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Fourth European Nursing Congress Older Persons: the Future of Care

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Guest Editors

Cuno van Merwijk & Johan Lambregts

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Fourth European Nursing Congress

Older persons: the future of care

Introduction

Prof Dr. Marieke Schuurmans, professor of nursing science
University of Utrecht, Faculty of Medicine, Utrecht
University of Applied Sciences Utrecht, Netherlands
On behalf of the programme committee

'Working as a nurse in intensive care I realise that we see patients of 80 years and over more often than some years ago. I feel that we do not fully adjust our care to the demands of these patients and their family.'

'Working as a nurse with people who are mentally handicapped I recently was confronted with one of my 'boys' being diagnosed with Alzheimer's disease. I do not know if we have the knowledge to create the best living conditions for him, however; in a nursing home they are not used to caring for mentally handicapped.'

'Working as a nurse in home care in an old part of the city I'm often confronted with the needs of non-western older persons for whom there is no family available to care for them as they wish and expect. They have poor housing and feel embarrassed that they need us. Finding good ways to communicate and plan care is not easy in these cases.'

'Working as a nurse in care for people with an addiction we are facing a growing group of drug addicts who have come to age. At a calendar age of about 50 years these people have a biological age of 70, as an effect of all those years of drug abuse. Their condition creates new problems we did not have in the past.'

'Working as a nurse in an acute psychiatric ward I see older persons coming in with not only their mental problems that caused the acute admission. Pressure ulcers, incontinence and severe immobility due to arthritis also demand nursing action in these patients. We are not yet adjusted to apply nursing actions to these more physical problems.'

'Working as a nurse in a nursing home our clients have become more of age when they are admitted. This means that their daughters who often cared for them in the time before admission are sometimes in their 70s.'

'In my practice as a company nurse I encounter the problems of older workers for whom we need to develop policies to keep them at work longer. The possibilities to stop working at 59 are over in our country'.

All European countries are facing a growing population of older persons. Demographic studies indicate that by 2050, Europe will have 173 million people of age 65 and above; this is 27.6% of the population, compared to 13.9% in 1995 and 8.2% in 1950. In different countries, the expected percentages range from 32.5% in southern Europe to 25% in northern Europe (IIASA, 2002). The ageing of the European population is attributed to the decrease in birth rates (the average fertility rate of 1.53 is below the replacement level of 2.1) and to the increase in life expectancy at birth (in Europe today 75.6 for men and 81.7 for women compared to 67.2 for men and 72.9 for women in 1962 (Eurostat 2002). These two developments create an imbalance between working and non-working populations that will have serious consequences for the whole of Europe.

Most older persons live in good health and experience a high level of well-being. Individual calendar age is not a reliable indicator for health status and well-being. Some people of 65 years are 'old', while most people of 70 years are still perfectly fit and able to participate in society. Health problems occur frequent in those aged 75 and above. The incidence of chronic diseases, however, increases with the years, and prevalence of functional deficits increases substantially. A recent study among citizens of the different European countries (the SHARE project: health problems among older persons in Europe) confirms the

increase in health-related problems with the increase in age. Age-related increase in health care use is strongly determined by age-related increase in health care problems. Variation is found between the different countries; this indicates that there is a potential to learn from each other. Socio-economical status is an important factor to explain the differences in health status among older persons. Education and preventive care related to risk factors can influence the high prevalence of health care problems in older persons.

The specific demands of older persons create a challenge for nurses. In view of the economic consequences of the demographic changes, efforts should be made to keep older persons in good health as long as possible. Good health is a key for an active role in society. According to Ursula Lehr, a policy for the aged should not be determined only by the question 'What can we do for the aged?' It should also be asked 'What can the aged do for society?' (Lehr, 2008).

Our current health care system is not prepared for the growing group of older persons. Older persons are often marginalised and kept on the sideline. Still today, discussing care for older persons many nurses hardly think further. They think it is not their concern, unless they work in a nursing home. The examples show this is not the case, in all fields of care except obstetrics and paediatrics, nurses will encounter a growing number of older persons.

In the fourth European Nursing Congress, *older persons as future of care* is the central theme. In this congress nurses of all fields of care are invited to share their good practices and their research findings with regard to care for older persons. Ethical and practical considerations with regard to nursing research in older persons are another key component, as well as educational issues with regard to motivating and training students for care of older persons.

The problems of these older persons will not be as clearly related to the field of care, as in younger persons. Examples of this phenomenon are depression in hospitalised patients with stroke or pressure ulcers in patients admitted to psychiatric institutions. Knowledge of prevention of problems in older persons is growing; however, application is not yet common practice. Indeed, current health care has many hazards to older people that threaten their safety and well-being.

Future older persons are better educated, lived their lives in greater prosperity and are more person centred. They come from a different social cohort and will demand care designed for their specific needs. Many of them will be interested in successful ageing; in changing their lifestyle to live a healthier life and experience more well-being at high age.

To ensure quality of care for older persons now and in the future, the focus should also be set on issues regarding labour market and labour saving. How can we create more efficiency of care for instance by technological support? Innovation, new ideas, creativity in thinking about organising care will be highlighted during the Congress. Older persons create the future of care.

The key themes of the congress *Older persons: the future of care* cover all fields of health care including:

- General and university hospitals.
- Nursing homes.
- Public health.
- Residences.
- Homecare.
- Mental health care.
- Care for mentally disabled people.
- Centres for Rehabilitation.

Key themes

- 1 Care for older persons in Europe in 2025.
- 2 Participation of older persons.
- 3 Attitudes towards ageing.
- 4 Promotion of health and well-being in older persons.
- 5 Family and informal care givers.
- 6 Ethics and older persons.
- 7 Use of technology in care for older persons in the future.
- 8 Patient safety and health outcomes e.g.
- 9 New approaches to acute care for older persons.
- 10 Rehabilitation of older persons.
- 11 Challenges and innovations in long-term care for older persons.
- 12 Palliative care.
- 13 New developments in dementia care.
- 14 Management and leadership in care for older persons.
- 15 Manpower issues and the labour market.
- 16 Financial issues regarding care for older persons.
- 17 Education and training of students in care for older persons.

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Plenary Keynote Addresses

KN1

Setting the agenda; the future of care

Rahm Hallberg Ingallil^{1,2,3}

¹Lund University Sweden

²The Swedish Institute for Health Sciences

³The European Academy of Nursing Science and the American Academy of Nursing

This presentation will address some topics that most likely will shape the future of care. For example the world wide demographic transition, the empowerment movement or rather the role of the person in his/her health, treatment and care, the inequality in health care and its power or lack of power to address health and nursing care issues in those most vulnerable, not in terms of disease but in terms of their socioeconomic conditions. The conflict between what can be done, in treatment and care and what will be possible to do due to financial shortage and in addition the kind of research needed to inform health care and nursing care specifically will be addressed.

It is well known by now that the entire world will encounter a gigantic demographic transition and some would regard this as a threat to society. It can also be viewed as a win-win situation since the health of older persons has improved much over time. However, the environmental conditions are not improving and that may be a threat to peoples' health. The patients' position in health care and nursing care is changing and self care, patient education and empowerment signals power transference, attempting to put the patient and his/her family in power of their health, treatment and care. This may coincide with or be in sharp contrast to the movement of person-centred care depending on if the movement is characterized by a maternalistic approach. Nurses' role in shaping the future and the trends is crucial.

KN2

Setting the agenda: facing challenges in nursing workforce

Uum Theo van^{1,2}

¹Ministry of Health, Welfare and Sports

²Directorate Macro Economic Policy and Labour Relations

In 2020 we will experience a shortage of nurses and carers, unless we act now. Demographic studies show, that in 2025 western countries will need an extraordinary additional number of care professionals, due to the strong increase of the aging population. At the same time nurses experience a lack of career opportunities. Many western countries face similar problems. To further complicate matters, nurses prefer to work in hospitals, while the future demand is growing very rapidly in nursing homes. It is obvious that we have to address these items. We have to change our policies. More diversity in careers for nurses is needed to make the profession more appealing for (future) nurses. Care of older persons should become a likely choice for young nurses. In general, the profession of nurses will undergo big changes in the near future. Specialized nurses will gradually take over specific tasks hitherto reserved to doctors. Nurses will more and more not be caring or curing, but engaging in the prevention of illnesses.

It's almost impossible to talk about the future of care without talking about money and budgets, especially from a government perspective. While people often talk about cuts in budgets for care and cure, the truth is, that these budgets have been increasing disproportionately as part of the national product. And they will keep on growing.

This presentation will highlight how government can stimulate the changes we need, by, among other things, legislation and funding of innovation.

KN3

The future of care: nursing research can make the difference

Hamers JPH

Department of Health Care and Nursing Science, School for Public Health and Primary Care, Maastricht University

What is the added value of nursing research for clinical practice and health care policy? The proposition is that nursing research can really make the difference, now and in the near future. This will be illustrated with two examples related to clinical practice (physical restraints) and health care policy (demand-driven care).

1 The use of physical restraints (e.g. belts, bed rails) is highly prevalent in nursing homes, and has many negative consequences for people with dementia. Nursing research has resulted in programs aiming to reduce the use of physical restraints. Furthermore, nursing research has had a strong impact on the policy and use of restraints in nursing homes, and on legislation. In the Netherlands for instance, a new law has recently been designed, changing restraint regulations.

2 In most European countries, there is a change from a supply-driven to a more demand-driven health care system. Generally, the assumption is that services should focus on the needs and preferences of older people. However, nursing research has resulted in the development of a theoretical model, refuting this assumption. Nursing research proposes that people's resources, and not their individual needs, are the key element in the development of demand-driven care. The model enables policy and decision-makers to make decisions regarding the development of new services.

European countries are facing similar problems, and nursing research can provide knowledge to handle these problems, considering cultural diversity. Nursing research enables practitioners to improve their practice, and provides evidence on which decision-makers can base their policy. Nursing research contributes to evidence-based practice and evidence-based policy.

KN4

The longevity revolution

Westendorp Rudi^{1,2}

¹Department of Gerontology and Geriatrics, Leiden University Medical Centre

²Leyden Academy on Vitality and Ageing

There is an urgent need to bring about a substantial change in the perception of the general public of what is without doubt one of the greatest changes to affect our populations in the last 100 years. The change is, of course, the increase in life expectancy. The 20th century has successfully dealt with major health issues at young and middle age, epitomized by the relentless increase of average and maximal lifespan that has no biological limitation. Fortunately this unprecedented success is gradually less appreciated as a societal burden and threat, but instead increasingly considered as an opportunity for long-lasting development and sustainability of our societies. Data shows that investments in long term health pay off on a national scale. And, in contrast to widespread belief, older people appreciate their life as much as youngsters and are keen to living longer. Longer

'lifespans' without disease and or disabilities allow older people to contribute to society for longer. This increase of 'healthspan', however, necessitates a complete reorientation of our health care investments. Learning from the earlier successes of public health, we have to implement preventive measures in the 3rd age to postpone the occurrence of complex disease in (very) old age. It also necessitates a proactive, trans-disciplinary approach of multi-morbidity to prevent disability once disease is present. Nurses are vital for initiating and implementing these new strategies as in our highly politicized health care systems they are best situated to stand for older citizens.

KN5

Prevention of falls in older persons: an update

Milisen Koen

Department of Geriatric Medicine, University Hospitals of Leuven & Center for Health Services and Nursing Research, Katholieke Universiteit Leuven, Leuven, Belgium

Between 28 and 35% of adults aged 65 years and older and living in the community experience at least one fall each year, and the annual fall prevalence increases with ageing. For those living in nursing care facilities, the annual risk of falls has been estimated up to 70%. Direct consequences of a fall can vary from bruises and minor injuries (28%) to severe wounds of the soft tissues (11.4%) and bone fractures (5%). Furthermore, psychological consequences such as fear of falling are substantial and may lead to loss of confidence, fear of dependence, social isolation, depression and increased risk of falling. Falls and their negative outcomes represent a considerable problem and require implementation of a strategy to prevent these undesirable events. As in all major geriatric syndromes, multiple risk factors are involved in falls with chronic predisposing and acute precipitating factors and interactions playing a crucial role. Although there is substantial evidence that fall prevention strategies reduce the number of falls and risk of falling in the community setting, and preliminary evidence for the residential setting, less evidence is available about their effectiveness in preventing fall-related injuries (e.g. sprains, bruises, head-injuries) and fractures (e.g. arm and hip fractures). Based on the most recent literature, this lecture will give an overview about how to quantify risk of falls and act accordingly.

KN6

Exercise, cognition and dementia

Scherder Erik

Department of Clinical Neuropsychology, Vrije Universiteit, Amsterdam, the Netherlands

Results from epidemiological studies show a strong relationship between physical activity and the level of cognitive functioning in older people. Unfortunately, irrespective of the condition of the musculoskeletal system, the level of physical activity declines with aging and recent studies suggest that this phenomenon has a negative influence on cognition. There are indications that a decline in the level of physical activity could be a pre-marker for dementia. Of note is that studies applying physical activity as an intervention show that in particular executive functions responds positively, at least in older persons without dementia. It is known that the prefrontal cortex is involved in executive functions. Relatively few randomized controlled studies examined the effects of physical activity such as walking on cognitive functioning and mood in patients with dementia. The results of these studies will be briefly addressed in the presentation. Furthermore, the question arises whether also other forms of physical activity than walking might exert a beneficial influence on cognition in patients with dementia; after all, quite a number of patients with dementia is not able to walk anymore. These studies will be addressed as well.

KN7

The many faces of person-centredness: whose interests are being served?

McCormack Brendan

Institute of Nursing Research/School of Nursing, University of Ulster, Northern Ireland

Person-centred practice has a long association with nursing, and at a level of principle is well understood as that which is concerned with: treating people as individuals; respecting their rights as a person; building mutual trust and understanding, and developing therapeutic relationships. The inherent good of providing care within a philosophy of person-centredness is irrefutable, but it has been recognised that translating the core concepts into every day practice is challenging. The reasons for this come in many forms and are often indicative of the context in which care is being delivered, and the fact that we are living in times of constant change, particularly within health and social care. However, in reality few organisations understand what person-centredness really means and if it is explicit in organisational values it is done so from a narrow 'patient quality' perspective.

This paper will explore these issues and challenges and through the frame of 'knowledge interests' raise critical questions and issues about person-centredness and how it is operationalised in the context of gerontological nursing.

KN8

Optimizing the geriatric nursing practice environment

Capezuti Elizabeth^{1,2}

¹*New York University's College of Nursing*

²*Hartford Institute for Geriatric Nursing where she directs the practice and research initiatives of the Institute including NICHE (Nurses Improving the Care of Healthsystem Elders)*

Although older adults generally represent a high proportion of hospital patients, they rarely receive specialized geriatric nursing care. Older patients experience more complications during hospitalization compared to any other age group that results in lower survival rate, loss of independence and leads to hospital readmission, increased usage of rehabilitation services, and new placement in a nursing home. Few acute-care providers, however, have specialized skills in geriatrics to address the older adult patients' needs related to age and frailty, and few hospitals provide administrative practices that support best practice care of older adults. NICHE (Nurses Improving Care for Healthsystem Elders www.nicheprogram.org) is a leader in improving geriatric care in hospitals that has been adopted in more than 300 hospitals in North America and the Netherlands. The focus of NICHE is on quality improvement initiatives whereby nursing interventions have a substantive and positive impact on care of older patients. NICHE assists hospitals by improving the quality of care to patients and improving nurse competence. This is accomplished by modifying the nurse practice environment with the infusion of geriatric-specific: (1) core values into the mission statement of the institution; (2) special equipment, supplies, and other resources; and (3) protocols and techniques that promote interdisciplinary collaboration. The nurse practice environment is the hospital organizational characteristics that facilitate or constrain nursing practice. This presentation will describe how improving the hospital's systemic capacity to develop and strengthen the geriatric expertise of direct-care nurses yields improvement in quality measures of clinical outcomes, patient satisfaction, and nurse satisfaction.

KN9**Nurses on the Move: An added value**

Kingma Mireille

Consultant Nursing and Health Policy, Geneva, Switzerland

Globalisation has facilitated and encouraged an expanding and increasingly competitive global labour market. The migratory flows from the developing countries to the industrialized countries continue to grow yearly.

Research consistently demonstrates the major reasons behind health worker migration - the *pull factors* of better remuneration, safer environment, improved living conditions and opportunities for professional development and career advancement in the destination countries and the *push factors* of ineffective infrastructures, a lack of support from supervisors, stagnant careers, non-involvement in decision making, futures without promise, and heavy workloads in their home countries.

Migration is increasingly seen as a means for development and a better distribution of global wealth. While some developing countries are "haemorrhaging" from nurse migration, others are benefiting from exchange programmes, improved skill pools using the acquired competencies of return migrants, remittances from nurses working abroad channelled to public sector development projects in their source country, or solutions to high unemployment levels. Industrialized countries faced with critical nurse shortages continue to see the recruitment of foreign-educated nurses as part of the solution to their failing health systems. The high vacancy rates in caring for the older person generate aggressive recruitment policies and attractive migration incentives. While facilitating the employment of an international workforce, these measures may also marginalise foreign-educated health professionals.

International mobility is a reality in a globalized world, one that will not be regulated out of existence. Brain circulation leading to brain gain is definitely the "best case scenario" for the future.

KN10**Nursing leadership**Cummings Greta^{1,2}¹*Faculty of Nursing, University of Alberta, Canada*²*CLEAR Outcomes (Connecting Leadership Education & Research)*

The important relationships that nursing leadership styles have with outcomes for nursing work environments, the nursing workforce and for patients are being clearly documented in the research literature. A recent systematic literature review of 63 research reports on such relationships found evidence of highly differential effects of relational leadership styles (focused on people and relationships) from task focused leadership styles (focused on job completion, deadlines and directives). Relational leadership styles were associated with key outcomes such as significantly higher nurse job satisfaction, organizational commitment, staff satisfaction with work, role and pay, staff relationships with work, staff health and wellbeing, work

environment factors, and productivity and effectiveness. Task focused leadership styles were associated with significantly lower values of all these outcomes. Other studies have shown that relational leadership styles of hospital nursing administrators also influence important patient outcomes including rates of hospital acquired infections, adverse events and 30-day patient mortality. Leadership styles focused on task completion alone are clearly insufficient to achieve optimum outcomes in the health system. Dr. Cummings will review these and other supporting research, with implications for healthcare and other management settings, and importantly, the care of older persons.

KN11**The care of older people – what role for technology?**

Tinker Anthea

Social Gerontology, King's College London, United Kingdom

The future care of older people in Europe depends on many factors including the projected large increases in numbers and proportions of very old people and a drop in numbers of working age. The latter has implications for those who could care for them including nurses and other health professionals. Added to this are changes in family structures and shortages of resources. One of the solutions put forward is to increase the use of technology. Ways in which this can be achieved will be discussed. These include technology for contact, help and for medical reasons. Sometimes the recipient is the older person but it can also be the family and professionals. The different types of technology will be discussed as will the problems. These include issues of acceptability, design and cost. Specific issues arise with regard to people with dementia including those of ethics. How technology can replace or supplement human care is the key question to be addressed. Research from Europe and the rest of the world will be drawn on.

KN12**Homecare and autonomy of older persons**Raphael Carol^{1,2}¹*AARP Board of Directors, Washington DC, USA*²*Visiting Nurse Service of New York (VNSNY), New York, USA*

Carol Raphael will explore the concepts of community nursing and the ever-evolving relationship between clients or patients and nurses. She will combine her expertise in the field of nursing and aging as CEO of the Visiting Nurses Society of New York (VNSNY) and AARP – the world's largest membership organization representing the 50+ population. Carol will discuss moves in the US and globally away from institutional care and into home-based and community care models. She will share how older people utilize services and manage chronic care. Her presentation will highlight aging in place as a reality and ways in which nurses can help the older population live with dignity.

Parallel Session A

A1-S6 Symposium

Creative imagination, ethics & the care for older people

Goal and Overview: Talking about what constitutes 'good care' but also what is necessary to entice healthcare personnel (nurses, health care assistants, physicians, etc) and/or patients on a level that is mutually enriching, is an exiting assignment that will be taken up in this symposium. In this symposium we will illustrate that the use of creative imagination i.e. the appropriation of creativity and creative work forms, is a necessary supportive element since stakeholders are more (experientially, bodily) engaged and therefore more willing to partake. Wicks and Reason (2009) talk about opening up a communicative space in which people feel free and safe to engage.

Within the presentation by Miranda Snoeren, the willingness to talk amongst different stakeholders about good care is highly facilitated by the development of a common view on good care first. Creative techniques and responsive dialogues are work forms used.

The presentation of Jill Bindels will highlight what it means to clients (workload, authority, responsibilities, tasks, surplus value, cooperation, bottlenecks, pitfalls and success factors) to actively participate in research. Within this presentation Jill will also dwell on her creative skills necessary to include clients as legitimate partners in research.

The presentations by Theo Niessen & Ezra Zadelhoff both are grounded within an appreciative worldview. From this default view Theo Niessen will highlight the empowering effect of this approach to health care assistants that are part of the ethics committee. They initiated and facilitated dialogues amongst clients and team members using photography as a creative imaginary tool. From a similar standpoint Ezra will exemplify that through the use of creative photography people with dementia could articulate their perspective on good care. Pictures thus are able to provide the foundations for shared improve practices of care.

Creating a common vision through dialogues and creative expression: the case of the Hazelaar

Snoeren Miranda

Fontys University of Applied Sciences, Eindhoven, the Netherlands

Introduction: In order to connect theory with practice, Fontys has set up a Care Innovation Unit (CIU) within De Hazelaar, a care facility for older people in The Netherlands. Important values in facilitating practitioners are equality of human beings and the belief that activities should contribute to the development and flourishing of those who are involved (Guba & Lincoln, 2005; Heron, 1996). This requires a rebalance of power, which is encouraged by democratic and participative processes. When starting the CIU a shared vision was created about the CIU and about the care for older people based on these beliefs.

Methods: Participants were supported to express their values about the CIU and the care for older people through building images with diverse materials and paint. This was a starting point for further dialogue in groups. Using a responsive methodology (Abma, 2005) a democratic process was promoted through which consensus was reached about topics to develop for improving the quality of care. First individuals were asked to express their experiences on the

ward. After that, dialogue was supported in homogeneous and heterogeneous groups.

Results: Trained staff members as well as students described a feeling of equality between team members. Furthermore, the understanding of each others' role, position and experienced difficulties has grown, through which relationships and collaboration are improved. Students, in particular, valued the experience of being part of the team, feeling safe and respected. There is a shared vision about the care for older people, which supports acting on that vision. Team members show ownership for situations that can be improved and are more engaged in innovation and research processes.

Conclusion: Creative work forms and (responsive) dialogue encouraged a strong learning environment, an egalitarian participation and empowerment to the relevant parties involved. This is in the end helpful for improving the quality of care for older people as it contributes to growth and development of competences of practitioners.

Client participation in an evaluation of integrated care for frail older persons

Bindels Jill¹, Abma Tineke², Bilsen Pascale van¹, Widdershoven Guy²

¹Maastricht University, Maastricht, the Netherlands

²VUMC, Amsterdam, the Netherlands

Introduction: Patients, policymakers and researchers are increasingly convinced that client participation has added value to relevance and quality of research. Therefore, four older persons are actively involved as partners and advisors in the set-up and execution of a process evaluation of an integrated care program for frail older persons. Two of them will fully participate in a community of practice. This community shall contribute to the development of strategies to improve the care for frail older persons. Another two persons will function as a research partner. From their own experience, knowledge about experiences of other older persons and health policy, these partners think along with the researcher about e.g. specific research questions, interview topics, data analysis and report. Yet, the question is whether this client participation has added value in this research. Additionally, the question rises if participation is feasible for older persons and if so, under what conditions and in what form.

Methods and Materials: Four client participants will be subjected to in-depth interviews, subsequently after 6, 12 and 24 months of participation. These interviews will allow for an analysis of success factors and pitfalls of this client participation. Additionally, the research partners and the researcher are asked to fill in a weekly journal. During an evaluation moment of the community of practice, after 24 months, all members are subjected to an in-depth interview, to reflect on their experiences, including the additional value of client participation.

Results: The results will consist of experiences of the research partners and advisors, specific aimed at the following topics: workload, authority, responsibilities, tasks, surplus value, cooperation, bottlenecks, pitfalls and success factors.

Conclusion: A project is presented in which older persons participate in an evaluation study of an integrated care program in the South of the Netherlands. Older persons are involved as advisors and research partners. Lessons, conditions and pitfalls are discussed.

Inspiring and empowering health care assistants to become ethical leaders

Niessen Theo

Fontys University of Applied Sciences, Eindhoven, the Netherlands

Introduction: At the end of 2007 the ethical commission of a home for elderly people decided to develop a new strategy to engage in moral dialogue company wide. The commission developed itself according to Practice Development principles thus intending to empower and give voice to the members involved. Five out of 10 participants were healthcare assistants (HCA). Three of these HCA (after being schooled by the author) started up a dialogue about ethics at their wards. This presentation will highlight the facilitative and creative approach taken by the chairman but also the results this approach was able to accomplish.

Methods and Materials: The chairman of the ethics committee appropriated an 'appreciative/dialogical approach' valuing and enticing participants' active engagement in the committee giving them voice to collectively develop the ethics vision and from thereon to develop activities with the intention to concretely alter the care environment. These actions focused both on daily practice and on facilitating a dialogue about 'the good' within the whole institution. To gather data about these issues, photo's were taken, and anecdotal evidence was gathered by means of interviews and email correspondence.

Results: From the appreciative default vision the three healthcare assistants with the other members developed a 'photo project' in which they set themselves to highlight what 'good happened' within the institution portraying this in a photo exposition. This resulted in five meetings across the institution in which a dialogue was held with residents and personnel about the good portrayed within the pictures. Two of the 5 HCA departed the ethics committee due to personal shortages.

Conclusion: An appreciative facilitative approach (chairman as 'architect' and 'mediator') in combination to Practice Development principles is able to empower HCA to engage in self-direct ward related and company wide ethics activities.

Photographs to give voice to people with dementia

Zadelhoff Ezra¹, Abma Tineke², Rossum Erik van³, Widdershoven Guy²

¹*Maastricht University, Maastricht, the Netherlands*

²*VUMC, Amsterdam, the Netherlands*

³*Hogeschool Zuyd, Heerlen, the Netherlands*

Introduction: From a perspective of evidence-informed practice, both patient, family, and nursing staff experiences are important for providing tailored care. The purpose of this study was to entice a dialogue amongst residents, family and nursing staff to make explicit what participants regard as good care in group living homes for older persons with dementia. Photographs were used as vehicles to facilitate this dialogue.

Methods and Materials: Data were collected over a period of 6 months in two group living homes. Photographs (taken by residents, their family and staff-members) about group living homes and views of good care were used to illuminate the perspectives. The photograph approach was used to let people with dementia speak instead of using words and to focus on vital aspects of care. Next, focus groups were held to unravel the meanings of good care implicit in the photo's and to strive for practice improvements using these positive images.

Results: Pictures were made by staff members about daily life especially around the group table with the residents together with staff members and some relatives, preparing dinner or drinking coffee together, pictures about the daily work and helping the residents and about relaxing. Residents and family-members selected moments of celebration in the summer, having a barbeque party. Recurring themes related to attentiveness, contact and care. In the focus groups the pictures about good care were discussed to unravel their meaning and enhance the understanding among participants.

Conclusions: By inducing residents, family and staff to make photo's and discuss them together, we were able to make explicit the meanings participants endow to good care within small group living homes. The use of photographs and dialogue laid the foundations for shared actions to improve the practice of care.

A2-S21 Symposium

New perspectives and opportunities to promoting positive ageing in older people

Goal of Symposium: This symposium focuses on new perspectives and opportunities for promoting positive ageing in two European countries. The papers explore key issues and challenges concerned with working with older people to promote positive ageing, ageing in place and debates the challenges of developing and sustaining collaborative networks to develop and promote positive ageing nursing strategies across Europe. The symposium will conclude by drawing together issues, implications and recommendations for nursing practice, research and policy.

Overview: Healthy ageing is a concept promoted by the WHO. This considers the ability of people of all ages to live a healthy, safe and socially inclusive lifestyle. Older people are no longer passive recipients of health professional care, but are now active contributors to the research process and health and social services planning. Ageing needs to be embraced as an opportunity and not as a challenge. We consider and debate current research, perspectives and opportunities to promote positive ageing across Europe through focussing on research conducted to improve older people's involvement in health and in care decision making; promoting active, healthy lifestyles; preventing falls; issues around positive health, ageing in place and the development of collaborative working to promote positive ageing in older people.

Improving older people's involvement in health and in care decision-making

Attree Moira

University of Manchester, Manchester, United Kingdom

Introduction: Involvement in health and care decisions can improve a person's quality of life and satisfaction, as well as increase care quality, safety and effectiveness. Across Europe people's levels of involvement differs in type, method and priority. Methodological and practical challenges to increasing older people's involvement in care will be deliberated. This presentation will present a synopsis of the evidence on older people's involvement in their individual health and care; identify current positions, approaches and challenges to promoting positive ageing through increasing older people's involvement in their care.

Method: Evidence synopsis.

Results: The evidence suggests that older people are not as involved as they would like to be in their care and that involvement in care can improve personal outcomes: confidence, self-esteem and self-worth, as well as health-related outcomes: compliance, self-management and satisfaction. Many factors were found to influence involvement; staff attitudes and structures that affect opportunities for involvement in decision-making are critical.

Conclusion: Barriers to increased involvement in care can be addressed through education that develops staff knowledge, skills and attitudes, and through policies, strategies and structures that promote active engagement of people in their health and care decisions.

Healthy ageing: preventing falls and promoting active living in older people across Europe

Horne Maria

University of Manchester, Manchester, United Kingdom

Introduction: Falls prevention remains a key public health priority across Europe as they are a major cause of illness and disability and a threat to the independence and quality of life of older people. Furthermore, falling and the fear of falling have been associated with elevated levels of psychological distress; restriction of activity and

independence; increased social isolation and the use of health and social services. 30–40% community dwellers aged >65 years fall each year and rates are higher above 75 years of age. Systematic reviews of randomised controlled trials show that risk of falling can be reduced by prevention programmes, especially exercise based or multi-factorial interventions. However, refusal rates to take up interventions are very high and adherence low. The uptake of intervention in the community has been reported at <10%. This presentation presents a synopsis of research undertaken across Europe to identify the attitudes and beliefs of older adults of such programmes to permit us to improve uptake and adherence rates, as well as the work undertaken to promote active living in older people.

Method: Research synthesis.

Results: Older adults do not acknowledge their fall risk and are generally not motivated to exercise to prevent falls. Those who had fallen are more likely to acknowledge risk of future falls.

Conclusion: Fall prevention should not be the focus of strategies to increase uptake and adherence to exercise. Instead, the wider benefits of exercise, leading to an active healthy lifestyle should be encouraged. For those in most need, health promotion programmes need to encourage home-based strength and balance training and may also be used as a way of encouraging the entire older population to engage in falls prevention.

Healthy ageing: positive health among older people with focus on sleep habits and falls

Fagerström Cecilia

Blekinge Institute of Technology, Sweden

Introduction: Satisfactory sleep has many positive benefits for older adults. It may produce daytime wakefulness and reduce the risk of falls. Sleep complaints and falls are both common with advancing age and negative determinants for health. However, their relationship with good health or improving health has not been clearly established. The aim of this presentation is to discuss sleep and fall predictors of positive self-rated health among people ($n=656$, >78 years), who participated in the longitudinal and multi-centre cohort study, The Swedish National study on Ageing and Care (SNAC), in 2001 and 2004. Positive odds ratio is used in the logistic regression analyses instead of commonly used Odds ratio.

Method: Research synthesis from a longitudinal, multi-centre cohort study, 2001 and 2004.

Results: Findings indicate that younger age, no fear of falling, no problem with balance, or no difficulties sleeping because of mood were associated with positive health, in the model that was adjusted for age, gender and co-morbidity.

Conclusion: It is important to target older adults who are at risk of losing their balance and have low mood to prevent future health problems with advancing age. Also, the use of positive odds ratios appears to be useful when identifying positive health among older people.

European perspectives on developing collaborative working to promote positive ageing in older people

Rahm Hallberg Ingalill

Lund University, Sweden

Introduction: This presentation will debate the challenges for developing and coordinating ageing strategies across Europe that actively involve older people. Particularly, it will focus on collaborative working to promote wellbeing in the phase where functional limitations have developed. It is well known that despite declining health and functional ability older people age more or less successfully in terms of quality of life. Some older people have severe functional limitations yet score their wellbeing as good or very good, whilst others have no or only small functional limitations, but rate their

wellbeing as poor or low. Understanding these differences is important when developing strategies and creative approaches to that promote healthy ageing, wellbeing and the ability to age in place.

Method: Research synthesis.

Results: Health and social service systems differ across Europe and the relationship between the system and the older person's wellbeing may be just one explanatory variable. It may well be that health care systems are developed for young people with one health

problem that can be treated successfully, whilst older people have complex health care needs, several and repeated contacts with different providers.

Conclusion: Developing and coordinating ageing strategies across Europe that actively involve older people, in accordance with older peoples' needs and wishes remains a challenge, but may benefit the quality of life, be cost effective and better serve older peoples' needs.

A3-S26 Symposium

Small-scale, homelike living arrangements – the future of dementia care?

Goal and Overview: Long-term care for older people with dementia is increasingly directed towards small-scale and homelike environments, in which normalization of daily life is emphasized. Values such as promoting quality of life and wellbeing, preserving autonomy, enabling residents to maintain their own lifestyle and offering a homelike environment are important in these facilities. Although there is an expansion of such small, homelike facilities in various countries, implications and effects for residents, their family and nursing staff remain largely unknown. Insight in these features is essential to improve dementia care and contributes to future planning and realization of facilities.

This symposium presents findings from three recent studies, conducted in two countries: the Netherlands and Germany. Characteristics and implications for residents, family and nursing staff are presented. It contributes to the ongoing debate on increasing domesticity in dementia care settings.

The first presentation focuses on characteristics of small-scale living in the Netherlands and experiences of residents, family members and nursing staff. Furthermore, residents' characteristics in small-scale living are investigated and compared with traditional nursing homes, especially focusing on functional status and cognition. The second presenter addresses results from a longitudinal study into small-scale living facilities in Germany, called Shared Housing Arrangements (SHA). Physical and psychological health outcomes are studied and compared between residents living in SHA and special care units for persons with dementia. Measurements were conducted at baseline and after 6 and 12 months of follow-up. Finally, the last presentation discusses results from the Dutch Monitor Living Arrangements for people with dementia, a large cross-sectional study into various types of dementia care, including small-scale living facilities. It especially focuses on results regarding which characteristics predict nursing staff's wellbeing, quality of care and residents' quality of life.

Small-scale living: characteristics and implications for residents, family and nursing staff

Verbeek H, Rossum E van, Zwakhalen SMG, Kempen GJIM, Hamers JPH

Maastricht University, Maastricht, the Netherlands

Introduction: In the Netherlands, dementia care is increasingly organized in small-scale and homelike facilities, also known as group living. A small number of residents live together in a homelike environment. They are encouraged to participate in daily household activities, emphasizing normalization of daily life with person-centred care. Nursing staff is part of the household. In the Netherlands, approximately 25% of nursing home care is nowadays realized in these small-scale, homelike facilities. Insight into their characteristics and experiences is, however, relatively unknown. Additionally, information regarding residents' characteristics is scarce. This study investigates characteristics and experiences with small-scale living and traditional nursing home wards in the Netherlands.

Methods and Materials: A cross-sectional study was conducted in the Netherlands, including 769 residents: 183 in small-scale living facilities and 586 in regular psychogeriatric nursing home wards. Main outcome measures included functional status and cognition. Furthermore, in-depth interviews ($n=45$) were conducted with the executive board and management of nursing homes, nursing staff and family caregivers to explore their experiences with small-scale living facilities.

Results: Residents' characteristics significantly differed regarding some aspects. Residents in small-scale living facilities had a significantly higher cognitive and functional status compared with those living in regular nursing home wards. In addition, they had a shorter

length of stay, were less frequently admitted from home and were more often female than residents in regular wards. No differences were found in age and care dependency.

In-depth interviews showed that all participants report positive experiences regarding personal contact, a home for life principle and homelike atmosphere. Nursing staff welcome the broadening of their tasks. Management of nursing homes express doubt regarding the costs, availability of family and professional caregivers.

Conclusion: Although positive experience are reported, there remains uncertainty regarding the development of small-scale living for older people with dementia. Longitudinal research is needed to investigate effects and feasibility.

Shared housing arrangements for persons suffering from dementia—the Berlin longitudinal study DeWeGE

Wolf-Ostermann K¹, Fischer T², Worch A³, Gräseke J⁴, Nordheim J⁵, Wulff I⁵, Meye S⁴, Pannasch A⁵, Meyer S⁴

¹Berlin, Germany

²Technopolis Deutschland GmbH, Frankfurt Am Main, Germany

³Alice Salomon University of Applied Sciences & Charité – Universitätsmedizin Ber, Berlin, Germany

⁴Alice Salomon University of Applied Sciences, Berlin, Germany

⁵Charité – Universitätsmedizin Berlin, Institut für Medizinische Soziologie, Berlin, Germany

Introduction: Shared Housing Arrangements (SHA) are a specific German kind of small-scale living facility for older, care-dependent persons, predominantly suffering from dementia. SHA are being served by community care services and are completely disconnected from traditional residential facilities. Although research on health outcomes is widely lacking it is often claimed that these arrangements contribute to better quality of life and health outcomes in residents, compared to traditional residential care.

Methods and Materials: In a longitudinal design all new residents of SHA suffering from dementia in Berlin were surveyed for 1 year. They were assessed when they moved into the SHA and again 6 and 12 months later. Data from the SHA are compared with data collected in the same way in residential Special Care Units (SCU) for persons with dementia.

Results: Fifty-six persons (43 female, 13 male) were recruited into the longitudinal study. The average age of the residents was 81.5 years when they moved in, women being about 6 years older on average than men. Persons moving into SHA tend to have better cognitive function than those moving into SCU. Impairments of physical functioning were frequent in both groups and did not show any significant differences. Also need-driven behaviours were frequent in both groups, hallucinations were prevalent significantly more often in SCUs.

Conclusion: In the DeWeGE study different health outcomes as well as quality of life and other aspects are compared between residents of Shared-Housing Arrangements and residential Special Care Units. Both types of facility attract slightly different populations according to our data. Further analysis will indicate whether health outcomes develop differently over time in both groups. These results will be useful to clarify whether SHA are more advantageous than SCU in general for the care of older people suffering from dementia or whether both forms have markedly favourable effects for different groups of patients.

Living arrangements for people with dementia study: nursing staff well-being and quality of care

Smit D¹, Willemse BM², Lange J de², Pot AM³

¹*Trimbos Instituut, Utrecht, the Netherlands*

²*Netherlands Institute of Mental Health and Addiction, Program on Aging, Utrecht, the Netherlands*

³*Netherlands Institute of Mental Health and Addiction, Program on Aging & VU Univ, Utrecht/Amsterdam, the Netherlands*

Introduction: Nursing staff in living arrangements where Group Living Home Care (GLHC) is provided often perform both care tasks and domestic tasks. To provide GLHC, new nursing home facilities arise or existing facilities are adjusted. As a result, a wide range of facility types providing nursing home care is available. These facilities differ in organizational characteristics such as resident number, the extent in which GLHC is provided, and staff ratio. The question rises which characteristics predict staff well-being and quality of care in facilities for people with dementia.

Methods and Materials: The Living Arrangements for people with Dementia (LAD-) study is designed to answer this question. One hundred and thirty-six living arrangements were studied, represent-

ing different types of long term dementia care. In each facility, a care manager was interviewed to obtain organizational characteristics and 15 randomly selected nursing staff members (N=1208) were asked to fill in a questionnaire about job satisfaction and burnout complaints. As an indicator of quality of care, staff members also filled in questions about their attitude towards people with dementia. Furthermore, the involvement in activities of 12 randomly selected residents (N=1366) was measured, and the use of physical restraints and psychotropic drugs.

Results: Well-being of nursing staff is predicted by perceived demands, control and social support in their job. Low levels of perceived demands and high levels of control are predicted by a higher degree of GLHC characteristics. A low level of perceived demands is also predicted by a higher staff ratio.

Staff well-being predicts our outcomes of quality of care: attitude towards dementia, the involvement of residents in activities and use of physical restraints.

Conclusion: GLHC characteristics contribute to a positive work experience of nursing staff which facilitates their well-being. The results show that this is an important starting point for the improvement of quality of care.

Parallel Session B

B1-419

Integrating home care services in Europe

Genet Nadine¹, Ersek Katalin², Boerma Wienke¹, Hutchinson Allen³, Garms-Homolova Vjenka⁴, Naiditch Michel⁵, Lamura Giovanni⁶, Chlabicz Slawomir⁷, Gulacsi Laszlo², Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²Corvinus University of Budapest, Budapest, Hungary

³Sheffield University, Sheffield, UK

⁴Alice Salomon University of Applied Sciences, Berlin, Germany

⁵Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

⁶INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

⁷Medical University of Bialystok, Bialystok, Poland

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: A key feature of home care is its divided nature. Conditions for coordination are poor. A variety of professionals provides a coherent mix of services. The social care system is in general local, less professionalised and usually moor poorly financed than the health care system. These differences are related to or result in different interests, culture and style and are a ground for communication problems. The existence of this divide will be explored it will be considered what remedies are available and are applied.

Methods and Materials: This presentation is drawn upon the results of the EC-financed EURHOMAP project and a discussion between country experts invited to the conference. The study has collected a wealth of data on various types of home care (including nursing care, personal care, domestic aid and respite care). In 31 countries information was gathered on a large set of indicators in the areas of policy & regulation, financing, organisation & delivery and clients & informal carers.

Results: Home care services may stem from different sectors, systems and organisations. Several countries have identified and addressed problems related to this situation. However, the degree of splitting varies among countries. It can exist at one or more of the following levels: governance and regulation; entry to the home care system; delivery of services. Furthermore the extent to which the division occurs may differ as well. Integration at governance level creates more favourable conditions for integration at access and delivery level. From a clients' perspective poor integration may manifest itself both at the point of entry (absence of a clear-cut easy access point), and in the delivery of services (which are not tailored to what is needed or lack flexibility).

Conclusion: There are many possible remedies against problems of poor integration; depending on the level and the situation where the problem occurs.

B2-70

Coordinating the roles of nursing home staff and families of elderly nursing home residents

Ben Natan Merav¹, Ehrenfeld Mally²

¹Pat Matteus academic school of nursing Hillel yaffe medical center Hadera, Hadera, Israel

²Tel Aviv University Department of Nursing, School of Health, Tel Aviv, Israel

Aims and Objectives: To examine families' and nurses' perceptions of the functions that should be performed by families of elderly nursing home residents.

Background: There are only a few studies comparing families' and nurses' perceptions, and their conclusions are incompatible.

Method: The study used a survey method. The research questions were as follows: what are families' and nurses' perceptions of the functions that should be performed by families of elderly nursing home residents, and is there congruency between their perceptions about the role of the family in caring for their elderly relatives residing in nursing homes? A questionnaire developed by Shuttlesworth et al which included activities/tasks to meet nursing home residents' needs, was used. The questionnaires distributed among a convenience sample of 85 nurses and 68 families of nursing home residents in Israel.

Results: The findings indicated that the staff believes that families must assume more roles than the families think they should. In contrast, families believe that they should be more informed of the physical care of residents and even be involved in providing physical care and to maintain quality care rather than encouraging them to be involved in social and current events outside of the nursing home.

Conclusions: It is important to construct an institutional procedure that will define and clarify family roles for the duration of nursing home care of elderly residents. This must then be explained to all family members of residents admitted.

B3-72

Nurses' perceptions of individualised care in long-term care institutions

Suhonen Riitta, Alieklemola Pilvi, Katajisto Jouko
University of Turku, Turku, Finland

Introduction: Although its importance in outcomes for both patients and caregivers is known, nurses do not seem to be universally convinced of the utility of individualised care in day-to-day practice. The aim of this study was to describe the individualised care perceptions of nurses working in in-patient long-term care wards in the capital city of Finland.

Methods and Materials: Using a descriptive design data were collected from nurses using the Individualised Care Scale–Nurse (N=283, n=215, response rate 76%) working in in-patient long-term care wards (n=19) in four hospitals in Finland during 2009.

Results: Nurses' perceived that they support older patients' individuality during nursing activities well and that the care they provide takes into account older patient's individuality. Nurses were positive about the support of older patients' individuality in the clinical situation and in the decisional control over care. Nurses also perceived that the care they provide takes the older patients' clinical situation into account. However, the nurses perceived that they support older patients' individual life situation to a lesser extent) and that the care they provide takes into account older patients' life situation to a lesser extent. In the care provided older patients did not have decisional control as much as during nursing activities.

Conclusion: The findings provide baseline data about individualised nursing care from nurses' perspective and provide ideas for the development of individualised care in older peoples' care settings. Nurses seem to think they provide individualised care in general but this was not necessarily realised in the evaluation of nursing practice overall. Although this study identifies some shortcomings in the realisation of individuality in care of older people, the results provide a more positive view about the state of individualised care than earlier studies.

B4-97

Protocol for innovative projects of care and support targeting community dwelling frail elderly

Durme Therese van¹, Cès Sophie¹, Ribesse Nathalie¹, Gobert Micheline¹, D'Hoore William¹, Jeanmart Caroline¹, Swine Christian¹, Remmen Roy¹, Declercq Anja², Macq Jean¹

¹Universite Catholique de Louvain, Brussels, Belgium

²Katholieke Universiteit Leuven, Leuven, Belgium

Introduction and Background: The Belgian national social health insurance system (INAMI/RIZIV) will finance alternative forms of care, in order to prevent institutionalization of the community-dwelling frail elderly. Bottom-up projects will receive grants if they propose innovative forms of care and support of care provided in a patient-centred and concerted way, if they target community dwelling frail elderly people with complex care needs and their informal caregivers and finally, if they prevent institutionalization of frail elderly.

This paper presents the design of a protocol for the scientific evaluation of these projects. Its aim is to provide evidence to assist RIZIV/INAMI and other public authorities in future long term innovative care programs decision making.

Methods: The general design has been driven by complex intervention evaluation methodologies, and performed by a multidisciplinary team, including nurses (MPH), GPs, epidemiologists, geriatricians, economists and sociologists. Three types of approaches were used: (1) a theory driven approach, through a literature review for model design, (2) a grounded approach, through candidate projects review, and (3) a pragmatic approach for data collection, including tools chosen by the INAMI/RIZIV in previous projects.

Results: Given the heterogeneity of the projects to be tested and their complex nature, four key objectives, related to four types of evaluations, are proposed.

- 1 Modelling the project components as part of a care system.
- 2 Performing an process implementation evaluation.
- 3 Performing an evaluation of outcomes for frail elderly and informal caregivers.
- 4 Performing an economic evaluation.

Conclusion: As a result of the process of designing this evaluation protocol for complex interventions, the four-step evaluation process should provide an exhaustive insight of the projects' process, functioning and results in terms of efficacy. Influence on the older peoples' health and how their needs have been met will be measured through regularly collected data.

B5-120

A pilot experience of client centred care in Brussels city

Jeanmart Caroline¹, Baeyens Jean-Pierre², Closon Marie-Christine¹

¹Institute For Health and Society UCLouvain, Brussels, Belgium

²Université du Luxembourg, Luxembourg, Luxembourg

Introduction: A pilot experiment of client centred care (frail old people) is carried out in Brussels in 2008. We've analyzed under which conditions this kind of coordination should work. Our goal is to improve health of vulnerable seniors, reduce institutional use and to improve client outcomes, service delivery and resource efficiency.

Methods and Material: The experiment is based on different steps: an interdisciplinary evaluation of all needs of the old person (medical, functional, psychosocial needs,...), a facultative coordination meeting, a plan of care, the nomination of a 'referee' who is a close relative of the old people (family, GP, nurse,...) who has to reassess and adjust care. 24 frail old people who live at home in Brussels take part to the experience (from June 2008 till November 2008).

Results: Quality of the support from friends and close relatives, quality of sleep and safety feeling. More than half people are happy with the services. Eight people on 10 say that services and helps give

them the opportunity to treat their problem more efficiently. All are satisfied with contact with care givers, privacy respect, respect of their choices and the feeling to be adverted. Family and care givers are satisfied with a clear definition of everybody's role, the promotion of independence and well-being, the support to family caregivers, and the information communication/sharing and support and the fact that older people's views are central. Very important is the evidence that no one of these old people has to come back to hospital or has to be institutionalized. They all stay at home.

Conclusion: The key elements of the experience are a multidisciplinary case management for effective evaluation and planning of the real client needs, providing a single entry point into the health care system, and packaging and coordinating services and the appointment of a referee for the old people who has to reassess and adjust the plan of care.

B6-151

Nijmegen university network of nursing homes: collaboration in care and research

Derksen Els, Gaal Betsie van, Koopmans Raymond
Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

Introduction: The Nijmegen University Network of Nursing Homes (NHs) is a collaboration between ten NH-organizations (35 NHs and 100 care homes) and the department of Primary and Community Care, centre for Family Medicine, Geriatric Care and Public Health. The aims of this NH-network are to cooperate on scientific research, education and implementation of best practices in nursing home care.

Methods and Materials: In each NH-organization, a multidisciplinary committee has been set up with at least professionals of elderly care medicine, nursing, psychology, physical and/or occupational therapy. The chair of each committee is a representative in the steering committee, responsible for the policy in the NH-network supported by two staff members. Two senior researchers complete this network with the professor of NH-medicine who is chair of the steering committee and of the NH-network.

Results: From 2003 until now the NH-network build an infrastructure in which several (research) projects were carried out. Most projects have integrated goals on research, education and best practices. A few of these projects:

Research: WAALBED II: A longitudinal study on neuropsychiatric symptoms (NPS) in dementia followed a group of 300 NH-patients with dementia during a 2 year period, with follow up measurements each 6 months. **Act-in-case-of-Depression (AID):** The AID-study investigates the effectiveness of the care program Act-In-case-of-Depression.

Education: The NH-network organizes a yearly multidisciplinary congress.

Best Practices. The NH-network has consensus projects, which aim to achieve agreement on one (or a small set of) assessment instrument(s) for different domains. A virtual learning environment will be built for the NH-network, where it is possible to exchange knowledge, create course content, offer lessons, and organize classes or consulting colleagues in other NHs and forum discussions.

Conclusion: The Nijmegen University Network of Nursing homes has developed into a research infrastructure in all collaborating NHs, where the culture of research and evidence based practice is growing.

B7-191

Towards a framework for operational access to care for the elderly

Schipper Lisette¹, Luijkx Katrien¹, Meijboom Bert¹, Schols Jos²

¹Tranzo/UvT, Tilburg, the Netherlands

²Maastricht University/Caphri/Department of General Practice, Maastricht, the Netherlands

Introduction: Chronic care in the Netherlands is mainly provided by large concerns with a diversified product range. These organizations are reconsidering the operational access to their services to meet demands of their clients quickly and accurately. The element of customer with the care provider is an essential dimension. In literature, front office activities are defined as activities executed in direct contact with a customer. Back office operations do not require the presence of the customer. This distinction is important, as front and back office operations have different design requirements. In our paper we address the following question: How can insights from literature on front/back office and on aspects of access to care be used to develop a framework to design the operational access to chronic care services for elderly?

Methods and Materials: We searched literature for the use of the term front and/or back office. A second search aimed to find relevant articles on access to care. Thirty-three articles were included in the analysis. Another nine articles were found through references of included articles.

Results: The insights from literature are used to identify the important dimensions of access to care. In order to translate this into a framework for operational access, we also use the distinction between front and back office operations. The result is a theoretical framework that aims to enable chronic care organizations to design their client centered entrance process. The validity of the framework will be tested in an exploratory case study in a group of large, diversified Dutch chronic care organizations for elderly.

Conclusion: It will be argued how the framework can help organizations in chronic care arrange their entrance unit in order to receive, clarify and fulfill the requirements of their clients effectively as well as efficiently.

B8-205

Examining the health care policy for elderly people from an international perspective

Golander Hava

Tel Aviv University, Tel Aviv, Israel

Introduction: The first stage of the health care reforms era has been characterized by rationing and cost restraints resulting mainly in reducing hospitalization rates, and monitoring access to public health agencies. Elderly people, the biggest and neediest consumer group, were negatively affected by these policy changes. The current stage is characterized by the development of community services for vulnerable population groups while reducing costs. In order to better understand the current directions of the health care reforms around the world an international comparative exploratory study was initiated.

Methods and Materials: Information was obtained through a variety of sources: a systematic review of the literature. In addition selected interviews were conducted in five countries (Australia, Canada, Northern Ireland, USA, and Israel) with policy makers, clinicians and researchers as well as some field visits to special geriatric care sites. Qualitative research methods were used to analyze the multiple data sources.

Results and Insights: Many similarities were found among these countries in relation to the general directions of current health care policies: aiming to meet the special needs of elderly people is getting higher priority. The major common barriers in implementing policy spring from fragmented funding and authority lines, manpower shortage, insufficient community infrastructure, and conflict of interests. A variety of innovative solutions are being developed, among them are: the integrated single assessment tool to ensure a comprehensive patient centered care in Northern Ireland, promoting friendly neighborhoods for elderly people across Canada, and the development of special health care programs for chronically sick people based on community teams (Israel) or hospital specialty groups (Australia).

Conclusions: An international perspective of comparative analysis could contribute to a better understanding, reflection and appreciation of one's own country, and provide an opportunity to learn from the experiences of others. It promotes an international discourse and partnerships enriching policy, practice, research and professional education.

B9-227

The continuous nursing care – conceptual basis

Tavares JPAT¹, Santos GMPS², Silva A³

¹*Coimbra, Portugal*

²*Gorete Pereira, Aveiro, Portugal*

³*Aveiro, Portugal*

Background: The recent implementation of the National Network for Integrated Continuous Care (NNICC) constitutes a new approach to nursing care in Portugal. The NNICC aim is to provide continuity of care through complementary levels of integrated care (convalescence, rehabilitative middle and long-term care), as well as palliative care for those living in situations of dependence. With full implementation in 2016 and a strong focus on home care, the NNICC allows people to remain at home as long as possible. As this network was established in 2006, research in this field is still scant.

Methodology: This is a descriptive-exploratory study of a qualitative nature. A total of thirteen nurses took part in the study, six males and seven female. The average age of them was 29 years. Data was generated through semi-structured interviews which were audio-recorded with the participants' consent.

Results: The results of this study provide the conceptual basis of Continuous Nursing Care (CNC). The CNC central aim is to promote independence and autonomy of people admitted in Integrated Continuous Care units.

Some assumptions are: the CNC – is centred on the unit – person, family/informal caregivers living situations of dependence; is developed in an interactive and interpersonal relationship among nurse, the person, family/informal caregivers towards the identification, mobilization and development of all inner resources to care; is developed in a multi/interdisciplinary perspective, contributing to the care for the whole person, family/informal caregivers.

Conclusion: The conceptualization of CNC and the philosophy of the Network itself are at a very early stage of development. The CNC conceptualization presented in this study is in its initial phase of development and does not cover its richness and complexity. Thus, additional studies are needed in different contexts and perspectives in order to move forward and improve the CNC knowledge.

B10-229

Barriers and solutions in the continuous nursing care for the elderly

Tavares JPAT¹, Santos GMPS², Silva A³

¹*Coimbra, Portugal*

²*Gorete Pereira, Aveiro, Portugal*

³*Aveiro, Portugal*

Introduction: In Portugal, in 2006, the National Network for Integrated Continuous Care was created, that provides continuous care for the elderly and citizens with dependence. In this context, despite the Continuous Nursing Care (CNC), there is still a large gap in research in the area. Considering this fact, this study aimed to know the barriers to the CNC for the elderly in an Integrated Unit of Continuous Care and possible solutions to improve their effectiveness.

Method: The qualitative approach and descriptive-exploratory method was adopted in this study. Data was collected through semi-structured interviews with 13 nurses and analyzed on a hermeneutic-dialectic.

Results: The results showed the effectiveness of the CEC in this unit is closely related to overcoming barriers and implementing the solutions identified by nurses. This improvement goes through nurses leaders, managers of the National Network for Integrated Continuous Care (RNCCI) to consider and rethink the allocation of qualified human resources and material resources needed in the RNCCI, and through the professional and, creation of conditions for an effecting the partnership with the family. Other issues to be addressed are unstable employment within the network, delays in salaries nurses, the ineffective communication between various professionals, lack of interaction between nurses and managers of nursing. This barriers and possible solutions are mainly administrative, financial and organizational, which hinder the effectiveness of the CNC in this unit.

B11-254

Nurse case management in England: a study of different models for community dwelling older people

Drennan Vari¹, Goodman Claire²

¹Kingston University & St. George's University of London, London, UK

²CRIPPAC University of Hertfordshire, Hatfield, UK

Purpose: This paper presents findings from a National Institute of Health Research funded project evaluating the contribution of different types of nurse case management in support of community dwelling older people with long term conditions (LTC) and completed in 2009. Current Department of Health (England) policy advocates primary care nurses as integral to the provision of health services for people with long term conditions; in particular through case management roles. Finding effective ways of supporting people with chronic diseases is a major issue amongst all health care systems.

Methods: The study had two phases: (1) an England and Wales wide survey of Local Primary Care organisations, building on an integrative review, and (2) an in depth comparative case study prospectively over 9 months of the patient experience ($n=60$) and nursing contribution ($n=12$) within four different models of nurse case management that are provided in three different areas of England. The second phase was a mixed methods study that included health economic analysis.

Results: This paper will present findings from both phases but focus on the case study phase. The case studies demonstrated how the different models of nurse case management influence patient care, access to services and outcomes for both patients and family carers.

Conclusion: Discussion and conclusions will focus on the extent to which the range of possible approaches to nursing involvement in case management acts as a compensation for the shortcomings of primary care or as an innovation that represents new approaches to chronic disease management.

B12-261

A quality framework for responsible care gives new opportunities for managers and professionals

Veen Roelf van der, Voorthuis Ida
Vilans, Utrecht, the Netherlands

Annually, a set of performance indicators concerned with client safety and effectiveness is presented to Dutch health care organizations. The performance indicators are in line with similar developments in other countries and are based on information obtained from reference literature on international indicator projects and subsequently set in close cooperation with organizations of professionals and healthcare providers.

Providers must ascertain high quality of care, which is effective, efficient safe and client-oriented. Responsible care is a central theme, but this can only be realized when staff members do their job well. Management must support and motivate their personnel en listen to what clients have to say.

The Quality Framework for Responsible Care to ensure responsible care was launched in 2006, on basis of an agreement of service providers, professionals and service users on what indicators should be used. This went together with a paradigm shift: not quality of care should be the final aim, but quality of life. Since 2008 an objective and widely supported comparable set of quality indicators is available. The QFRC contains measurable indicators that show if the organization provides responsible care. QFRC is important for attaining membership of the Netherlands Organization of Care providers.

In this workshop we would like to address: How well has the QFRC improved transparency of care provision and given support to competition on quality between providers? Has the framework enabled service users and commissioners to contract services based on quality and to monitor the quality of care? Can professionals be enhanced to share their experiences in meeting the standards? How does a care provider monitor the effectiveness of these conditions on the quality indicator and what can results be investing in improvement actions (Care for Better program)?

B13-325

Literature review on advance care planning of nursing home residents

Séchaud Laurence¹, Goulet Céline²

¹Haute Ecole de Santé, Genève, Switzerland

²Institut Universitaire de Formation et Recherche en Soins, Lausanne, Switzerland

Aim: Conduct a search and analytic review of literature regarding attributes of Advance Care Planning (ACP) and Advance Directive in order to identify the experiences and the best care strategies for older adults resident in nursing homes or long term institutions.

Methodology: An extensive electronic search was undertaken in the following databases: Pubmed (via Ovid search), Cumulative Index of Nursing and Allied Health (CINAHL, via EBHOST), psychINFO and Cochrane. After analyzing and eliminating duplicates and professional's point of view (19), 144 titles were considered relevant: 28 opinion papers, 94 descriptive/qualitative studies or predictive studies, 17 experimental and five systematic reviews. Most of them were produced in North America and only 10 were in French.

Results: With regard to European experiences, studies are scarce and further research could benefit from North American evidence. Contrary to Europe, nurses in North America play a major role in the process of care planning. The major findings were related to the poor efficacy of the completion of Advance Directives, even in presence of a substantial variety of implementation strategies. The evidence supports interventions that conceptualize ACP as a process, with an emphasis on the ascertainment of patients' values and beliefs and the necessity to include the family or loved ones from the beginning of the process in order to favor the expression and sharing of one's life perspectives and priorities in care. The most relevant findings were associated with the conceptualization of the ACP as a change in health behaviors which needs an involvement in different stages to overcome a variety of barriers.

Conclusion: Rigorous research in ACP for the older adults in Swiss nursing homes that promote respect and dignity in this frail population is needed. How to best achieve patients and families goals should be the focus of nursing intervention and research in this domain.

B14-337**Best practice; the professional as a 'guiding actor'**

Boonstra Jeroen, Oosterholt Paul
Saxion, Enschede, the Netherlands

Introduction: This paper will present and explore issues arising out of changing care in different setting (four separate locations) to develop best practice in nursing homes in the East of the Netherlands, Overijssel.

The aim of this 2 year RAAK-project is to strengthen the knowledge skills and competence of healthcare professionals, and through that maximise the standards, and acceptability and appropriateness of care offered to those no longer able to live independently in the community.

Methods and Materials: This is a partnership project in which staff and students from Saxion University of Applied Science work together with healthcare practitioners to review current care and then devise and implement change and innovations to improve care and increase the quality of life of residents. The emphasis is on facilitation with the staff from Saxion providing support and guidance, to increase staff motivation and enable them to develop their knowledge and skills such that they can develop their own ideas and initiatives to improve care. To help identify factors impacting on care and how changes can be initiated small scale research projects are identified and then carried out by students working with the healthcare practitioners, under the guidance of Saxion staff.

Results: This is a win-win situation, it enables the students to gain the skills and expertise to develop evidence based practice whilst working in a real but protected environment. The healthcare practitioners also benefit, many of these care staff are junior grades of staff with limited research expertise, or confidence in their own ability to make changes to improve care. Through this process they are able to see how the research is developed and carried out in areas of interest and concern, and so gain an increased understanding of the processes used to develop the evidence to support practice. Thus the students also learn how to share information and support colleagues. The findings from these studies are then used as the basis for the implementation of change and innovation in practice.

Conclusions: The healthcare practitioners also report that the partnership with Saxion and the research from students has increased their motivation and job satisfaction, as they now feel supported as they work towards initiating changes based on evidence. The outcomes in practice terms are evident, but perhaps the greatest change is that the partnership approach has been extended to include the residents who are more nearly involved in planning their own care.

B15-380**Structure of patients' health requirements in homecare in Poland and changes in the health care**

Wojcik Grazyna¹, Fidecki Wiesław², Sienkiewicz Zofia¹,
Wysokinski Mariusz², Imiela Jacek¹, Wronska Irena², Idzik Anna¹

¹Medical University of Warsaw, Warszawa, Poland

²Medical University of Lublin, Lublin, Poland

Introduction: Due to the lack of data on the needs in the long-term care there are significant differences in contracting services in this scope of activity in the particular parts of Poland, which results in significant disproportions in the availability of services in the local and national level. The research is aimed at establishing detailed conditionings of requirements in this matter.

Aims of Research: The aim of this study is to establish the factors that influence the type and structure of health requirements of patients who benefit from various forms of home care.

Sources and Methodology: Research used two tools: the InterRAI assessment form prepared in the USA for the assessment of health conditions and health requirements of long-term care patients, and

The Barthel scale that measures performance in 10 basic Activities of Daily Living and covers information on the requirements for specific medical procedures. The research was conducted on patients over 65 years of age, living in the selected districts of Central and South Poland, who benefit from various forms of home medical care cared out within services financed by the healthcare insurance system in Poland.

Results and Conclusions: Research was conducted in the second half of 2009 on a group of 350 patients. Currently the research is at its final stage that is working out the Results. The comparison of the InterRAI assessment form and Barthel scale will allow to assess the conditionings of patients' health requirements, the effectiveness of the existing system of patients' qualification for various forms of home care. Based on the research conducted the recommendations for the Polish long-term care system will be prepared especially with the reference to proposed legal changes connected with the new Law on the nursing-care insurance system.

B16-382**Obesity in care of nursing home residents – pilot study on detection of efforts in nursing homes**

Apelt Gerda¹, Garms-Homolova Vjenka², Kuhlmeier Adelheid³

¹Charité-Universitätsmedizin Berlin, Berlin, Germany

²Alice Salomon University of applied Science, Berlin, Germany

³Charité, Berlin, Germany

Introduction: Little is known about the prevalence of obesity and its relation to the utilization of resources in nursing homes. My research focuses on the demand of care for NH-residents suffering from obesity. I observe nurses while they are caring for obese and non-obese residents to identify differences of care in both groups. In particular I compare the time needed to complete different tasks, the requirements on the professional competence of nurses, and the use of aids and technology.

Methods and Materials: I started with a structured observation of care giving to a convenient sample of obese (BMI \geq 30.0; $n=52$) residents and to a control group of non-obese residents (BMI 25.0–29.9; $n=52$) in five NHs in Berlin, Germany.

Furthermore I interviewed experts (heads of nursing staff, NH-directors, and administrators, total $n=15$), asking them about their view of changes of the organization of facilities, staffing, and technology that would become necessary if the proportion of obese residents would increase in future NHs.

Results: The professional caregivers needed significantly more time to dress up obese residents than non obese residents ($M=9.26$ Min, $SD=3.75$, $t(66)=2.277$, $P<0.01$, $d=0.56$). Residents suffering from obesity were significantly younger (Mean=80.5, $SD=10.2$, Min=55, Max=98) than non obese residents (Mean=84.38, $SD=7.9$, Min=63, Max=101). The Prevalence of obesity in NHs under study amounted to 13%. That is less than in the US-NHs (25%; Lapane, Resnik 2005). Further results are anticipated until Summer 2010 and will be presented on this Congress.

Conclusion: My results support our assumption that the completion of single tasks of care for persons suffering from obesity is highly consuming. However nurses tended to compensate such a 'loss of time', and therefore try to reduce the number of activities dedicated to heavy persons, but also situations that require the utilization of technical aids. Facing such needs, more attention has to be paid to the development of this problem in the nursing facilities.

B17-463**Collaborative intensity – a description of the research process for the partnership model**

Rekola Leena¹, Reijonen Merja¹, Harra Toini¹, Immonen Sirpa²,
Haggman-Laitila Arja¹

¹*Helsinki Metropolia University of Applied Science, Helsinki, Finland*

²*City of Espoo, Espoo, Finland*

Introduction: The project aims to produce a innovative collaborative model between different organizations. It is based on functional co-active relations and learning environments which transcend boundaries. The new work model is set to advocate the collective recognition, use, and development of know-how between different organizations.

Methods and Materials: The partnership model is developed as action research. The target organizations in Finland are Helsinki Metropolia University of Applied Sciences and the social and health care office of the city of Espoo, specifically geriatric services, the Espoo Hospital and recruiting unit. At the beginning stages of the project the partnership is realized through a pilot, in which work models based on the service idea of the newly planned hospital in Espoo will be developed for geriatric work. The pilot consists of three partially independent subprojects carried out in the Espoo hospital, which will focus on patient safety and safe medical treatment.

Results: The partnership model and its development process will be presented in the action research. In the research, the principle, structural and processing factors of the model are recognized, evaluated and named. The results and their actualization will be evaluated with experience gained from the project. The development of the model and the concepts therein will be presented in the Results.

Conclusion: The research for the project is set to four phases 2009 – 2011 and the research will apply the principles of action research and realistic evaluation. Information retrieval and material analysis are performed through both qualitative and quantitative methods. In the first stage, knowledge of the development of the partnership model will be produced through a systematic literature review and the terminology for the model will be recognized and named.

B18-465

Partnership between higher education and working life in Geriatric Services

Haggman-Laitila Arja

Helsinki Metropolia University of Applied Sciences, Helsinki, Finland

Introduction: The collaboration and partnership of health care organizations and higher education has been depicted for decades in international literature. In spite of this, research information covering the subject is still rather sparse and the research is considered challenging. In Finland, Metropolia School of Applied Sciences and the hospital of the city of Espoo launched a project in which a work model for the partnership between higher education and working life is being developed.

Methods and Materials: The model is developed through action research. This presentation will depict the first stage of the action research which was put into effect through systematic literature review and focus group interviews. The search yielded 1012 references, of which 205 abstracts were picked after certain inclusive and exclusive criteria. Twenty-one full texts altogether were chosen for the final analysis. A total of 31 persons from the partner organization took part in the focus group interviews.

Results: Based on the preliminary results of the literature review, features advancing partnership were recognized to include stages involved in the arrangements of the cooperation, the ethical principles and culture of the organizations, work principles directing the cooperation, management of change, and publicity. Features hindering the cooperation were cultural differences between the organizations, prejudice as well as the lack of respect, resources and mutual misunderstanding. Partnership processes in the development and sharing of expertise transpired as unilateral cooperation or shared learning. Shared learning occurred in student guidance, the develop-

ment of treatment work, the development of leadership, and in collective training. For the sharing and developing of expertise, configurations of student guidance had been established.

B19-L1

Home dialysis for the frail elderly

Riemann Aase

Dianet Dialysecentra, Amsterdam, the Netherlands

Introduction: Assisted peritoneal dialysis is PD with support from district nurses educated by the dialysis nurses. In other European countries, Canada, VS and also the Netherlands, assisted PD started in the early eighties. At this moment about 20 dialysis centres in the Netherlands are working with assisted PD.

The main group of patients who need assisted PD are the frail elderly patients with physical restrictions, such as those who cannot lift the heavy bags of solutions and patients with impaired hearing and vision as well as patients with decreased physical and mental activity.

Since the start of assisted PD many international research findings have been published especially on subjects such as peritonitis rate, quality of life and costs. In 2008 research results from Denmark and France showed the importance of continuing education of district nurses especially on peritonitis. Evaluations done by a Dutch quality institute of dialysis showed the same Results.

Methods and Materials: In March 2008 the Dutch project 'Thuis in PD Zorg' started, initiated by nine dialysis centres in the province of North Holland with the aim to develop a new uniform retraining course for district nurses who already have worked with PD in the past. Nurses can sign up for a course given every 6 weeks via the website THUISINPDZORG.NL, run by persons from the project group. Every 2 years each district nurse has the possibility to do the course and receive a certificate.

Results: 1 December 2009 the website was launched. Medio January 2010 five persons have signed up.

Conclusions: Assisted PD is a treatment with advantages for the elderly. The developed course ensures well-educated nurses assisting the elderly with their treatment. As a side effect and due to information about the project the group receiving assisted PD is growing.

B20-10

Moral distress and burn-out in nurses on acute geriatric wards

Dewitte Magali¹, Piers Ruth¹, Steeman Els², Noortgate Nele van den¹

¹*Ghent University Hospital, Ghent, Belgium*

²*Ghent University, Ghent, Belgium*

Introduction: The care for elderly often confronts geriatric nurses with the 'end-of-life' and difficult decision-making processes. In this context moral distress (MD) and burn-out (BO) may develop. They are complex concepts that occur in nurses and negatively impact their personal and professional functioning. To date, there are no data on MD in geriatric nurses, or its relationship to BO. The first aim of this study is to investigate whether MD is a problem. Secondly, we aim to identify whether MD is related to BO. The third goal is to identify factors that contribute to MD.

Methods and Materials: Nurses were recruited from three hospitals. The response rate was 54%. MD was assessed with an 18-item self-report questionnaire, adapted from the Moral Distress Scale (MDS) (Corley, 2001). To measure BO, participants completed the Utrechtse Burn-Out Schaal voor Contractuele beroepen (UBOS-C). In addition, socio-demographic characteristics and data about the organisation of 'end-of-life' care were collected. The mean frequency of occurrence and level of burden on the MDS-items were calculated. Further, a correlation analysis between MD and BO, and a

multivariate analysis – including ‘end-of-life’ organisation factors – were performed.

Results: (1) MD-related circumstances occur rather frequently in geriatric nurses and that is related to a rather high level of burden. (2) MD is correlated with BO ($r=0.336$; $P=0.001$). (3) A lack of active participation in the decision-making processes concerning end-of-life ($b=-11.02$; $P=0.001$) and a lack of debate on ethical issues ($b=-14.43$; $P=0.001$) appear to contribute to MD.

Conclusion: The findings of our study indicate that MD is a potential problem in nurses on acute geriatric wards. They also suggest that BO is associated with MD and that a lack of engagement in end-of-life care decisions contributes to MD.

B21-98

Patient safety climate in Swiss nursing homes and its relationship to clinical outcomes

Zuniga Franziska¹, De Geest Sabina², Schwendimann René²

¹University of Basel, Buelach, Switzerland

²Institute of Nursing Science, University of Basel, Basel, Switzerland

Introduction: To date, few studies have explored the relationship of safety culture with clinical outcomes in nursing homes. The main objective of the study is to explore the patient safety climate in nursing homes in Switzerland and to examine its relationship with clinical outcomes (falls, pressure ulcers, physical restraint, and urinary tract infection).

Methods and Materials: In this cross-sectional survey, the Swiss version of the Nursing Home Survey on Patient Safety Culture (NHSPSC-CH) will be distributed to the healthcare personnel of a convenience sample of nine Swiss nursing homes in the autumn 2010. The four clinical outcomes will be measured with a questionnaire for the unit nurses as point prevalence (physical restraint use, pressure ulcers) or period prevalence (falls and urinary tract infection during the last 30 days). The correlation of the resident safety climate scores with the clinical outcomes will be controlled by facility, unit, clinician, and resident characteristics, and their association with safety climate scores will be assessed using hierarchical generalized linear modeling.

Results: Descriptive statistics for the facilities, units, clinicians and residents will be reported. The psychometrics (internal consistency and construct validity) of the NHSPSC-G (e.g. Cronbach's alpha) will be examined. It is hypothesized that front line workers and especially nurse assistants will have lower scores and therewith a less positive view of the safety climate. In a second step, the prevalence of the four clinical outcomes will be determined at facility and unit level. It is hypothesized that lower numbers of physical restraint use and urinary tract infections correlate with higher safety climate scores, whereas the reporting of falls will increase with a better safety climate.

Conclusions: Will be drawn from study results and based on earlier literature findings

B22-123

The Australian medical sheepskin prevents pressure ulcers: a combined multilevel analysis of three RCTs

Mistiaen Patriek¹, Jolley Damien², McGowan Sunita³, Hickey Mark⁴, Spreeuwenberg Peter¹, Francke Anneke¹

¹NIVEL, Netherlands institute for health services research, Utrecht, the Netherlands

²School of Public Health & Community Medicine, Melbourne, Australia

³Nursing Research & Evaluation, Fremantle Hospital, Fremantle, Australia

⁴CSIRO Textile & Fibre Technology, Clayton, Australia

Introduction: Pressure ulcers can to a large extent be prevented by implementing best practice care. For many of the devices to help in

the prevention of pressure ulcers there is lack of evidence-based knowledge about their effectiveness. In this study we performed an individual patient data meta-analysis on one such ulcer preventing device, the Australian Medical Sheepskin (AMS), to assess the effect of it for the prevention of sacral pressure ulcers based on the combined existing trials.

Methods and Materials: The effectiveness of the AMS has been studied in three RCTs [two in Australian hospital patients (1;2) and one in Dutch nursing home patients (3)]. All patients received an AMS under the buttocks when lying in bed and in all three trials the incidence of sacral pressure ulcers was used as (one of) the outcome measure. The individual data of the three RCTs were combined into one dataset.

Results: The total population consisted of 1281 patients (mean age 72) and covers more than 20 000 observation days. The sacral pressure ulcer incidence was significantly lower in the intervention group in two of the three studies. A conventional meta-analysis with the effect sizes of the three trials showed an odds ratio of 0.37 with a 95% confidence interval between 0.17 and 0.77. The multilevel logistic regression across the three studies and controlled for age, gender, pressure ulcer risk and observation length showed an odds ratio of 0.35 with a 95% confidence interval between 0.23 and 0.55.

Conclusion: The multilevel analysis on the combined individual patient data of three RCTs confirms and corroborates the conclusions of the separate RCTs that the AMS is an effective aid to prevent and delay sacral PU. The confidence interval is narrowed almost by half, giving a much more precise estimate of the effect of the intervention. Therefore individual patient data meta-analysis is to be preferred above conventional meta-analysis.

B23-149

Assessment of postoperative pain in older patients

Dijk Jacqueline van, Wijck Albert van, Kappen Teus, Schuurmans Marieke

University Medical Center, Utrecht, the Netherlands

Introduction: Effective management of pain is dependent upon valid and reliable pain assessment. In previous research we examined the relation of the Numeric Rating Scale (NRS) and a Verbal Rating Scale (VRS). The aim of the study is to assess the relation between NRS and VRS in older patients specifically.

Methods and Materials: All adult patients scheduled for any surgery between March 2006 and December 2008 were included. 10 434 Patients (<65 years $n=7760$; ≥ 65 years $n=2674$) completed a short questionnaire of two pain scales the day after surgery: an 11 point numeric scale (NRS) and a five point adjective scale (VRS). The adjective expressions of the VRS included: no pain; little pain; painful but bearable; considerable pain; and terrible pain.

Results: The most common NRS scores within patients reporting VRS ‘no pain’ was NRS 0 (82%); within VRS ‘little pain’ 83% of patients reported NRS 1–3; within VRS ‘painful but bearable’ 84% reported NRS 3–6; within VRS ‘considerable pain’ 89% reported NRS 5–8; and within VRS ‘terrible pain’ 82% reported NRS 8–10. Specificity of NRS>4 for ‘unbearable’ pain in older patients was 83% with a sensitivity of 97%. With a cut-off point of 5, specificity increased to 94%, while sensitivity decreased to 85%. Compared to younger patients, the specificity with a cut-off point of 4 was also 83% with a sensitivity of 94%. With a cut-off point of 5, specificity was 92% with a sensitivity of 84%.

Discussion and Conclusion: With a NRS cut-off point of 4, 17% of older patients with ‘bearable’ pain would be incorrectly classified as ‘unbearable’. This misclassification might result in overtreatment with analgesics in a large group of patients, while a much smaller group would be undertreated (3%). However, for a NRS cut-off point of 5 it would be the opposite: 6% of older patients would be overtreated, while 15% would be undertreated. In this study there are no relevant differences between older and younger patients in how they assess their pain on a numeric scale. In conclusion, the

NRS does not require a different interpretation for older patients compared to younger patients, and can be used safely to assess their pain. However, with NRS scores close to guideline cut-off points for administration of additional analgesics, one might consider to let patients differentiate between 'bearable' and 'unbearable' pain to prevent over- or undertreatment.

B24-198

Belgian screening tools (BeST) database

Bulteel Lien¹, Vanderwee Katrien¹, Gobert Micheline², Defloor Tom¹

¹Ghent University, Ghent, Belgium

²University Catholique Louvain, Louvain, Belgium

Introduction: Older persons may struggle with different health-related problems for which specific nursing interventions are needed. Measuring instruments are helpful to identify the specific problems and to choose the most appropriate intervention. Those measuring tools and their psychometric properties are often difficult to find. The care for older persons can be improved by using adequate and validated measuring tools in nursing practice. The aim of this project was to construct a database with validated tools in which an overview of the psychometric properties of those scales is provided.

Methods and Materials: The included themes were: disorientation, pressure ulcer risk, condition of the mouth (oral health), nausea and vomiting, neurological care, pain, fatigue, sedation, diminished cognitive function, functional, mental and psychological evaluation, nutrition and malnutrition, continence and incontinence, wound care, self care, quality of life and catheter care. For each theme, a literature review was performed using a standardized methodology.

Results: The database is freely accessible on a website (www.best.ugent.be) and is focused on health care professionals. The database represents a clear overview of existing validated tools per theme. A total of 139 scales were found. Fifty-one scales can specifically be applied to older persons and cover the following themes: disorientation (16 scales), pain (2 scales), diminished cognitive function (15 scales), quality of life (1 scales), functional, mental and psychological evaluation (11 scales), nutrition and malnutrition (3 scales), self care (2 scales) and wound care (1 scale). For each theme a description of the scale, the theme, the target group and the reference were specified. Each instrument can be downloaded if the author(s) provided permission. A summary of all included publications is presented in evidence tables.

Conclusion: The 'Belgian Screening Tools' (BeST)-database is an easy accessible database of measuring tools of importance for caregivers in charge for older persons in several settings.

B25-217

Adherence and medication management by the elderly

Henriques Maria Adriana¹, Costa Maria Arminda², Cabrita José³

¹Escola Superior de Enfermagem de Lisboa, Linda A Velha, Portugal

²UNIFAI-ICBAS-UP, Oporto, Portugal

³Universidade de Lisboa, Lisboa, Portugal

Introduction: Non-adherence to chronic medication is a big problem for elderly with chronic conditions, for health care and security in use medicines' use. The aim of this study was to explore the strategies used for medication management by elderly who live at home in community, who can influence medication adherence and describe the interpretations of the elderly in relation to their medication.

Methods and Materials: We used a qualitative approach, with two focus groups of seven men and 11 women. It is considered the homogeneity in people aged 65 or more, retired, users of the Health Centre of Lisbon, currently with four or more chronic medications. The segmentation was done between those who were or were not enrolled in nursing consultation.

Results: The content of the discussion was analyzed from the verbatim transcript and identifying categories and subcategories that have emerged, leading to the construction of a diagram analysis. Of data analysis, four categories emerged that describe the interpretation and strategies of people over 65 and with chronic illness, managing their medication: to live with medication, taking medication, beliefs about drugs and related professionals health.

Conclusion: Participants suggest that the relationship with health professionals, in this case physicians and nurses is essential in disease management and medication and they reported that the information given by the nurse during consultation is very important. Considering the importance of nursing interventions – education, teaching and training, help the patient about issues related to the treatment and with the medication.

B26-240

Barriers that influence nurses' information exchange during care transfer of older persons

Olsen Rose Mari¹, Østnor Bjørg Horntvedt², Enmarker Ingela¹, Hellzen Ove¹

¹Nord-Trøndelag University College, Namsos, Norway

²Sør-Trøndelag University College, Trondheim, Norway

Introduction: Despite an increased focus on the need for cooperation between providers across health care organizations, researchers still report problems in the exchange of information between the hospitals and the health care systems in the municipalities. The aim of the present study was to investigate barriers that influence nurses' information exchange during elderly patients transfer across health care organizations, based on the experience of registered nurses within medical hospital unit and home health care.

Methods and Materials: A qualitative approach was chosen in this study, and data were collected using focus group methodology. Three focus group interviews were conducted, interpreted and analysed through content analysis. Fourteen registered nurses, two men and 12 women, were recruited from two units at the general medical department at a hospital and the home health care agency affiliated with this hospital. Each focus group consisted of between three and six nurses who had direct experience in information management during elderly patient transfer.

Results: Three preliminary main themes were formed to describe barriers that influence nurses' information exchange during elderly patients transfer between hospital and home health care. These themes were: organizational factors, interpersonal factors, and personal factors. These themes included several sub-themes.

Conclusion: The findings in this study highlight the challenges nurses encounter in ensuring successful information exchange and continuity of care during the elderly patients' transfer through the health care system. Recognition of these barriers that affect nurses exchange of information is important to meet to ensure patient safety and successful transitions from hospital to home care. In order for nurses to conduct a successful exchange of information, it is critical that hospital and home health care facilitate this through adequate resources, clear mission and responsibilities, and understandable policies.

B27-268

Comparing acute and long-term elderly care by the use of an Italian theoretical model and the ICNP®

Ausili Da Vjenka vide¹, Sironi Cecilia¹, Rasero Laura²

¹Insubria University Varese, Varese, Italy

²Florence University, Florence, Italy

Introduction: The theoretical nursing model by Cantarelli (2003) has been used by many Italian health organizations and educational

institutions to define and orient nursing practice since 1996. This conceptual model was developed through direct observation of Italian nurses work, and led to a operational definition of nursing need. The process resulted in identification of eleven nursing needs that can theoretically represent the whole of Italian nursing practice. However, no language classification have never been used to describe nursing clinical data according to this conceptual model.

The aim of this point-prevalence survey is to compare elderly nursing needs in two medical units of a general hospital and in one nursing home in Lombardy Region combining the use of the International Classification for Nursing Practice (ICNP) and Cantarelli's conceptual model (Modello delle prestazioni infermieristiche, MPI).

Methods and Materials: A point-prevalence design has been chosen with a convenience sample from Varese Hospital (medical and geriatric wards) and Molina Nursing Home in Varese. A written tool has been developed for collecting the data, and specific education has been planned for nurses involved in data collection process. Demographic, and epidemiological data will be collected from health care documentation systems on an expected sample of 200 patients' medical documentations. Data collection will be completed in June and data analysis will be accomplished in July. Descriptive and inferential statistic techniques will be applied to describe and compare patients characteristics and nursing care patterns in acute and long-term care facilities.

Results: The research is ongoing. The results will include sample description and comparison of nursing phenomena in hospitals and long-terms clinical settings.

Conclusion: Prevalence of acute and long-term elderly nursing needs will be discussed as well as the future implications in using MPI and ICNP to describe and measure nursing practice in Italy.

B28-344

Pain and interventions in German nursing homes

Kopke Kirsten, Dräger Dagmar

Charité – Universitätsmedizin Berlin, Berlin, Germany

Introduction: Drug therapy is a mainstay in pain management. Despite its significance, the quality of drug therapy and appropriateness of prescribing practices for pain management in nursing homes (NH) is currently under assessed. The main objective of the project is to determine the factors influencing the pain prevalence in German nursing home residents and to clarify how pain is associated with their autonomy. Therapeutic interventions and structural measures likely to increase or maintain autonomy despite pain will be identified.

Methods and Materials: Different data sources will be used to answer the main research question how pain has an impact on the autonomy of nursing home residents. To gain a more thorough insight pain related impact factors primary data on a sample of randomly selected 1000 NH residents in Berlin and Brandenburg will be collected and evaluated. The primary data source is a structured resident interview. This will include psychological and physical assessments as well as an analysis of resident records. Since a large number of residents with cognitive deficits are expected, the assessment instruments will be selected according to the individual's cognitive level.

Results: The expected result of the study is a comprehensive characterization of pain in residents of German NHs. At the congress data will be presented about pain and its etiological factors, pain related interventions, analgesics and the association with other diseases, subjective health, and personal and social impact factors. Experiences with the population of NH residents can be referred and measurement instruments for pain assessment of severe cognitive impaired people can be suggested.

Conclusion: The results will be integrated in recommendations for the medical and nursing practice which lay the scientific foundations of an advanced accommodation in nursing homes.

B29-364

Experiences of nurse specialists in projects aiming to reduce the use of physical restraints

Smeets Ine¹, Brouwers Terry², Gulpers Math²

¹*MeanderGroep ZL, Kerkrade, the Netherlands*

²*Verpleeghuis Luckerheide, Kerkrade, the Netherlands*

Introduction: In the Netherlands nurse specialists have been participating in EXBELT. In this study nurses specialists are teaching multidisciplinary nursing home staff the facts about restraint use, evidence about the negative effects of its use and alternative measures. Furthermore, they discuss practice cases with nursing home staff and visit nursing home wards for consultancy. This presentation focuses on the role and the experiences of the nurse specialists in the educational and consultancy part of the EXBELT study.

Methods and Materials: In the EXBELT program, the specialist nurses play a key role. This program aims to reduce belts in nursing homes. The nurses are responsible for the educational program and act as a consultant. The educational intervention program aims to increase the knowledge of nursing home staff and change influence their attitudes.

Results: So far, about 170 members of the nursing home staff (physicians, psychologists, nurses, nursing assistants, physiotherapists, managers) from 15 wards from six Dutch nursing homes have completed the educational training. Furthermore, the nurse specialists have visited 15 wards to discuss complex cases aiming to support nursing home staff in finding creative solutions for reducing belts. An example of successful alternative measures are: A resident constantly creating a considerable risk of falling. Due to this risky situation she was given a locked chair table. The advice from the nurse specialists was; remove the locked table, let a nurse monitor her actions and look what happens. The resident stood up for more than 30 times a day and then simply sat down again. There was no particular risk falls.

Conclusion: Nurse specialists play a key role in teaching and supporting nursing home staff aiming to reduce physical restraints. In this presentation the nurse specialists will present both examples of successful reductions of physical restraints in nursing homes and barriers hindering restraint reduction.

B30-371

Making an inventory of best practices recommendations and putting them at nurses' disposal

Gobert Micheline¹, Dardenne Olivia¹, Filion Nataly¹, Vandurme Thérèse¹, Courtens Annelies², Grymonpré Dries², Vanderwee Katrien², Defloor Tom²

¹*Université Catholique de Louvain, Bruxelles, Belgium*

²*Ghent University, Gent, Belgium*

Introduction: New communication tools – in particular internet – provide access to guidelines. The strength of the evidence supporting specific recommendations and their intellectual independence is not always guaranteed. Lack of time, lack of skills in critical appraisal or understanding of research language or other tools are mainly responsible for the fact that professionals make their own 'local' recommendations, only based on experts' opinions. The aim of this study is to select best practice evidence-based guidelines and to put them at the nurses' disposal in their own language.

Materials and Method: The method was essentially based on literature review of best practice guidelines validated by nurses' associations (Finland, Ontario, CBO, HAS), the Cochrane Collaboration Library, Medline, CINAHL, BNI. Only the guidelines of the last 7 years has been explored. Each guideline has been assessed by AGREE, Shaneyfelt, Grilli & Cluzeau tools. Additional criteria have been used to assess the quality of the guidelines. All steps of guidelines selection were performed by two researchers. To put the recommendation at the nurses' profession disposal a website has been developed.

Results: Six main topics have been developed: disorientation, nausea and vomiting, wound care, sedation, diabetes, nutrition. A special attention was focused on geriatric care at hospital. For each topic, four guidelines are selected based on appraisal tools and additional criteria. The website was accessible since July 2009 at the URL address: <http://www.sesa.ucl.ac.be/guidelines>. According to the satisfaction study, all users would recommend the website to a colleague and 9 respondents of 10 found the website very useful.

Conclusion: The website is a tool in order to have an access at the evidence based information. This is a first step of a long process. The website was considered very useful by users. But, a next question is the implementation the evidence based guidelines in clinical work. The obstacles and support factors of evidence based guidelines in the geriatric care by nurses must be studied.

B31-374

Falls in the hospital: a study of data collection processes and inter-rater reliability in the US

Simon Michael, Klaus Susan, Dunton Nancy

University of Kansas Medical Center, School of Nursing, Kansas City, KS, USA

Introduction: On behalf of the American Nurses Association, the National Database of Nursing Quality Indicators (NDNQI) conducted two studies to (1) survey data collection processes that potentially influence fall measurement and (2) to investigate fall classification in an inter-rater reliability study across units and hospitals. NDNQI is a unit-level database collecting quarterly nursing data from of more than 1500 hospitals and 14 000 units across the United States and internationally.

Methods and Materials: Study #1: 1244 site coordinators representing more than 1400 hospitals reporting falls data to NDNQI were invited to participate in an online survey. A 59% response rate (was attained. Descriptive statistics were calculated. Study #2: An online video survey, which included a set of 20 fall scenarios was sent out to 247 hospitals with 615 units that volunteered to be part of the study.

Results: Study #1: Nurses (99%), followed by physical therapists (18%), nursing assistants (15%) and patient care technicians (12%) submit 'often' or 'most often' submitted initial fall reports. In 72% of the hospitals electronic incident report systems were in place. Seventy-five percent of the hospitals provide a written tutorial or other in-house training for falls reporting; the other 25% provide general or no information about incident reporting. Study #2: The 20 fall scenarios had 49–99% agreement in the classification as fall or non-fall. Eleven scenarios had agreement of over 80% and 7 scenarios had an agreement of below 65%. When asked whether they had witnessed each fall scenario, affirmative responses ranged from 14–75%. Three of the most frequent scenarios (55% or above) were in the group of low agreement scenarios (below 65%).

Conclusion: Realistic fall situations with low agreement call for an appropriate fall definition to align fall reporting across facilities. Training provided by hospitals on fall reporting varies widely. This study identifies the importance of harmonized training for fall reporters.

B32-386

Psychosocial interventions to reduce antipsychotic drugs in care home residents: systematic review

Köpke Sascha¹, Richter Tanja¹, Filz Melanie¹, Meyer Gabriele²

¹*University of Hamburg, Hamburg, Germany*

²*Witten/Herdecke University, Witten, Germany*

Introduction: Considering the current evidence, it is questionable whether prescribing antipsychotics can be justified in terms of con-

trolling Behavioural and Psychological Symptoms of Dementia (BPSD). The potential harm in persons with dementia highlights the need to seek less harmful alternatives as for example psychosocial interventions. Accordingly, practice guidelines recommend giving preference to psychosocial interventions rather than psychotropic drug prescription in the treatment of BPSD. A number of efficacy trials have been published, investigating different psychosocial interventions aiming at the reduction or substitution of antipsychotic medication. So far, no systematic review of high methodological quality has been conducted. Therefore, we aimed to prepare a Cochrane review summarising available randomised-controlled studies.

Method and Material: A systematic literature search was conducted covering the Cochrane Dementia and Cognitive Improvement Group's Specialised Trial Register, the Cochrane Central Register of Controlled Trials, Medline, Embase, PsychInfo, Cinahl, hand search, and trial registers. Also, experts in the field were contacted. Titles and abstracts of citations identified were examined independently by two authors. Quality assessment of included studies followed the Cochrane Handbook for Systematic Reviews of Interventions and self-developed criteria for cluster-randomised trials and trials of complex interventions.

Preliminary Results: Recently, the protocol for the Cochrane review has been completed. So far, 14 articles have been identified, evaluating complex interventions. All studies were carried out in care homes with interventions comprising different components including educational programmes, medication review, counselling, and attempts to improve inter-professional communication. Most studies were of limited methodological quality and showed inconsistent results regarding the reduction of antipsychotic drug prescription.

Conclusion: The preliminary results indicate that there are successful psychosocial interventions aiming to reduce antipsychotic drug prescription in care home residents, although overall, the included studies provide insufficient evidence for general efficacy of different psychosocial interventions. At present the review is still in progress. Final results will be presented at the congress.

B33-420

Fall prevention in the elderly: current evidence and challenges for further research

Balzer Katrin¹, Bremer Martina², Lühmann Dagmar¹, Raspe Heiner¹

¹*Universität zu Lübeck, Lübeck, Germany*

²*Hamburg University of Applied Sciences, Hamburg, Germany*

Introduction: To allow recommendations for practice and health care politics available evidence needs to be systematically evaluated and synthesized. Embedded in a health technology assessment (HTA) we conducted a systematic review of current evidence regarding the clinical effectiveness of different approaches for risk assessment and fall prevention in older persons either independently living in the community or in long-term care institutions. This HTA report is undertaken on behalf of the German Agency for Health Technology Assessment (DAHTA).

Methods and Materials: A systematic literature search was conducted in 31 data bases covering the period from January 2003 till June 2008. To evaluate the clinical outcome of preventive interventions systematic reviews and randomized-controlled trials (RCT) were solely included. With respect to risk assessment prospective studies were also considered. Since included studies proved to be very heterogeneous, the conduct of meta-analyses was considered not adequate. Results are summarized in a qualitative manner.

Results: Altogether 4910 publications were retrieved of which 86 were finally included in data synthesis. Overall, analysed studies do not provide consistent evidence with regard to any intervention. The majority of studies show limited validity due to high risk of bias. As new rigorous studies were identified when the HTA report was about to be accomplished it was decided to rerun literature search so that

most current evidence will be included. Thus, present results are preliminary but final results will be available in summer 2010.

Conclusions: Due to high heterogeneity and limited validity of available studies clear-cut evidence on the benefits of specific fall prevention strategies is scarce. Apart from methodological requirements for original studies several challenges for secondary research were identified. In particular, extended methods of qualitative and quantitative data synthesis are necessary to account for heterogeneity of studies and the complex nature of fall prevention. Based on present HTA report advanced approaches for evidence-synthesis will be discussed.

B34-451

Screening for falls in an acute geriatric ward: are instruments performing better than nurses?

Versluys Karen, Ligneel A, Dekoninck J, Noortgate N van den, Velghe A, Petrovic M

University Hospital Ghent, Ghent, Belgium

Introduction: In the acute Geriatric Department of the University Hospital in Ghent a fall prevention protocol was developed, consisting of both assessment and intervention. To evaluate this fall prevention protocol, a study with following objectives was designed: (1) Do the Morse Fall Scale (MFS) and the St-Thomas's Risk Assessment Tool in Falling Elderly Inpatients (STRATIFY) have an added value in screening compared to the current nursing assessment? (2) For what group of patients interventions can be optimized based on described falls and risk factors?

Method: The study consists of a double design. (1) The validity of the MSF and STRATIFY are evaluated by a prospective cohort study in the geriatric ward of the University of Ghent from January 2008 till March 2008. These instruments were collected by the researcher (RS), using anamnesis and a referent nurse (RN), using the patient file. (2) The major risk factors for falls are evaluated based on retrospective and prospective data.

Results: Two hundred and seventy-two patients were included in the study by the RN. A part of them ($n=95$) were seen by the RS. The screening instruments have a weak interobserver agreement obtained between reference nurse and researcher ($\kappa(\text{MFS})=0.207$ and $\kappa(\text{STRATIFY})=0.174$). The risk profiling by nurses seems to be at least as worthy as the screening tools. Multivariate analysis shows that the main independent risk factors are the use of benzodiazepines, tricyclic antidepressants, number of comorbidities at admission, the total score of the STRATIFY and the high risk fall assessment by nurses.

Conclusion: Screening instruments do not provide better risk stratification than the risk stratification by nurses in an acute geriatric ward. Factors such as the history of falls, locomotor ability, the number of comorbidities at admission and medication use are important parameters to determine risk of falling. Screening instruments do not seem to improve risk stratification.

B35-467

Towards an optimal skill mix for older residents in nursing homes

Tuinman Astrid¹, Hoeve Yvonne ten², Roodbol Petrie²

¹*Hanzehogeschool Groningen, Groningen, the Netherlands*

²*University Medical Center Groningen, Groningen, the Netherlands*

Introduction: Nursing homes have to deal with a lot of challenges: increased regulatory oversight, financial pressures from government and health insurance companies, and a severe shortage of nursing home personnel that is expected to increase in the future. There has

been a shift towards the employment of staff with lower qualifications or no qualifications at all. This study aimed to systematically review the literature and describe which care provider contributes to specific outcomes of quality care in nursing homes. A deeper understanding could contribute to decision making in relation to the necessary skill mix in nursing homes.

Methods and Materials: Relevant articles were identified through the electronic databases of Medline and Cinahl. Inclusion criteria included: original research (written in English), published between January 1995 and December 2008. The main focus of the studies had to be on the relationship between different care providers (skill mix) and specific resident outcomes in long-term care in nursing homes.

Results: Twenty-five relevant studies were identified. The study designs included 15 cross-sectional studies, seven longitudinal studies, and three observational studies. An increase of Registered Nurse staffing is associated with better resident outcomes, especially the prevalence of pressure ulcers, physical restraints, urinary tract infections and hospitalization. The number of Licensed Practical Nurses is not significantly related to resident outcomes, and when associations were found, the results are conflicting. Nurse Assistants have a positive influence on the prevalence of pressure ulcers and weight loss.

Conclusion: Substitution of care to less educated care providers has an impact on the quality of care and for this reason on the safety of patients. Managers have to realize that this will have an impact on the quality of care and, even worse, on the well-being of residents.

B36-469

Falls in older hospital inpatients and effect of cognitive impairment

Härlein Jürgen¹, Halfens RJG², Dassen Theo³, Lahmann Nils³

¹*General Hospital Fürth, Fürth, Germany*

²*Maastricht University, Maastricht, the Netherlands*

³*Charité – Universitätsmedizin Berlin, Berlin, Germany*

Introduction: Falls are common in older people with cognitive impairment, but prevalence studies in the hospital setting are rare. The study's objective was to compare fall rates in older hospital inpatients with and without cognitive impairment. Relationships between age, gender, mobility, cognitive impairment, care dependency, urinary incontinence and medical disciplines were investigated.

Methods and Materials: A secondary analysis of three nationwide prevalence studies in German hospitals from the years 2005, 2006, and 2007 was conducted.

Trained staff nurses used a standardized instrument to collect data about accidental falls within the last 2 weeks in their institutions and about other patient characteristics. The data of 9246 patients aged 65 years or older from 37 hospitals were analysed.

Results: The fall rate for cognitively impaired patients was 12.9%, while only 4.2% of older persons without cognitive impairment experienced a fall. Comparison between medical disciplines showed great differences concerning fall risk for confused and non-confused inpatients. In multivariate logistic regression analysis, the odds-ratio association of cognitive impairment and falls was 2.1 (CI 1.7–2.7). Higher age (OR 1.5, CI 1.2–1.9), greater care dependency (OR 1.6, CI 1.1–2.1), reduced mobility (OR 2.6, CI 1.9–3.7) and being a patient on a geriatric ward (OR 1.8, CI 1.1–2.9) were also statistically significant predictors in this model.

Conclusions: Cognitively impaired older people constitute a high-risk-group for accidental falls in hospitals. Fall prevention strategies in the hospital setting should address cognitively impaired inpatients as an important high-risk group.

B37-L11

Issue and implementation of a practice guideline for skin care with incontinence for acute hospitals and nursing homes

Haslinger-Baumann Elisabeth, Jukic-Puntigam Margareta, Steininger Alfred, Burns Evelin
Forschungsinstitut des Roten Kreuzes, Wien, Austria

The object of this paper is to provide evidence based nursing measures in incontinence related skin care. The first step was a literary analysis in order to achieve an evaluation of the nursing practices in urinary and/or stool incontinence-related skin care, with reference to the incontinence-related skin care product itself. The main focus was on the cleansing and protection of the perineal skin, as well as on the optimal treatment with incontinence-related skin care products. The next step was to define a practice guideline for nursing care based on the literary analysis. Nursing interventions were selected, aims were defined and evaluation criteria were tested as to their practicability by EBN experts and hospital staff, all results were recorded.

The practice guideline was introduced and implemented in the hospitals and nursing homes of the Barmherzige Brüder Österreichs by way of project management. As the hospital organization has a strong commitment to research and provides sufficient support in implementing the results, the guideline is well accepted in hospital practice. Developing an evidence based guideline is one way of putting into practice the combination of scientific findings and the practical knowledge of experts.

B38-2

Caring for older people with multiple chronic conditions in their own homes

Lupari Marina¹, Coates Vivien², Adamson Gary²

¹NHSCT, Magherafelt, UK

²University of Ulster, Coleraine, UK

Background: Often the complexity of older people's multiple chronic conditions presents challenges to healthcare professionals and care is deemed to be fragmented, reactive and inappropriate to patient care needs.

Preliminary Work: An expert panel was established capturing the views of older people and their carers. Analysis of patients' journeys allowed us to assess the causes of the problem. A scoping exercise was completed using all existing hospital and community-based information systems. Systematic review of available evidence completed. Information synthesis was achieved through a fishbone exercise.

Solution: Creation of a community based chronic illness case management service (CICM) for older people with multiple chronic conditions.

Implementation: Change was implemented through project management approaches- a steering team was established, champion engaged, key stakeholders identified, project initiation document agreed, and key implementers identified. For the new services nurses were recruited and trained in work in a new way – being matched against agreed competencies. Timetable for change was a 12 month period.

Results: Sixteen nurses have been providing care to older people in excess of 1000 patients in their own homes, proactively engaging with older people and orchestrating the care they require from the healthcare services. Eighty percent of patients who received a CICM service did not present for readmission in the 12 month analysis timeframe.

Further Analysis: Effects have been simplistically measured using hospital data to investigate the effect of the intervention on admissions and beddays. In November 2009 we will finish data collection from a prospective comparative study to investigate effectiveness and cost effectiveness of the intervention.

Conclusion: Chronic disease management for older people is a complex task which involves many different and very powerful stakeholders. Professional territoriality is a key challenge. Older people with chronic conditions can be successfully managed at home.

B39-8

Cultural diversity, locus of control, spirituality and quality of life in elderly patients

Marcus Yehudith, Balik Chaya, Kelishek Shoshana, Khaikin Rut, Warshawski Sigalit, Ben Avraham Yaffa, Markman Yuri
Shoenbrun Academic School of Nursing, Tel Aviv, Israel

Background: Increased life expectancy is a global phenomenon and the population in Israel mirrors this trend. Consequently, a higher percentage of the population have developed chronic diseases and conditions that impact on quality of life. Health maintenance and improvement of quality of life is a fundamental nursing goal in the care of this growing elderly population.

The aim was to investigate patient perceived factors that influence quality of life within the elderly, chronically ill population in Israel.

Method: Sample: A convenience sample of 489 chronically ill elderly patients in a large hospital located in central Israel. Patients completed self-reporting questionnaires that measured socio-demographic variables, locus of control ($\alpha=0.84$) and quality of life ($\alpha=0.96$). Descriptive statistics and Pearson correlation were utilized to analyze data.

Findings: Significant differences were found in patient perception of quality of life and locus of control between the different ethnic groups ($P<0.05$). Religious observance and spirituality were found to be associated with higher locus of control ($P=0.05$) with observant patients significantly higher than the less observant population. Not surprisingly, chronically ill patients who perceived their health as poor reported a lower quality of life ($r=-0.395$ $P=0.000$) with decreasing perceived quality of life with increasing age ($r=0.463$, $P=0.000$).

Conclusions: Spirituality, religious observance, ethnic origin and patient sense of locus of control were found to be key determinants that influenced quality of life. Consequently, these factors must be considered by nurses who provide care to this population, develop policy and guidelines for care of older adults, and educate students so that the best quality of life can be attained by the elderly.

B40-13

Natural environment and health: promoting health in older persons

Prasini Ioanna¹, McWilliam Carol²

¹Hygeia Hospital, Marousi Athens, Greece

²University of Western Ontario, London, Canada

While the relationship between nature and health has been documented in the literature, little is known about seniors' experience of nature as part of health. The purpose of this study was to acquire an in-depth understanding of seniors' experiences of nature in the context of health. Applying phenomenological methodology, the researcher purposefully selected eight seniors representing both sexes, varying in age and cultural backgrounds. Narrative data were collected through audio-taped, in-depth interviews, using a semi-structured interview guide. Hermeneutic analysis and interpretation revealed that seniors' experience nature as part of health was one encompassing various levels of consciousness: being part of nature, being consciously aware/ thinking of nature and health, and acting to create health through nature. Overall, seniors described their health as a dynamic concept which was inextricably intertwined with elements of the natural environment. The insights gained from this study may inform health promotion theory and nursing practice, education, and administration.

B41-5

Osteoporosis knowledge, health beliefs and preventive behavior in older women living in a rural areaAree-Ue Suparb¹, Petlamul Monrudee²¹*Ramathibodi School of Nursing, Faculty of Medicine
Ramathibodi Hospital, Bangkok, Thailand*²*Graduate Studies, Mahidol University, Bangkok, Thailand*

Introduction: Osteoporosis is a disease affecting primarily women. Osteoporosis preventive behaviors are important to decrease adverse consequences. The aims of this descriptive study were to: (1) describe osteoporosis knowledge, health beliefs, self-efficacy, and preventive behaviors among older women; and (2) examine the relationship between osteoporosis knowledge, health beliefs, self-efficacy, and preventive behaviors among older women.

Methods and Materials: Participants were recruited from a rural area in southern Thailand. The sample consisted of 83 women ages 60 years and over, with the mean age of 67.95 (SD=7.91 years). The measures used were osteoporosis knowledge test, osteoporosis health belief scale, osteoporosis self-efficacy scale, and osteoporosis preventive behavior. Statistical analysis was performed by using descriptive statistics and Pearson's product moment correlation coefficient.

Results: Findings revealed that the mean osteoporosis knowledge score, health belief score, self-efficacy score, and preventive behavior score of older women was 7.71 (SD=3.96), 139.41 (SD=13.49), 75.11 (SD=27.09), and 66.92 (SD=8.47), respectively. There was a significantly positive relationship between osteoporosis knowledge and osteoporosis preventive behavior ($r=0.30$; $P<0.01$); perceived severity and osteoporosis preventive behavior ($r=0.27$; $P<0.05$); perceived benefits of exercise and osteoporosis preventive behavior ($r=0.25$; $P<0.05$); perceived health motivation and osteoporosis preventive behavior ($r=0.26$; $P<0.05$); and perceived self-efficacy of exercise and osteoporosis preventive behavior ($r=0.32$; $P<0.01$). A significantly negative relationship was found between perceived barriers of exercise and osteoporosis preventive behavior ($r=-0.27$; $P=0.01$).

Conclusion: The results suggest that interventions should aim at promoting osteoporosis knowledge, perceived benefits of exercise, perceived health motivation, self-efficacy in osteoporosis prevention as well as aim to reduce perceived barriers to osteoporosis preventive behaviors among older women. A tailored intervention for specific age groups would be beneficial.

B42-18

Fall risk assessment in the outpatient setting

Meador Suellen, Heasley Marsha, Jones Roberta

Jack C. Montgomery VA Medical Center, Muskogee, OK, USA

Introduction: Jack C. Montgomery V.A. Medical Center nurses systematically assess Outpatient and Home Based Primary Care patients for fall risk. Authors defined fall risk assessment for community-dwelling elders, developed, tested and implemented a 'screen' integrating research and computer technology.

Body: Goal-improve veteran safety with fall and catastrophic injury prevention. Method-educate patient/family on home safety, assess gait/balance, report single/recurrent falls, include provider in follow-up.

Materials: Nurses electronically complete 'screens/ reminders'. Providers receive immediate alerts of positive screens.

Methods: Education handout, 'Fall Prevention at Home', from the National Center for Patient Safety (NCPS) Falls Toolkit is pleasant, easy-to-read and understand, available paper copy or computer link.

Gait/balance assessment tool, the 10 Foot 'Get Up and Go Test' (modified) assessing gait, strength and/or balance. The nurse inquires about falls, classifies 'single' or 'recurrent', comments on recent fall circumstances, patient injury, treatment for injury.

Research tool chosen, Preventing Falls in Older Adults, Evidence Based Guideline for Fall Prevention' and 'Assessment and Manage-

ment of Falls' by Dr. Laurence Rubenstein (with permission). Management includes history, medication, vision, gait/balance, lower limb joints, neurological and cardiovascular factors. Provider has plan/action box for changes

Results: Tool meets VA EPRP (External Peer Review Program) ACOVE Measures Basic Fall Evaluation (Assessing Care Of Vulnerable Elders, 75+) and exceeds JCAHO Safety Goal #9. Health factors enable tracking at VA's Data Warehouse.

Conclusion: Fall prevention and well-being promotion requires watching people walk, asking if they have fallen, taking appropriate action. People that can be helped the most are those that have not yet started to fall.

B43-23

The nursing staff's experiences and reactions when older people with dementia fall in nursing homesStruksnes Solveig¹, Bachrach-Lindström Margareta², Hall-Lord Marie Louise³, Slaasletten Randi¹, Johansson Inger¹¹*Gjovik University College, Gjovik, Norway*²*Linköping University, Linköping, Sweden*³*Karlstad University, Karlstad, Sweden*

Introduction: Multi-factorial intervention programs seem to be the most efficient strategy to prevent fall incidents and promote well-being and health. However, there are still few studies regarding nursing staff's experiences with the compound process to prevent falls. The aim of this study was to describe the nursing staff's experiences and reactions when fall incidents occur among older people with dementia. A further aim was to compare the experiences of registered nurses (RN) and enrolled nurses (EN).

Methods and Materials: The study has a quantitative cross-sectional design and includes the staff working in special care units ($n=104$) for older persons with dementia in four nursing homes in Norway. The response rate was 66%. Data were analysed with descriptive and analytic statistics.

Results: The results show that the respondents seldom experienced being present at or preventing fall situations. It seldom took long before fall incidents were discovered by the staff, and ENs discovered the fall incidents significantly faster than the RNs. The majority of the nursing staff seldom felt stress, unease or guilt related to attending fall situations. However, RNs felt stress in relation to fall situations to a significantly higher degree than ENs.

Conclusion: The nursing staff in the present study report that they seldom experience fall-incidents but they experience that they have sufficient competence in fall-prevention and are able to manage the fall incidents. As regards systematic intervention programmes the results reveal uncertainty about routines or lack of routines. This highlights the necessity for stronger focus on improvement of prevention proceedings as the general intention in the nursing home must be to ensure good quality of care to older people including the prevention of injuries. Consequently, the nursing staff's experiences and work conditions related to fall-prevention need to be explored through further studies.

B44-26

Effects of quadriceps exercise on pain and strength conditioning in women with knee osteoarthritis

Piyakhachornrot Naphaphorn, Vanavanant Sommai

Ramathibodi Hospital, Bangkok, Thailand

Introduction: Knee osteoarthritis (OA) is becoming a major cause of disability in middle-age and older women. Consequently knee OA symptoms such as pain and stiffness can compromise the patient's physical, psychological and socioeconomic status. The purpose of this study is to investigate the effectiveness of an intervention

program applying self-efficacy theory on increasing self-efficacy and quadriceps muscle strength and decreasing knee pain in women with knee osteoarthritis.

Methods: Eighty-five patients with knee osteoarthritis attending the orthopaedic out-patient clinic, Ramathibodi Hospital, Bangkok, Thailand completed the study (mean±SD=57.8±9.5 years; range 33–80 years). Participants received the intervention program, which consisted of a 3-week class session including lecture, group discussion, and individual exercise training followed by home-based exercise three times a week for 12 weeks. Data were collected using self-efficacy questionnaire, visual analogue scales, and back-leg dynamometer at baseline, 8-, and 12-week follow-ups. Data were analyzed using descriptive statistics and repeated measures ANOVA.

Results: Results revealed that the program participants had a statistically significant increase in the mean score of self-efficacy ($P<0.001$), and also had higher level of quadriceps muscle strength after enrollment compared with the baseline. Visual analogue pain scores decreased significantly compared with the baseline ($P<0.001$).

Conclusions and Recommendations: The intervention in this study leads to reduction of pain and improvement of muscle strength. Self-efficacy theory, therefore, should be considered when developing a health education program, which is a low cost intervention, in women with knee osteoarthritis.

B45-54

Healthy and Active Ageing, a preventive program for independent living well elderly

Heijmans Anke, Bussmann Monique, Brouwer Diana, Kuiper Chris

University of Applied Sciences, Rotterdam, the Netherlands

Introduction: In July 2008, a governmental grant was awarded for a follow-up study, to implement the Dutch Healthy and Active Ageing program. The intervention is based on the American Life-style Redesign and British Life Style Matters Program. Both showed positive effects: older people scored positively on health and quality of life issues, and required less health care services. However, these results can not be easily translated to another culture, since many differences can be expected in elderly and their social world.

The research objective is to perform a 'bottom-up' study on the implementation of the preventive intervention for elderly living at home, in specific contexts, aimed at preserving health and well-being, so they can live independently for a longer period.

Methods and Materials: An action research design is used to reflect on and learn from the issues that emerge during the implementation of the program, experienced by the various parties concerned. Important information will be particularly derived from the professionals and elderly involved. In addition, quantitative measurements on health, self-management, and quality of life will be used to gain insights in the characteristics of the potential target group, and their preferences for the content of the program by using Q-methodology ($N=150$).

After analysis, the results are discussed within a focus group of stakeholders per context, aimed at fine tuning and realizing suitable conditions.

Results: The following outcomes will be presented. Differences per context. Consequences for contextualized programs. Puzzles and pearls for implementation of preventive interventions.

Conclusions: Methodology of action research can generate highly usable knowledge for professionals to perform actions that are clearly aimed at improvement. Particularly the process of collaborative learning with and from the parties concerned (including elderly), has shown to be effective to develop contextualized programs.

B46-60

Older peoples' perceptions of pain, health and psychosocial life

Willman Anna¹, Petzäll Kerstin¹, Hall-Lord Marie Louise²

¹*University of Karlstad, Karlstad, Sweden*

²*Gjøvik University College, Gjøvik, Norway*

Introduction: Few studies have examined the very oldest people with pain and how pain influences health and psychosocial life. The aim of this study was to describe how older people perceived pain and to compare sex and age groups in relation to perceived pain, health and psychosocial life. Further to investigate how pain influenced health and psychosocial life.

Methods and Materials: The study had a cross-sectional design. The sample was recruited from a survey of elderly peoples' life situation, health and quality of life, conducted in a county in the middle part of Sweden. The selected people in this study were 80 years and older, with already known extensive pain. Altogether, 314 older people were invited and 225 agreed to participate (response rate 72%). Data was collected by a questionnaire, consisted of 42 items.

Results: Pain had lasted from 2 weeks to 60 years (md=9 years) among the older people and had lasted significantly longer among women than men. Almost 40% of the older people had pain from one location and more than 50% had pain from one to three locations. Seven percent had pain from four to ten locations. The older people experienced moderate to severe pain. The people in the younger age group, 80–85 years, experienced significantly more intense pain. There were statistical significant correlations between several of the MPI-S dimensions (e.g. pain-related interference, life control) and mental and physical health.

Conclusion: The older people suffered from an overall low mental and physical health. The intensity of pain influenced the older persons' psychosocial life and health in a negative way. It is important for nurses to be aware of the complexity of pain and the overall low health in this group to be able to support and promote the older persons in their daily life.

B47-75

Visiting nurses' foot health evaluation skills – a pilot study

Stolt Minna¹, Suhonen Riitta¹, Viitanen Matti¹, Voutilainen Päivi², Leino-Kilpi Helena¹

¹*University of Turku, Turku, Finland*

²*Ministry of Social Affairs and Health, Helsinki, Finland*

Introduction: Foot health is an integral part of older person's general health and needs to be evaluated regularly to prevent the incidence of foot problems. Visiting nurses play an important role older person's foot health assessment. Measures like the Foot Health Assessment Instrument are of importance to evaluate foot health of older people. The purpose of the study was to pilot test the functionality of the Foot Health Assessment Instrument and describe the inter-rater agreement of foot health evaluations between visiting nurses and a podiatrist.

Materials and Methods: Visiting nurses ($n=13$) performed foot health evaluations of older person's feet independently. After that a podiatrist (MS) made assessments with the same instrument of the same feet. Foot health was evaluated with Foot Health Assessment Instrument (20 items) consisting of evaluation of skin health (11 items), nail health (five items) and foot structural deformities (four items). Agreement percentages were calculated dividing the amount of corresponding evaluations with total amount of items and multiplied it with 100. The objective was 100% agreement between visiting nurses' and podiatrist's assessments.

Results: Overall agreement in all items of the instrument between visiting nurses and a podiatrist was 80%. The agreement in skin health evaluation of older person was best, 82.5%. Most problem-

atic items to evaluate were palpation of pulses in ankle area. Evaluations of nail health reached 76.2% and foot structural deformities 78.8% agreements. Most difficult foot structural deformity to evaluate for visiting nurses was hammer toes.

Conclusion: Visiting nurses' foot health evaluation skills need to be improved so that they can recognize foot health problems of older people. In addition, the Foot Health Assessment Instrument needs developments to standardize and guarantee the congruent foot health assessments and the functionality of it need to be improved. Overall, more research with representative sample is needed to analyze visiting nurses' foot health evaluation skills.

B48-89

Evaluation of the effects of screening elderly people in order to detect frailty at an early stage

Duimel-Peeters Inge GP¹, Stijnen MN¹, Jansen WJ², Vrijhoef Hubertus JM³

¹Maastricht University Medical Centre, Maastricht, the Netherlands

²Public Health Service of South-Limburg, Maastricht, the Netherlands

³Maastricht University Medical Center/Tilburg University/TRANZO

Introduction and Purpose: Assuming the fact that screening of frailty should be the first step in an integrated chain of care model, the effects of preventive consults in which elderly people are screened on (possible) frailty, the subsequent interventions and follow-up among community-dwelling frail elderly have to be evaluated before broad implementation can start. A preventive consult should contribute to healthy and active ageing, to the adequate control of one's independence, to the early detection of health problems and to the promotion of quality of life. Systematic preventive screening will reach those elderly who have undiagnosed health problems, i.e. those in whom secondary prevention can start.

Methods: A measurement instrument to distinguish between 'frail' and 'not-frail' older people (75+) will be developed and validated. This instrument consists of a list of indicators extracted from the GP Health Record File and of questionnaires about health determinants and risk factors for physical, mental, psychosocial and cognitive impairments. With a quasi-experimental design, the psycho-clinical properties and the predictive feature for frailty of the screening instrument will be discussed, process measurements and outcomes (quality of life as well as health related outcomes) at individual level, and experiences of healthcare professionals (e.g. feasibility) will be compared between experimental and control condition.

Results and Conclusions: Based on the preliminary data from the pilot study it can be concluded that an integrated care model for elderly will be adopted by professionals in the primary healthcare setting, patients and healthcare insurance companies if the consultation service can be described as 'effective' based on the outcome opinions (i.e. clinical parameters and questioned opinions). Finally, with proven evidence-based effects of screening the elderly within an integrated chain of care model, the feasibility of a Diagnosed Treatment Combination (in Dutch: DBC) for frail elderly will be judged.

B49-124

The 75-year-olds' perceived health. The district nurse's starting point for health dialogues

Sherman Helena¹, Forsberg Christina², Karp Anita³, Törnkvist Lena¹

¹Centre for Family Medicine, Huddinge, Sweden

²Karolinska Institutet, Stockholm, Sweden

³Aging Research Centre (ARC), Stockholm, Sweden

Aim and Objective: To obtain an understanding about the health, health resources and socio-demographic status of today's 75-year-

olds in order to equip district nurses with the necessary skills when conducting health dialogues with 75-year-olds.

Background: The change in demographic structures towards an older population calls for preventive and promotive interventions, for example a health dialogue, so that older people will be able to live with good health and independently in their homes for as long as possible.

Method: Data were collected on 583 people from 16 Health Care Centres areas in Stockholm. Three questionnaires were used: Health Index, Sense of Coherence and one study-specific questionnaire. Statistical methods were used for analysis.

Results: The results showed that many 75-year-olds could benefit from interventions such as behavioural and lifestyle changes and support regarding various health problems e.g. pain, sleeping problems, fatigue, elimination patterns, low spirits and lifestyle factors such as low or excessive bodyweight and smoking. They also need help to understand their own health and illnesses. Socio-demographic status was associated with health and well-being. In general women, individuals who lived alone and individuals with elementary education reported lower Health Index and Sense of Coherence scores than men, those who lived with someone and those with a university education.

Conclusion: The results provide an understanding of the health and health resources of today's 75-year-olds, which can support district nurses as to what they should be aware of in the health dialogue. It also provides important knowledge on what areas district nurses need skills in.

Relevance to Clinical Practice: A health dialogue offered to all 75-year-olds could be an important action plan to support the 75-year-olds in improving their health as well as focusing on disease prevention. A well-equipped DN with adequate skills might make a significant difference in their health and wellbeing.

B50-139

A qualitative analysis of experiences of smoking cessation among older males in Taiwan

Huang Chih-Ling, Chen Chih-Yin

Chang Jung Christian University, Tainan, Taiwan

Introduction: Recent evidence suggests that smoking resulted in 217 761 years of potential life lost (YPLL) for males, 15 462 YPLL for females, and corresponding annual productivity losses of US\$1371 million for males and US\$18.7 million for females in Taiwan. Among the current older smokers, 28.06% had quit attempts within the recent year. However little is known about the experiences of smoking cessation among older persons in Taiwan. The purpose of this study was to explore older ex-smokers' views on smoking cessation by the qualitative methods.

Methods and Materials: Individual interviews were conducted in May 2007 among older male ex-smokers recruited from public health stations and Family Medicine clinics in southern Taiwan. The recruitment criteria included: (1) the age >60 years, (2) Mandarin or Taiwanese speaking, (3) continuous abstinence for ≥6 months, (4) no cognitive impairment, and (5) living in community, not in hospitals or institutions.

Results: Subjects were male and their average age was 66.6 years (±8.0). On average, they began smoking when they were 19 years of age. Three elder had previous quit attempts before abstinence. The motivation for smoking cessation among elder ex-smokers was health concern and the desire of hugging grandson. Successful quitters used in general a combination of quit methods such as smoking reduction, eating, gargling, nicotine patches, determination and will-power, and avoidance of triggers.

Conclusion and Suggestions: To our knowledge, this is the first survey of smoking cessation in older persons in Taiwan. Findings suggest older ex-smokers have positive attitudes to quit and successful skills from coping with nicotine dependence. The results provided health professionals and policymakers to plan effective tobacco

control strategies and smoking cessation interventions for the older smokers.

B51-146

Action research as a method to improve quality of care for older persons

Snoeren Miranda

Fontys University of Applied Sciences, Eindhoven, the Netherlands

Introduction: With the aim of combining care, education, innovation and research, a care facility for older persons in The Netherlands, has set up a Care Innovation Unit in collaboration with a faculty of nursing. To encourage change and improvement a participatory action research project (PAR) was initiated on the ward, where older persons with psycho geriatric problems live temporarily for observation, rehabilitation or first aid. PAR integrates the improvement of practice and the development of scientific knowledge through action cycles of problem orientating, planning, action and evaluation. One action cycle on the ward had the aim to improve day planning and involve clients in (household) tasks and activities. A multidisciplinary research group with five vocational trained practitioners was supported in initiating the project and planning actions for improvement. They facilitated other team members in carrying out actions and participated in evaluating the results.

Methods: Kemmis & McTaggart's (1988) four-phase framework was used to establish the action research process

Results: Practitioners involve older clients purposefully in activities, which they also use as an opportunity for observation. Day planning is now a central element in the nursing process. Clients are alert and show less destructive behaviour. Process orientated results include increased ownership of the situation and enhanced collaboration. Working in a heterogenic research group encourages group learning, but also gives difficulties when aspects not relevant to a participant's job are discussed. Although practitioners did not show motivation to use the research cycle as an opportunity for their own learning, individuals expressed learning results and development afterwards.

Conclusion: PAR supported learning, development and empowerment, enabling vocational trained practitioners to engage older persons in activities. This increased the well-being of older persons.

B52-157

Planned interviews about sexuality as part of routine care to men with genitourinary cancer

Maassen Susanne¹, Gamel Claudia², Boellaard Willem¹, Bangma Chris¹

¹*Erasmus MC, Rotterdam, the Netherlands*

²*UMC Utrecht, Utrecht, the Netherlands*

Introduction: Within the existing health care to Dutch men with genitourinary cancer sexuality is little discussed by both doctors and nurses. Former research showed that patients experienced information needs about all aspects of sexuality. Nurses should intervene in this information need. Effective interventions exist, but none of these have been tested in the Dutch health care system. In this study a nursing intervention to discuss sexuality with male genitourinary cancer patients was developed and evaluated.

Material and Method: The intervention consists of two planned interviews performed by the same oncology nurse with patients who will receive a surgical treatment. The first interview takes place a week before, the second 6–8 weeks after surgery. Topics: sexual functioning and possible changes after surgery for genitourinary cancer, the patient experiences with sexuality, coping with changes in sexual feelings, feelings of masculinity and the sexual relationship,

and uncertainties and myths about sexuality. The study was conducted in a one-group pretest-posttest design. To evaluate the nursing intervention a newly designed questionnaire was used.

Results and Discussion: The results of this study show a positive evaluation of the two planned interviews on sexuality by one oncology nurse. The questionnaire used for the evaluation of the interviews had an internal consistency of α 0.82 and proved to be a practical instrument for evaluation of a new nursing interview intervention. Although the opinion on the timing of the interviews showed much spread, the average was considered positive.

Conclusion: This study has shown that a nursing intervention to discuss sexuality in two planned interviews is positively evaluated by men who undergo surgical treatment for genitourinary cancer. Future research is necessary for a ruling on the impact of the planned interviews on sexuality. Preferably this will happen in a randomized controlled trial.

B53-177

Care models that integrate advanced nursing services to elderly with depression: a literature review

Dreizler Jutta

Zurich University of Applied Sciences, Winterthur, Switzerland

Introduction: Despite a tremendous impact of depression on everyday life and general health, about 50% of the patients seek treatment with family physicians and only 5% with psychiatrists. To identify helpful care services including nurses, a literature review on models of care has been conducted. The purpose was to describe necessary content of interventions, the target outcomes in patients, the structure and skills of the care team, the model of care and the role of the nurses.

Methods: Literature search in CINAHL, Cochrane, PUBMED, Medline, Gerolit was conducted. Twelve articles were included according to inclusion criteria.

Results: Two models of care were described. First, in the care management model, based on the WHO Chronic Care Model, the patients sought treatment for depression or other conditions in a primary health care centre. Second, in the gate keeper model, based on the Assertive Community Treatment Model, a nurse educated indigenous building workers of public housing to identify clients with mental health problems. Professional attributes as following the treatment in problem solving therapy were defined a necessity for physicians, nurses and other health care professionals. Regular team supervision and mutual continuous education were seen as prerequisite for efficient services. The nurses were seen as part of the multidisciplinary team. In addition to contribute to individualized care plans, follow-up to monitor the situation and the progress was seen as main responsibility of the nurses.

Conclusion: There is evidence that integrative care including advanced practice nursing is beneficial for elderly patients with depression. However, the intervention programs were very diverse in intensity and content. Therefore, further research is needed to identify the best care model. Additionally, the model of care has to be adapted to the specific health care system and the specific life situation of the patients in order to be accepted in this frail elderly population.

B54-235

Well-being and quality of life of people over 75 years: influence of social support

Almeida Maria

Nursing School of Coimbra, Coimbra, Portugal

Introduction: Assessing older people's quality of life is very important for health professionals and it should focus on health problems which cause disability and may be solved, functional ability, health status, life satisfaction and social support.

Material and Methods: This study aimed to describe the characteristics of the quality of life of people aged 75 and above and identify the relationship between the sociodemographic variables/social support and the quality of life and well-being of older persons. This sample was composed of 108 older adults (age ≥ 75 years, good orientation in space-time, user of adult day-care centres selected more than 6 months ago). We used a sociodemographic questionnaire; the Scale to Assess the Quality of Life and Well-Being of Older People by Sousa & Figueiredo (EASYcare 1999–2002); and the Social Support Scale by Matos & Ferreira (1999).

Results: (1) Older adult males have a better quality of life in the dimension 'health and quality of life' than female subjects. (2) The older they are, the less quality of life they have, both in general and in the dimension 'motor skills'. (3) Less qualified older people have less quality of life in the dimension 'cognitive skills'. (4) Married older people have a better quality of life in the dimension 'health and quality of life' and a worse quality of life in terms of 'autonomy'. (5) Older people who live with their children have worse overall quality of life and 'motor skills'. (6) Married older people receive more 'instrumental support' than non-married older people. (7) Older people with more 'instrumental support' have better quality of life in the dimensions 'cognitive skills' and 'motor skills'. (8) Older people with higher overall social support have less quality of life.

Conclusion: With regard to the sociodemographic variables, gender, age and education were considered important factors in the quality of life.

B55-250

Identifying patients with low health literacy

Sommerhalder Kathrin, Frey Sibylle, Hahn Sabine
University of Applied Sciences, Bern, Switzerland

Introduction: In the acute care setting many patients are elderly. Due to this, limited health literacy is potentially highly prevalent in hospitals. During hospitalization patients receive daily information about their medical condition and care. Health literacy is essential for patients' ability to understand and apply this information. Currently, there are no existing German instruments available for identification of low health literacy. This study validates a screening instrument that identifies patients with low health literacy in the hospital setting, with a special focus on instrument validity for elderly patients.

Methods and Material The study is performed in acute care hospital settings in Bern, Switzerland. Data from 200 adult patients is currently being collected. To assess test-retest reliability, 50 patients' will be retested, with a 14-day interval in-between the testing dates. The screening instrument of Chew *et al.* (2004) is utilised. It is a 16 item self-assessment of the patients' ability to understand and act upon health information. It was translated from English into German according to international standards. Two instruments are utilised as comparison standards.

Results: The study is currently in the phase of ongoing data collection. Data collection will be completed by the end of February 2010. Results of the study will be presented at the conference.

Conclusion: This study provides a screening tool which will assist health care professionals in effectively identifying patients with low health literacy. Due to the elderly being at risk for low health literacy, a valid screening instrument is especially needed for this age group. Identifying a patient's level of health literacy assists health professionals in developing tailored interventions to improve the patients' health literacy. Health literacy supports patients in making informed decisions concerning their health and in having greater control in health related issues. Supporting patients with low health literacy is therefore crucial for the empowerment of these patients.

B56-259

Diabetes: psychometric evaluation of an instrument to evaluate the effectiveness of education

Duprez Veerle¹, Pover M de¹, Vanrolleghem S¹, Peeters B¹, Spiegelaere M de², Nuytens C¹, Beeckman D¹

¹University College Arteveldehogeschool, Ghent, Belgium

²COMPahs – Arteveldehogeschool, Ghent, Belgium

Introduction: A rigorously constructed and psychometrically validated instrument can be used to assess the effect of education in diabetes patients. The aim of this study was to develop a valid and reliable instrument to evaluate the effectiveness of education on (1) patients' knowledge (2) self-efficacy, and (3) self-care.

Methods and Materials: A prospective psychometric instrument validation study was performed. An extensive literature review was performed to develop a (1) knowledge, (2) self-efficacy and (3) self-care assessment instrument for patients concerning their diabetes management. Face and content validity of the instruments were evaluated in a double Delphi procedure by a panel of 14 endocrinologists, general practitioners, podiatrists, dieticians and nurses with an extensive experience in diabetes care and education. A convenience sample of 188 diabetes patients from Belgium participated to evaluate construct validity and internal consistency of the instruments.

Results: A 21-item multiple-choice knowledge instrument, reflecting knowledge about (1) 'glycemic control' and (2) 'medico-social management aspects', was developed. The content validity of the instruments was excellent [Content Validity Index (CVI) = 0.79–0.88]. Group knowledge scores of Type I diabetes patients (mean=0.80, SD=0.15) were found to be statistically significantly higher than those of Type II diabetes patients (mean = 0.60, SD = 0.21) ($P < 0.001$). The item difficulty index of the items in the knowledge instrument ranged between 0.54 and 0.89, while values for item discrimination ranged from 0.26 to 0.68. The internal consistency reliability (Cronbach's alpha) of the instruments were between 0.79 and 0.86.

Conclusion: Preliminary psychometric testing suggests that the instruments are reliable and valid. Replication of this study with a larger sample is indicated to determine relationships between the scores on the different instruments and to determine the stability of the instruments.

B57-269

Feelings of insecurity and vulnerability: Is the association different between older age groups?

Donder Liesbeth de¹, Witte Nico de², Dury Sarah¹, Buffel Tine³, Verté Dominique¹

¹Vrije Universiteit Brussels, Brussels, Belgium

²University College Ghent, Gent, Belgium

³FWO, Brussels, Belgium

Introduction: The aim of this contribution is twofold: to explore the relationship between different sources of vulnerability and feelings of insecurity among elders and to investigate whether this association is different between three older age groups (60–69, 70–79, 80+). In criminological literature, vulnerability is mainly related to 'being at risk to crime and victimization'. This study, however, suggests a broadened conceptualization by incorporating the influence of demographic, material, physical and psychosocial vulnerability.

Methods and Materials: The data used in the present study originated from the research project 'Belgian Ageing Studies' assessing quality of life and living conditions of older people. The project started in 2004 and is still continuing. The structured questionnaire collected information on e.g. feelings of insecurity, housing conditions, psychological wellbeing, civic participation, various neighbourhood characteristics. Belgian Ageing Studies made use of a participatory methodology, named peer research. Elders were not

merely the research target group, but they also adopted the role of expert researchers.

Results: Hierarchical regression models indicated that gender, number of children, household income and perceived ageism influenced feelings of insecurity, across all age groups. Furthermore, some sources of vulnerability were found to be group specific. For the first age group (60–69), poor housing quality, mental health problems and growing older contributed to higher feelings of insecurity. In the second age group (70–79) age, being a social tenant and poor physical health showed a significant relationship with feelings of insecurity. In the third age group (80+), elders experience a growing need for mobility assistance because of difficulties to coming outside

Conclusion: Conclusively, this study emphasizes the importance of recognizing the essential diversity among older persons in order to reduce feelings of insecurity. Different approaches are needed for particular groups. Policymakers and practitioners need to take into account differences when developing and implementing services for older populations.

B58-274

Prevalence studies on elder abuse in Europe: state of the art and guidelines for future research

Donder Liesbeth de¹, Ferreira Alves José², Lang Gert³, Koivusilta M⁴, Reingarde Jolanta⁵, João A², Luoma Minna-Liisa⁴, Schopf Anna³, Tamutiene Ilona⁵, Verté Dominique¹

¹Vrije Universiteit Brussels, Brussels, Belgium

²University of Minho, Braga, Portugal

³Forschungsinstitut des Roten Kreuzes, Vienna, Austria

⁴National Institute for Welfare and Health (THL), Helsinki, Finland

⁵Magnus University, Kaunas, Lithuania

Introduction: The World Health Organization and the International Network of the Prevention of Elder abuse have recognised the abuse of older people as a significant global problem. Generally, though, the issue does not emerge as a major theme in research nor in the work of policymakers. This contribution aims to map existing prevalence research on abuse and neglect of elder people and aims to provide a critical overview of existing methodologies, which have been used to survey the prevalence rates of abuse against elders in all European countries.

Methods and Materials: This research is part of the Prevalence study of Violence and Abuse against Old Women (PEANOW) which aims to provide knowledge about the prevalence of abuse and violence against older women in five European countries (Austria, Belgium, Finland, Lithuania and Portugal). The first phase of the research consisted of providing an overview about the state of the art of prevalence research on elder abuse, survey designs and methods, instruments and results in all European countries. Therefore, an extensive literature search and qualitative content analysis was conducted.

Results: One of the lacunae concerns reliable data on the prevalence of elder abuse. Studies hardly ever use a substantiated operationalisation, but are in many cases based on professionals' reports rather than on information from elders themselves. Moreover, most studies lack theoretical foundation.

Conclusion: Combating elder abuse requires an integral understanding of those patterns and forces that underlie it. Especially, the knowledge on domestic violence among older women living at home is limited. Previous research has made some noteworthy strides in that direction, but clearly this is a line of inquiry that could be pursued more systematically. In the discussion, substantive attention is paid to develop possible guidelines for future research.

B59-286

Accidental falls prevention in the elderly: a post intervention survey in Italian Hospitals

Mecugni Daniela¹, Friggeri Federica², Mastrangelo Stefano², Gradellini Cinzia¹

¹University of Modena and Reggio Emilia, Reggio Emilia, Italy

²Azienda Saniatria Locale, Reggio Emilia, Italy

Introduction: This project aimed to identify characteristics and entity of falls, and applying good practice for falls' prevention and reduction of related risk factors. The first part was to increase incident reporting from nurses. The Health Authority organized courses for nurses on the use of a specific tool for data recording. This tool was a structured checklist with items on patient characteristics, risk factors analysis, description of the circumstance in which the fall occurred. The second part had the goal to evaluate courses efficacy, testing their impact on the use of the incident reporting tool.

Methods and Materials: At the end of nurses educational intervention a survey was planned. Two data collection methods were used: a questionnaire administered to nurses, and the incident reporting tool. The questionnaire was intended to measure professionals' perception and consciousness, and was specifically prepared and tested for the survey. A convenience sample of 144 nurses was selected from all nurses working in structures involved in the survey.

Results: Seventy-six nurses out of the 144 nurses involved in the survey answered the questionnaire (66.7%) concerning nurses perception and consciousness. Results describe a high level of problem sensitization among nurses: they show a good knowledge about falls risk factors. However, lack of knowledge about the reporting tool, and the fall risk assessment scale remain.

Falls incident registrations using the incident reporting tool were 265 (137 more than registrations made in year 2007). It is important to highlight that all registrations were collected in a thorough and correct way.

Conclusion: The survey demonstrated the positive relapse of nurses course on the registration of incident reporting. Nurses perceptions analysis highlights the shared importance of the incident reporting to prevent falls. These data will permit the Health Authority to start working on risk factors management. However, it will be necessary to keep updating courses, to maintain a high interest of professionals.

B60-295

Frailty: beyond the figures

Luijckx Katrien¹, Gobbens Robbert², Wijnen-Sponselee Ria³, Schols Jos⁴

¹Tilburg University, Tilburg, the Netherlands

²Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

³Avans University of Applied Sciences, Breda, the Netherlands

⁴Maastricht University, Caphri, department of General Practice, Maastricht, the Netherlands

Introduction: The Tilburg Frailty Indicator (TFI) is an user-friendly validated short questionnaire for screening frail community-dwelling older people, including only self-reported information on determinants of frailty and three domains of frailty (physical, psychological and social). The question remains whether such instruments are mainly analytic tools suitable for research purposes or also describe genuine experiences of frail elderly. The perspective of elderly themselves on frailty has as yet been little explored. Two research questions are therefore central in this paper:

1 To what extent corresponds the TFI frailty score to a frailty score assessed according to the narratives of elderly?

2 How do frail elderly perceive their frailty and their situation in general?

Methods and Materials: Both quantitative data and qualitative data were used. Interviews with 33 persons aged 75 years and over living independently in Roosendaal (the Netherlands), provided insight in the experiences of (frail) elderly. They also filled in the TFI and the WHOQOL-BREF.

Results: The combination of qualitative and quantitative data reveals the story behind the figures. First it will be shown whether a qualitative and a quantitative approach are congruent. Besides, the perspective of frail elderly themselves, their preferences and needs in daily life will be presented.

Conclusions: The results have both theoretical and practical relevance. A quantitative frailty measurement is validated further. Besides, knowledge about the perspective of frail elderly enables demand-based provision of care and services.

B61-321

Effects of group and personal interventions on perceived togetherness in older people

Tiikkainen Pirjo¹, Leinonen Raija²

¹JAMK University of Applied Sciences, Jyväskylä, Finland

²GeroCenter Foundation for research and development, Jyväskylä, Finland

Introduction: In order to promote health and prevent loneliness we need to develop interventions which promote social interaction and perceived togetherness between older people. In this study the subjective aspect of social interaction is described by the concept of perceived togetherness. The aim of this study was to examine the effect of group and personal intervention on perceived togetherness.

Material and Methods: This study is a part of the 3-year Good-Mood research and development project. The target population of this study consist 257, 75–79-year-old community-living residents in the City of Jyväskylä, Central Finland, and who reported feeling, at least occasionally, loneliness, melancholy or depressive mood and have no memory problems. The participants were randomized into the control ($n=127$) and intervention groups ($n=129$). The intervention group members participated in a 6-month intervention including either a personal counselling session ($n=47$), or a physical ($n=51$) or social activity group ($n=31$). Perceived togetherness was assessed using the Social Provisions Scale.

Results: At baseline the means of the six dimensions of perceived togetherness varied from reliable alliance 13.0 (± 2.3) to reassurance of worth 11.7 (± 1.9) in the intervention groups, and in the control group from guidance 13.2 (± 2.3) to reassurance of worth 11.7 (± 1.9). At follow-up the corresponding figures varied from reliable alliance 13.2 (± 2.0) to reassurance of worth 11.8 (± 2.0), and from guidance 13.5 (± 1.9) to reassurance of worth 12.1 (± 1.7). At follow-up the means of six dimensions indicated more perceived togetherness than at baseline, except in opportunity of nurturance in both groups and in social integration in the control group. The change between groups was statistically significant in the occurrence of social integration ($P=0.029$).

Conclusion: It seems that diverse interventions promote perceived togetherness. The findings indicate the importance of developing personal counselling and group interventions in order to promote social integration.

B62-329

Quality of life model: predictors of quality of life among sick older adults

Halvorsrud Liv¹, Kirkevold Marit², Diseth Åge³, Kalfoss Mary¹

¹Diakonova University College, Oslo, Norway

²University of Oslo, Oslo, Norway

³University of Bergen, Bergen, Norway

Introduction: The term Quality of Life (QoL) has been used in nursing for several years despite not being grounded in a common con-

ceptual model. Wilson and Cleary (1995) propose a conceptual model (WCM) based on theory, clinical practice, and research findings, which describes associations between different variables, mediator effects, and QoL. Such a conceptual model is important because it relates concepts in a rational scheme by virtue of their relevance to a common theme while serving as a springboard for generating research hypotheses.

Aim: The primary aim of this study is to investigate how the relation between depressive symptoms, physical function, health satisfaction, age and environment may predict QoL in a model that is based on the WCM.

Methods and Materials: Participants were drawn from a sample of Norwegian older adults receiving community health care, and stratified by age, gender and living area. The study is part of a larger international study. There were 89 older adults with a mean age of 78.6 year, 73% were women, 94.4% were living at home and 5.6% were living in nursing homes. A face-to-face interview was conducted using a questionnaire package designed for this study.

Results: The results showed that the overall model provided empirical evidence for linkages in the WCM. QoL was manifested by significant direct effects of environmental conditions and health satisfaction. In addition, environmental conditions had indirect effects on QoL, in particular via depression and health satisfaction. Age was not a significant predictor of QoL. Depressive symptoms, physical function and health satisfaction served as mediator factors in the overall model.

Conclusions: The results give preliminary support to the theoretical model based on the WCM. This model may help nurses in the community health care to collect and assess information, to suggest suitable interventions and to guide decision making among older adults receiving community health care.

B63-340

Assistance for the chronically ill older persons living at home

Moe Aud, Enmarker Ingela, Hellzen Ove

Høgskolen i Nord-Trøndelag, Levanger, Norway

Introduction: The present study, which is a part of a larger project, will focus on the assistance for the chronically ill older persons living at home. Chronic disease is one of the biggest health problems among Norway's oldest citizens. Getting in harmony with oneself may be a movement toward acceptance of chronic suffering and disease, conditioned by the existence of hope and life courage (Delmar *et al.* 2005). The aim of this paper is to describe how older persons living at home experience their chronically illness in relation to the assistance.

Methods: Data was given by in-depth interviews, sample 13 elderly, women ($n=5$) and men ($n=8$), ages 80–94 living at home with chronic disease, receiving help from home nursing care. Transcribed data were analysed using manifest content analyses.

Results: The identified meaning units could be described in three categories: Assistance from family, Assistance through facilities and Assistance from home nursing care. The family contributed with practical help and social contact. The facilities contributed to a feeling of safety and reduced their dependence on others. The nurses were helpful, but receiving help from busy nurses emphasized dependency.

Conclusion: The study indicated that elderly wanted to live at home. Life could be described as a battle with many trials, but they did not give up. They found happiness in life and events and expressed gratitude over physical and mental resources that were still intact. They had a life courage strengthened by life experience, gratitude to life, and by enjoying activities.

Life courage was supported by having a box with happy memories, reminiscing about happenings in the past, assisted by nurses to meet the challenges of living with illness and aging.

B64-352**Feasibility of a new intervention programme for vulnerable older people in primary care**

Bleijenberg Nienke, Schuurmans Marieke

UMC Utrecht, Utrecht, the Netherlands

Introduction: Following the principles of Disease management, care for vulnerable older people and their family caregivers is most effective when cure and care will be integrated within the context of primary care (Levine, 2006). In a large cluster randomized, controlled, open intervention study in primary care an innovative intervention programme meeting the above principles will be implemented. Prior to the RCT the feasibility of this innovative programme, including the introduction of the Geriatric Nurse Primary Care (GNPC) and the developed geriatric assessments and a 'tailor-made' care plan will be tested.

Method and Materials: This feasibility study will take place in three general practices with four GNPC's and at least 30 vulnerable older patients and their caregivers. First the GNPC will complete an educational program how to use the assessments and 'tailor-made' care plan. The trained GNPC will visit patients at home to examine the level of frailty and care needs of the patients and of their caregivers. After this visit the GNPC will prepare and coordinate a 'tailor made' integrated care plan for vulnerable older people and their caregiver in need of complex care. This plan is tuned with the GP.

Results: Results of this feasibility study will describe the experiences barriers and facilitators by the GNPC, general practitioner and patients and family caregivers who tested this new intervention programme. The results of the feasibility will be expected before summer 2010 and can be presented at the Fourth European Congress.

Conclusion: If the introduction of the GNPC, the assessments and the tailor made care plan are feasible, they will be tested in the large trial in the 'Central Utrecht Older People project' with 5000 patients and 90 general practitioners. This intervention will be compared to the innovative UPRIM group and a usual care group.

B65-370**Determining self-attendance abilities of older people regarding with their realization of daily life activities**

Koc Zeliha

Ondokuz Mayıs University, Samsun, Turkey

Introduction: With ageing, individuals face lots of health problems, have difficulties on leading their daily lives and self-attendances independently. This study has been planned with an aim of determining self-attendance abilities of older persons (60 and older) who receive a treatment in a hospital.

Methods and Materials: Three hundred and seventy-two patients who were being treated at Atatürk State Hospital, Sinop, who were ambitious to join the research, be able to communicate with us and who had no psychiatric disorder had been included to the research. The data have been collected by the question form which determines the socio-demographic and clinical characteristics of elders, prepared by the researchers, and the Daily Life Activity Scale and Self-Attendance Power Scale.

Results: When the elders' ability to fulfill their daily life activities was examined, it was determined that they are dependent to the others (24.4, 22.0, 18.5, 12.9% respectively). In addition, the patients' daily life activity point average had been determined as 13.54 ± 1.34 , and most of the elders' dependancy on their daily lives had been pointed out. The patients' self-attendance power point average has been determined as 71.6 ± 9.7 . Statistically positive correlation has been found between the old individuals' daily life activity and self-attendance ability and some socio-demographic and clinical specifications ($P < 0.005$).

Conclusion: In the research, even though most of the elders were determined as independent on their daily life activities, male elders

who were 75 years old and older, who had no social security, had less income, with low socioeconomic situation, who have a chronic disease and use a medicine were determined as half dependent on their daily activities. The elders' actualization levels of their self-attendance needs were determined as middle leveled. In terms of acquired results, support has been advised for old individuals to continue their daily life activities and their self-attendances in an independent way.

B66-373**Quality of life of elderly people in long-term care in the South-East Poland**Wojcik Grazyna¹, Sienkiewicz Zofia¹, Fidecki Wiesław², Wysokinski Mariusz², Wronska Irena², Slusarz Robert³, Kachaniuk Hanna², Burian Jadwiga², Imiela Jacek¹¹*Medical University of Warsaw, Warszawa, Poland*²*Medical University of Lublin, Lublin, Poland*³*Nicolaus Copernicus University in Torun, Torun, Poland*

Introduction: Quality of life and old age are closely connected. Ageing is considered as a destructive, progressive and irreversible process. This is caused both by the biological factors which are related to physical decline and psychosocial factors. Elderly people have problems with deteriorating health condition. Physical and mental fitness drastically deteriorate with the age. The aim of this research was to establish the subjective quality of life of the elderly people who stay at the long-term care centres in the South-East of Poland.

Methods and Materials: The research was carried out in 2007 on a group of 202 patients over 65 years of age who stayed at the long-term care centres in the South-East of Poland. A tested group consisted in 68.3% of women and in 31.7% of men.

Research material was collected using the Polish version of WHO-QOL-Bref scale. Scores in each domain range from 1 to 5 (five being the highest score, the higher the score the better quality of life).

Results: The tested group of elderly people assessed their general quality of life at the average of 2.53 while the self-assessment of health condition reached 3.05. The results in each of the four domains were as follows: environmental (average 12.28), social relationship (12.20), psychological health (11.42), physical health (10.94). The average assessment of the quality of life in case of women was 3.07, in case of men – 3.01. The quality of life was better assessed by people living in urban area (average 3.21) than in rural society (2.95). The results were similar in case of people with elementary education (3.05) and secondary education (3.07).

Conclusion: The quality of life of the elderly people who stay at the long-term care institutions remained at the lowered level. Of the four domains the highest score was given to environmental one and the lowest to the physical condition.

B67-384**Resources for improving everyday movements and promoting autonomy of nursing home residents**

Kalinowski Sonja, Dräger Dagmar

Charité-Universitätsmedizin Berlin, Berlin, Germany

Introduction: Although the effects of decreased basic motor skills and mobility have been documented, there is a lack of satisfying programs available for long-term care residents which facilitate motor abilities, and insufficient training to overcome handicaps and impairments. For this reason autonomy of institutionalized older adults is decreasing. The purpose of this study is to generate knowledge about personal and environmental resources promoting everyday movements and autonomy of nursing home residents – despite existing impairments, functional limitations and pain. This particular research question extends the project 'Pain and Autonomy in the

Nursing home (PAiN)', which is part of the consortium 'Autonomy Despite Multimorbidity in Old Age' (AMA).

Methods and Materials: To explore and identify resources, we focus on internal aspects (physical, psychological, social) and environmental aspects (institutional and socio-economic factors and physical environment) influencing everyday movements resp. movement actions. For this reason, a combination of different instruments is used to obtain primary data: a structured resident interview, assessments and an examination of the institutional documentation and general framework. Specific performance tests investigate the present status of movement actions. The approximate sample size is $n=700$.

Results: We make a contribution toward operationalizing resources that promote everyday movements. For this purpose different instruments are revealed that are able to assess the requisite and theoretical constructs 'factors of influence', 'movement action' and 'self determination' as a basis for the statistical analysis. As an intermediate result (data collection will be finished in the end of February), initial identifications of internal and environmental resources which influence everyday movements and autonomy are presented.

Conclusion: Final results (entire identified resources) will help to determine and increase awareness of factors that relate to improved movement abilities and autonomy of nursing home residents.

B68-385

A chronic grief intervention for alzheimer's family caregivers

Paun Olimpia, Farran Carol, Fogg Louis

Rush University College of Nursing, Chicago, IL, USA

Introduction: Chronic grief increases caregivers' risk for depression and suicide. Interventions targeting the mental health of caregivers have focused on in-home care. There are no documented interventions designed to decrease AD caregivers' chronic grief post LTCF placement.

Methods and Measurement: This on-going pilot study uses a quasi-experimental design to test the feasibility and effects of a Chronic Grief Management Intervention (CGMI). The CGMI is a 12-week, group-based program that uses guided discussion as a strategy to deliver knowledge of AD and teach skills in communication, conflict resolution, and chronic grief management. Using a randomized design, to date, 70 caregivers have been recruited from 16 facilities and received either the CGMI ($n=26$) or a comparison condition consisting of two check-in phone calls ($n=44$). Participants are being assessed at baseline, 3 months (immediately post-intervention) and 6 months (post-baseline) using measures of knowledge (Knowledge of Alzheimer's Test), skill (Family Perception of Caregiver Role), chronic grief (Marwit-Meuser Caregiver Grief Inventory), and depression (CES-D).

Results: The sample consists of mostly daughters (60%) and spouses (20%), of an average age of 62, mostly Caucasian (95%), and highly educated (81% college). We report the following preliminary results.

Recruitment in LTCF poses major challenges. Once recruited, participants are retained and are highly satisfied with the intervention.

Preliminary analysis of baseline to 3 months data indicate small effect sizes (ES) for the guilt and loss subscales and moderate for the personal sacrifice and burden subscale (MM-Caregiver Grief Inventory). Between 3 and 6 months, we found moderate ES for the conflict with staff subscale (Family Perception of Caregiver Role). From baseline to 6 months we found small ES for depression and knowledge of dementia and moderate ES for guilt.

Conclusion: The CGMI offers promise as a feasible and effective intervention in alleviating chronic grief and depression in caregivers of persons with AD after placement in a LTCF.

B69-405

Older persons in the world of HIV/AIDS: health promotion through community-based collaboration

Watson Martha Jacoba, Kloppe Hester, Kruger Annamarie

North-West University, Potchefstroom, South Africa

Introduction: In the endeavor to promote the health of the older persons in the world of HIV/AIDS, the aim of the study was to explore and describe a workable collaborative partnership between the older persons and informal and formal organizations in their communities. It was possible through the alignment of key concepts gained from the determination of the health profile, needs, expectations and strengths of the older persons as well as the perceptions of the stakeholders in the community.

Method: Key concepts identified from the empirical data collected through a survey to determine the health profile of the older person infected with and/or affected by HIV/AIDS, the Mmogo-methodTM (visual method) that involved focus group discussions regarding the needs, expectations, strengths and impediments of the older persons and research interviews with the stakeholders and role players to explore their perceptions regarding community-based collaboration to promote the health of the older person in the world of HIV/AIDS. The Systems theory was used as the main theoretical underpinning and framework to conceptualise community-based collaboration.

Results/Conclusion: The findings presents the reader with a summarized, but clear understanding and insight into the health profile of the older persons in the world of HIV/AIDS, confirm the many challenges the older persons are exposed to and that community-based support is needed. The conceptualization of community-based collaboration occurs in the context of community health practice where the understanding of the cultural, temporal, social and geographical influences of the environment with which the older persons and stakeholders interact with the community and the family should be taken into consideration.

B70-428

What is 'healthy physical activity'?

Anderiesen Hester¹, Sonneveld Marieke¹, Goossens Richard¹, Scherder Erik²

¹TU Delft, Delft, the Netherlands

²VU Amsterdam, Amsterdam, the Netherlands

Introduction: Although the causality between physical activity and the older persons' cognitive functioning is not proven yet, epidemiological studies show a strong relationship. Moreover, the disastrous effects of passiveness on physical as well as cognitive functioning are broadly accepted. Therefore, today, professionals involved in elderly care aim at improving the older persons' level of physical activity (researchers, caregivers, physiotherapists, policy-makers, and product designers). To support a healthy active lifestyle, we need a thorough understanding of the notion of the concept of 'healthy physical activity' for the elderly. We need to understand what kind of movements are appropriate, their qualities, frequencies, and so on. The development of a healthy environment that invites elderly to become physically active will involve multidisciplinary teams of professionals. Insights in the different aspects of and perspectives on healthy physical activity are essential for mutual understanding and effective teamwork.

Methods and Materials: To review the broad and complex scope of aspects concerning 'physical activity' we unravel the question 'what is healthy physical activity?' in different domains and their sub-domains. A Literature study in the related disciplines will result in a conceptual framework that will give an overview of the different aspect of the concept.

Results: The framework will be represented through info-graphics (for example mind-maps). An example of a specific domain is the designers' domain. Characteristic concerns from the perspective of a

designer are: who are the physical active elderly we are designing for? Within this domain we distinguish a sequence of sub-domains: Are they alone or together? What kind of interaction occurs? What do they experience? Next to the designers' point of view, we will address a variety of approaches. The resulting info-graphic gives an overview of the broad scope of different aspects to take into account while supporting healthy physical activity of the elderly.

B71-455

Elderly health needs in primary care unit and nurse's professional practice

Romijn Tocantins Florence¹, Evangelista do Nascimento G²

¹Universidade Federal do Estado do Rio de Janeiro – UNIRIO
Rio de Janeiro Brazil

²UNIRIO Rio de Janeiro Brazil

Introduction: This study explores the nurse professional perspective about the healthcare needs of elderly seeking care at Basic Health Units. It was aimed to describe the nurse activities with the elderly people in primary care and to analyze the healthcare need conception that grounds nurse's practice related to elderly clientele in primary care unit.

Methodology: The study was developed as a qualitative research having as theoretical and methodological reference Alfred Schutz's sociological phenomenology. As investigation scenario it was taken three Basic Health Units located in a Rio de Janeiro's geographic area where the highest quantitative of elderly people live. Ten nurses who work at the selected scenario and attend elderly people were interviewed.

Results: As professional actions undertaken it prevail those with technical and educational features. The purpose of those actions pointed out at Elderly Independence, addressed through two components: the idea of self care and the independence of health services and assistance, composing nurses' conception of healthcare need that ground their assistance practice in Primary Care.

Conclusions: The conception of healthcare needs of the elderly assisted in Primary Care Units focuses on the professional's attitude, which involves social networking. The professional nurse's practice has as fundamental value a human being and with health needs of their attention, assisted by technical activities and social relationships. The fact of this professional practice grounding not only 'what', but 'how', contributes to consolidate and characterize nursing as knowledge area and profession.

B72-462

Wellbeing of elderly people within the Russian minority in Finland and Estonia

Ehasalu Anne¹, Kauber Maiu²

¹Tallinn Health College, Tallinn, Estonia

²Tallinn Pedagogical Seminar, Tallinn, Estonia

Introduction: With the disintegration of the Soviet Union in the beginning of 1990, the migration flow started, allowing for reunion of families and migration of people from Estonia and Russia whose native language is Russian. The demographic situation is the same in both countries. Wolfgang Zapf has defined quality of life as 'good living conditions which correspond to positive subjective well-being'. By Allardt there are material and non-material needs that influence well-being of people.

Methods and Materials: Four individual interviews and 12 group interviews were carried out from May 2009–December 2010. Interviews were carried out in Tallinn and Helsinki day-care centres, social centres, clubs for the elderly. Essential topics of interviews were nutrition, movement, services, social network, well-being. Target-group was made from Russian-speaking elderly 65+. In Tallinn in interviews participated 33 women and four men, in all 37 persons, in Helsinki 28 women and three men, in all 31 persons.

Results: In Tallinn target-group medium age was 73.7 years, in Helsinki medium age 76.5. Medium length of stay in Tallinn target-group was 0–42 years, in Helsinki from 5–35 years. Tallinn target-group knowledge about Estonian language was rather bad, Helsinki target-group considered their speaking Finnish rather good. Social services: Tallinn respondents do not know, what kind of services do exist and did not trust services. In Helsinki: target-group need for social services is low, more popular is to use services from third sector. Wellbeing: Tallinn target-group members were optimistic and trying to manage with everyday life, even if they have a lot of problems. Information about services is the main problem. The Helsinki focus-group members are satisfied with their lives.

Conclusion: There is a need to enhance Russian-speaking elderly wellbeing in Estonia and Finland creating an empowering model that works in both countries.

B73-L23

Home care and support for the elderly in Switzerland

Schwarze Thomas, Hahn Sabine

Bern University of Applied Sciences, Bern, Switzerland

Topic Family and informal care givers

Introduction: Demographic changes within the Swiss population will result in an increasing number of elderly people with specific care requirements. It does not seem feasible to fulfill the desire of elderly people to live at home for as long as possible without the support of family members. The aims of this study are to obtain a systematic overview of the overall care requirements and unmet needs of the elderly population in Switzerland and to develop measures in which voluntary involvement can be improved upon.

Methods and Materials: In module one, 712 elderly people (70+) were interviewed in their homes regarding their care and support needs. The instrument utilized explored care dependency and functional limitations, activities of daily living (ADL's) and participation, support networks and personal information. Module two will consist of an in-depth evaluation of the collaboration between professional and non-professional care-givers.

Results: The sample was comprised of 712 persons; 70.9% were women and 29.1% were men. Regarding the ADL's, 4.2% reported not requiring any support. One third required support in one or two activities. One fifth required support in three activities and 11.4% required support in four or more activities. 43% of all support activities were performed by spouses and 21% were provided by home care organizations. 67.9% of the sample reported that formal support had been provided by home care organizations. 72.8% reported that informal support had been provided by family members, friends and neighbors within the same timeframe.

Conclusions: The results of this study reveal that the majority of support is provided by family members, especially spouses and daughters. Professional home care, however, has a significant role in the support of the elderly living in their home.

Parallel Session C

C1-S7 Symposium

DEFEND your older hospital patient!

Goal of symposium: This symposium addresses new scientific insights on multimorbidity, risk assessment and systematic comprehensive geriatric assessment in hospitalized older patients in order to prevent functional decline after hospitalization. The symposium is based on data from a multicenter prospective cohort study in 639 acutely hospitalized patients of 65 years and older, the DEFENCE-study (Develop Strategies Enabling Frail Elderly New Complications to Evade).

Overview: Annually, 16% of all older people above 65 years are admitted to the hospital and they account for 60% of all days spent in the hospital. Admission to the hospital is a hazardous event for older people, leading to many adverse outcomes including functional decline. Functional decline is defined as a loss of activities of Daily living (ADL) and is experienced by 30–60% of older patients after hospitalization. Functional decline itself leads to an increased length of stay, an increase in the use of professional care, institutionalization and mortality.

Early identification of patient at risk for functional decline by risk assessment, systematic comprehensive geriatric assessment and interventions can assist health care professionals to provide effective and efficient care to older patients.

1 Measuring functional decline in hospitalized older medical patients: a systematic review.

2 Multimorbidity in acutely hospitalized older patients: prevalence and outcome.

3 Identification of Seniors At Risk-Hospitalized Patients; an instrument predicting functional decline in older hospitalized patients.

4 Comprehensive Geriatric Assessment in older hospitalised patients at risk for functional decline.

Comprehensive geriatric assessment in older hospitalised patients at risk for functional decline

Buurman Bianca¹, Hoogerduijn Jita², Gemert Liesbeth van¹, Haan Rob de¹, Korevaar Johanna¹, Schuurmans Marieke³, Rooij Sophia de¹

¹Academic Medical Center, Amsterdam, the Netherlands

²University of applied science, Utrecht, the Netherlands

³University Medical Center Utrecht, Utrecht, the Netherlands

Background: Preventing functional decline has become an important focus of care in older hospitalized patients. As not all patients equally benefit from interventions to prevent functional decline, a multistage selection procedure has been proposed, consisting of risk assessment and a systematic comprehensive geriatric assessment (CGA). Data supporting this process are lacking.

Methods: This multicenter prospective cohort study was conducted in three hospitals in the Netherlands. All acutely admitted patients of 65 years and older who were hospitalized for at least 48 h received a systematic CGA, aiming at identification of 20 conditions frequently met in older patients. A risk assessment instrument, the Identification of Seniors at Risk- Hospitalized Patients (ISAR-HP) was applied to differentiate between patients at high and low risk for functional decline.

Results: Overall, 639 patients were included with a mean age of 78 years (SD 8). Patients had a mean of six geriatric conditions at hospital admission. In total, 72% of patients were at high risk for functional decline. These patients had more geriatric conditions [mean 7.5 (SD 2.5)] compared to those who were at low risk for functional decline [mean 3.4 (SD 1.7, $P<0.001$)]. Patients at high risk

for functional decline also had a longer length of stay (median 8 days vs. 5 days, $P<0.001$) and a higher mortality rate 3 months after admission (22.4% vs. 13.7%). In patients at high risk for functional decline five conditions were significantly associated with functional decline: presence of an indwelling urinary catheter, incontinence, good vision, high perceived burden of care giver and a high score on the risk assessment instrument.

Conclusion: Geriatric conditions were highly prevalent in acutely hospitalized patients. Risk assessment reveals the most vulnerable patients, presenting with many geriatric conditions and at high risk for poor outcomes. Five conditions were significantly associated with functional decline in a high risk population and could be subject for intervention.

Multimorbidity in acutely hospitalized older patients: prevalence and outcome

Buurman Bianca¹, Frenkel Wijnanda¹, Abu-Hannah Ameen¹, Haan Rob de¹, Parlevliet Juliette¹, Lagaay Goke², Verhaar Harold³, Schuurmans Marieke³, Levi Marcel¹, Rooij Sophia de¹

¹Academic Medical Center, Amsterdam, the Netherlands

²Spaarne Hospital, Hoofddorp, the Netherlands

³University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: The presence of multiple chronic diseases rises with age and is associated with increased use of care facilities, adverse health events and hospitalization. At this moment no studies exist that describe multimorbidity, defined as the presence of two or more diseases, and its impact on outcomes in a population of older hospitalized patients. The objective of this study was to investigate the prevalence of individual diseases, multimorbidity and disease patterns in acutely hospitalized older patients.

Methods and Materials: This multicenter prospective cohort study was conducted in three hospitals in the Netherlands. All acutely admitted patients of 65 years and older who were hospitalized for at least 48 h were included. After discharge, all discharge letters were screened by two geriatricians on diseases present at admission (acute or chronic), syndromes and symptoms present at admission or developed during admission; and adverse drug events before and during hospitalization. The ICD-9 criteria were applied to score the presence of diseases.

Results: Overall, 639 patients were included with a mean age of 78 years (SD 8). Multimorbidity was present in 98% of patients and patients had a mean of five diseases at admission. Most frequently observed diseases were infection (53%), hypertension (49%), renal failure (27%), diabetes (26%) and anaemia (26%). Adverse drug event were present in 17% of all patients and related to hypertension, atrial fibrillation and gastro intestinal bleeding.

Conclusion: Besides the acute disease that caused hospital admission, patients had a mean of four other acute or chronic diseases. Multimorbidity was present in almost all patients. Many patients experienced adverse drug events, demonstrating the need for good coordination of care of this complex patient group.

Measuring functional decline in hospitalized older medical patients: a systematic review

Buurman Bianca¹, Munster Barbara van¹, Haan Rob de¹, Korevaar Johanna¹, Schuurmans Marieke², Rooij Sophia de¹

¹*Academic Medical Center, Amsterdam, the Netherlands*

²*University Medical Center Utrecht, Utrecht, the Netherlands*

Background: The objective of this systematic review was to study instruments used and definitions applied in order to measure functioning and functional decline of acutely hospitalized older medical patients.

Methods: We systematically searched Medline, Embase and the Cochrane Database of Systematic Reviews (CDSR) from 1990–July 2007. Articles were included if they (1) focused on acute hospitalization for medical illness in older patients; (2) described the instrument used to measure functioning; and (3) outlined the clinical definition of functional decline. Two reviewers independently extracted data.

Results: In total, 27 studies were included in this review. Five different instruments were utilized to measure functioning: the Katz ADL index, the IADL scale of Lawton and Brody, the Barthel index, Functional Independence Measure (FIM), and Care Needs Assessment (CAN). Item content and scoring between and within the instruments varied widely. The minimal amount for decline, as defined by the authors, referred to a decrease in functioning between 2.4 and 20.0%.

Conclusion: This review shows that there is a large variability in measuring ADL functioning of older hospitalized patients and a large range of clinical definitions of functional decline. These conceptual and clinimetric barriers hamper the interpretation and comparison of functional outcome data of epidemiological and clinical studies. In view of the range of complex methodological questions to be answered on the road to standardization of measuring functioning and functional decline of older (hospitalised) patients, we propose that an expert panel will take these questions into account.

ISAR-HP an instrument predicting functional decline in older hospitalized patients

Hoogerduijn Jita¹, Buurman Bianca², Rooij Sophia de²,

Korevaar Johanna², Grobbee Diederick³, Schuurmans Marieke³

¹*Hogeschool Utrecht, Utrecht, the Netherlands*

²*AMC, Amsterdam, the Netherlands*

³*UMC Utrecht, Utrecht, the Netherlands*

Introduction: After being hospitalized, 30–60% of older patients experiences a functional decline. Prevention of functional decline will lead to more efficient and effective patient care. The first step could be to identify patients at risk for functional decline, followed by a geriatric assessment and targeted interventions for those at risk. The objective for the study is to modify and validate an existing screening instrument, the ISAR (Identification of Seniors At Risk) to assess the risk of functional decline in older hospitalized patients.

Methods and Materials: A multicentre prospective cohort study was conducted in two university and one general hospital. Included were patients aged 65 years and older acutely admitted to the internal medicine departments.

Results: Included were 492 patients, mean age 77.8 years, 44.4% male, 34.6% suffered functional decline. A predictive model was developed with only four items: needing assistance in Instrumental Activities of Daily Living on a regular base, using a walking aid, needing assistance for traveling, not pursuing education after age 14. The AUC was 0.71 (95% CI 0.66–0.76). As screening is only a first step that should be followed by a CGA, we preferred a high sensitivity 87.1%, specificity 39.4%. This results in a relatively high percentage of false positives. Comparing the false and true positives shows that the false positives are very similar to the true positives and very different from the patients not at risk. For prediction mortality, the sensitivity was 80.8%, for identifying patients with maximum Katz index score at baseline as patients at risk, sensitivity was 100%, and for the combined group (suffering decline, maximum score at baseline and the deceased) sensitivity was 85.4%.

Conclusion: The Identification of Seniors At Risk-Hospitalized Patients (ISAR-HP) is a brief and easy-to-use screening instrument to identify older patients at risk for functional decline following hospital admission.

C2-S8 Symposium

Determinants of fear of falling from different perspectives

Goal: To create awareness that fear of falling (FOF) is a common and potentially serious problem in older adults living in the community. FOF may even exist without earlier falls and may lead to physical, functional, psychological and social decline of functioning. A better understanding of FOF can contribute to the early identification of FOF and to more efficient interventions for primary (and secondary) prevention of falls in order to reduce some of the serious adverse health consequences of FOF, especially for older, more vulnerable persons.

Overview: Society needs to create conditions for older persons to stay healthy and to remain at home. To obtain this and to avoid risks, it is important that older persons are active and mobile. Falls are the third leading cause of poor health among persons aged 65 years and older. Each year in the Netherlands, 89 000 older persons visit emergency departments because of a fall-related injury, and one third of this group is admitted to hospital. Over 30% of community-dwelling older persons fall each year, and 15% fall more than once. In nursing-homes, falls have been reported in up to 50% of patients. Almost 33% of the older population experiences functional decline after the fall. Many older persons also experience psychological difficulties, as fear of falling, related to the fall. Fear of falling and avoidance of activity due to fear of falling are common in older people, both in fallers and non-fallers. In community-living older people, the rates for fear of falling range from 20 to 85% and from 15 to 55% for associated avoidance of activity. Fear of falling, and associated avoidance of activity, may lead to adverse consequences, like functional decline, restriction of social participation, decreased quality of life and increased risk of falling and institutionalisation. New technology and new prevention programmes can make it possible for older persons to stay at home, to feel safe and being mobile.

Safety for older persons; effectiveness of a mobile safety alarm

Scheffer Alice¹, Scholte op Reimer Wilma², Dijk Nynke van¹, Munster Barbara van¹, Rooij Sophia de¹

¹Academic Medical Centre, Amsterdam, the Netherlands

²Hogeschool van Amsterdam, Amsterdam, the Netherlands

Introduction: Many older persons experience psychological difficulties directly related to a fall. Among these consequences are fear of falling, feelings of unsafety and activity avoidance. Fear of falling is associated with decreased social participation and lower experienced quality of life. To make it possible for older persons to move freely and to promote their well-being, different kinds of support are needed and a wide range of technologies have been developed. A mobile safety alarm is one of these new technologies and enables older persons to freely anywhere.

Aim: Does a mobile alarm help older persons to improve their environmental social participation by reduction of fear of falling and feelings of unsafety, compared with usual care provided by a house placed alarm?

Design, Setting and Participants: A two-armed randomized controlled trial recruiting participants from July 2009 to March 2010 with a home-based alarm. The intervention, a mobile alarm, was provided for 6 months: assessments were conducted at baseline, 1 month, 2 months, 4 months and 6 months.

Main Outcome Measures: Primary outcome was a change in behaviour, measured by the frequency of going outside. Secondary outcomes included fear of falling (Visual Analogue Scale for Fear of Falling), feelings of unsafety (Visual Analogue Scale for Feeling Unsafe) and quality of life (Visual Analogue Scale of EQ-5D).

Results: In this study 203 participants were included: 100 participants [mean age 80.8 years, (SD 9.01 years)] received a mobile

alarm, 103 participants [mean age 81.2 years, (SD 9.3 years)] received care as usual (home-based alarm).

Conclusions: This randomized trial will be completed in March 2010. Results will be presented on the basis of data yet to be collected.

Fall prevention on wheels: fear of falling in older persons visiting a mobile fall prevention unit

Scheffer Alice¹, Dijk Nynke van¹, Munster Barbara van¹, Luigies René², Rooij Sophia de¹

¹Academic Medical Centre, Amsterdam, the Netherlands

²Eusamed BV, Rijswijk, the Netherlands

Introduction: Over 30% of community-dwelling older persons fall each year, and 15% fall more than once. Almost 33% of the older population experiences functional decline after the fall. Many older persons also experience psychological difficulties related to the fall. One of these psychological difficulties is fear of falling (FOF). Many studies investigated FOF and high prevalences of FOF were also found in non-fallers. This study was conducted to investigate the relationship between FOF and risk factors for FOF, both in fallers as well as in non-fallers, in a population of community-dwelling older persons.

Methods: Community dwelling older persons were invited by mail to take part in a fall prevention program, as part of a prevention program of their health insurance company. Within this program, participants received a fall assessment at home, by means of a mobile fall prevention unit. All participants were asked to complete the Carefall Triage Instrument (CTI), an evidence-based fall questionnaire, including a Visual Analogue Scale for measuring FOF. The CTI was used to identify modifiable risk factors for (recurrent) falling. Participants then received an individual fall intervention program, based on their individual risk factors.

Results: From August 2007 to March 2009, 1710 participants were included in the program, mean age 77.81 years, 63% female, 45.8% of the participants had a fall history. Participants who had sustained a fall were more afraid of falling [median 3 (range 1–10)] than participants who had no fall history [median 2 (range 1–9, $P < 0.001$)].

Conclusions: Preliminary conclusions show that older persons, who have never sustained a fall, do experience FOF.

Fear of falling: perspective of a patient with a hip fracture

Visschedijk HM

VUmc, Amsterdam, The Netherlands

Introduction: Some research has indicated that psychological factors, and in particular fear of falling (FoF), may have an important impact on functional recovery after a hip fracture. However, much is still unknown about the role FoF plays in the rehabilitation process, what the determinants of FoF are and how it interferes with the rehabilitation outcomes. Hence, a systematic literature review was carried out. The objective of this review was to systematically describe and analyse FoF in patients after a hip fracture, focussing on measurement instruments for FoF, the prevalence, factors associated with FoF and interventions which may reduce FoF in patients with a hip fracture.

Methods: In 2009 a literature search was carried out using four databases, i.e. Pubmed, Embase, PsychINFO, and CINAHL. Also the Cochrane Library was consulted and the reference lists of selected articles were scrutinized for relevant articles.

Results: Fifteen relevant studies were found and analysed. These studies indicated that 50% or more of patients with a hip fracture suffer from FoF, although adequate instruments still have to be validated for this specific group. Only one study assessed pre-morbid

factors, which may influence FoF. The information in this study was collected through interviews, just after the fracture had occurred. It was found that FoF, measured with the Falls-Efficacy Scale, had a strong association with pre-fall activity problems and (a weaker but significant) association with history of falls.

Conclusions: The knowledge about determinants of FoF, the prevalence and the exact causal relations with important health outcomes is still limited. An important constraint is that most studies suffer

from selection bias: Patients with a hip fracture are mostly fragile and suffer from several other (chronic) diseases, while most studies in our review excluded such patients. Nevertheless, based on the analysis of the available studies, it is likely that FoF is quite common and has a negative impact on functional recovery after a hip fracture.

C3-439

International networking, a prerequisite for excellent research? WENR, an example of good experienceCrijns Myriam¹, Zydziunaite Vilma²¹*Netherlands Centre for Excellence in Nursing, Utrecht, the Netherlands*²*Vytautas Magnus University, Kaunas, Lithuania*

The WENR is the oldest, research networking-based workgroup of National Nurses Associations in the European Region. The WENR's mission is to promote and strengthen the value of collaborative nursing research in Europe for the benefit of people, to contribute to safe care in Europe, enhance collaboration and solidarity among nurse researchers across Europe. This is done by strengthening international research networks, disseminating research findings, developing and supporting a range of scientific events in nursing, including symposia and conferences. The WENR also provides up-to-date information on nursing research activities, collaborates with national and international associations to influence European and national health policies indirectly.

WENR's main activities are the annual workgroup meetings, biennial conferences and scientific symposia. During and in-between meetings, WENR members, as NNA's representatives give share up-to-date information and establish international networking groups around a specific topic.

Every 5 years, since 1978, the country representatives produce a report on nursing research development in their country. All these reports are then published forming a unique international networking-based archive of information about the development of European nursing research over time.

In 2008 four members of WENR wrote a report on 'Patient Safety Report in Europe' on request of the European Federation of Nurses Associations (EFN). This report was significantly important in the discussions between nurses associations in European countries and the EU.

The round table discussion will be implemented as an interactive discussion. Participants are invited to discuss the role of international nurse networks concerning the care for older persons and to share information by presenting cases of good practice concerning experiences within various kinds of networks. Special provocative propositions will be given to participants to challenge them to come to some new answers regarding the subject of networking. The discussion will be closed with concluding remarks extracted from presentations of participants.

C4-92

Family caregivers of older people in SpainZabalegui Adelaida¹, Navarro Montserrat², Cabrera Esther³, Gallart Albert³, Bardallo Dolores³, Escobar Miguel-Angel⁴, Gual Pilar³, Fernández-Capo María³¹*Hospital Clínico de Barcelona, Barcelona, Spain*²*Hospital Parc Taulí, Barcelona, Spain*³*Universitat Internacional de Catalunya, Sant Cugat Barcelona, Spain*⁴*Universitat de Lleida, Lleida, Spain*

Introduction: The purpose of this study is centered on testing the impact of the psychoeducational intervention INFOSA on dependent elderly caregiver's in decreasing burden, negative emotional symptomatology and increasing perceived social support.

Methods: We used an experimental design with repeated observations taken at baseline, post-intervention, and at six at caregivers' home. Study setting was the Geriatric Care Unit VII Centenario of the Corporació Sanitaria Hospital Parc Taulí in Sabadell. Study subjects were 76 elderly caregivers. Sample were randomly assigned to a usual care control group ($n=37$) or INFOSA intervention group ($n=39$). Independent variable was the caregiver psychoeducational

intervention INFOSA. INFOSA program is an innovated intervention that involved eight 2 h sessions in small groups. Dependent variables were caregiver burden, emotional symptomatology and perceived social support.

Results: Participants on the study reported providing care for more than three years (53%) and at least 17 h a day. Moreover, economic data shows the great problem that caregivers have to assume the costs of care. At baseline, about 75% of the participants had high levels of burden. For burden scores we found a significant difference between groups and for psychological emotional symptomatology. Nevertheless, at 6 months these results were not statistically significant. Even though, the positive effect of INFOSA interventions still remains. In relation to perceived social support and depression levels, we found better results on experimental group than in control group, but differences between them were not statistically significant. Univariate regression models shown that participants of experimental group better improvement on burden and negative emotional symptomatology, been statistically significant 6 months later. Multivariate regressions models confirm positive effect of INFOSA intervention like a better prediction factor for caregivers.

Conclusions: The INFOSA intervention reduces burden and negative emotional symptomatology and enhances caregivers' perceived social support.

C5-169

The experience of being next of kin to an older person in the last phase of lifeAndersson Magdalena¹, Ekwall Anna², Hallberg Ingall¹, Edberg Anna-Karin¹¹*Lund University, Lund, Sweden*²*Malmö University Hospital, Malmö, Sweden*

Introduction: The experience of being next of kin to an old person at the end of life has barely been explored and more knowledge is needed. Such knowledge is particularly important since the next of kin is often involved in the care of the person even when they receive public care. The aim of the study was to investigate the experience of being next of kin to an older person in the last phase of life as narrated after the older person's death.

Methods and Materials: Qualitative interviews were performed with the next of kin ($n=17$) to people aged 75 years and older who had recently died and had received help and/or care from the municipality in the last phase of life. Eleven women and six men participated, of whom seven were spouses, nine were children and one was a grandchild. The interviews were analysed using qualitative content analysis.

Results: The experience of the next of kin could be understood as Being a devoted companion during the transition towards the inevitable end, embracing the categories: Living in the shadow of death; Focusing on the needs of the dying person, and making adjustments to everyday life; Feeling the major responsibility; Struggling with the health and social care system; and Gaining strength from support.

Conclusion: Being next of kin to an old person at the end of life means being a devoted companion during the transition towards the inevitable end including the feeling of bearing the major responsibility and the need to be acknowledged by professionals. This study points to the importance of having access to professional care when it is needed, to complement and support the next of kin when their own resources and strength falter.

C6-458

(In)formal care and care shortages – Findings from the Belgian ageing studies BAS

Witte Nico de¹, Verté Dominique², Donder Liesbeth de², Buffel Tine², Dury Sarah²

¹University College Ghent, Ghent, Belgium

²Vrije Universiteit Brussel, Brussels, Belgium

Introduction: In order to cope with the challenges caused by the increasing numbers of elders, Belgium's policy focuses mainly on the desinstitutionalisation of services and on 'ageing in place'. As a consequence, formal and informal care, provided at home, will gain importance. In this contribution, we explore formal and informal care in relation to care shortages.

Methods and Materials: For these analysis, data from our own survey, the Belgian Ageing Studies, are used. In over 150 cities in Belgium, a stratified sample was drawn from the population, using gender and age as stratification. Between January 2004 and December 2009, a sample of 59 977 residents aged sixty and over was interviewed on their perceptions of various aspects related to quality of life and living conditions in older age. A specific interview-design was developed to maximize the response.

Results: We examined which combination of formal and informal caregivers lead to the lowest care shortages. The most ideal situation consists of two informal caregivers (children, neighbours) and one formal service (family care). Of the elders relying on this combination, only 1.7% reports care shortages. If the spouse is added, this percentage remains unchanged. Elder relying on their neighbours and family care services report 3.4% care shortages. Moreover, regarding the 10 most ideal combinations of formal and informal care, family care services is stated nine times, neighbours six times and home care by nurses five times. Spouse and children are four times elements of an ideal combination.

Conclusion: For elderly living at home and needing help, a combination of formal and informal caregivers is required. Family care services are the most important form of formal care. Although, the role of children as informal caregivers can not be denied, neighbours are apparently as valuable. As a consequence, a policy focussing on 'ageing in place' should take these findings into account.

C7-196

The effectiveness of a multistage low pressure air mattress in pressure ulcer prevention: an RCT

Demarré Liesbet¹, Vanderwee Katrien¹, Beeckman Dimitri², Defloor Tom¹

¹Ghent University, Ghent, Belgium

²University College Arteveldehogeschool, Ghent, Belgium

Introduction: Alternating pressure air mattresses (APAMs) provide pressure relief at the different anatomical sites by alternating the inflation and deflation of air-filled cells. Recent studies indicate that patients still develop pressure ulcers despite lying on APAMs. Theoretically, a slower, gradual deflation and inflation cycle should prevent ischemic reperfusion disorders of the tissue and thus pressure ulcer development. There are no studies available about the effectiveness of alternating low pressure air mattress with such a multistage inflation and deflation cycle (ALPAM's). The aim of the study is to compare the effectiveness of APAMs and ALPAMs on the incidence of pressure ulcers.

Methods and Materials: A Randomised Controlled Trial was performed. A convenience sample of 25 geriatric or medical wards in five Belgian hospitals was used; 610 patients were included if they were at risk for development of pressure ulcers based on the Braden Scale (<17).

Results: The cumulative pressure ulcer incidence (category 2-4) on the APAM was 5.8% vs. 5.7% on the ALPAM, there was no significant difference ($P=0.98$). The Kaplan-Meier survival analysis was

used to analyze the time to develop a pressure ulcer category two of worse between patients lying on an APAM and patients lying on an ALPAM. There was no significant difference between the two groups (log-rank $\chi^2=1.70$; $df=1$; $P=0.19$). A trend to earlier development of a pressure ulcer category 2-4 in the heel area (heel and ankle) was observed in the experimental group ($m=day 3$) compared to the control group ($m=day 8$) (log-rank $\chi^2=4.04$; $df=1$; $P=0.044$).

Conclusions: No difference was found between APAMs and ALPAMs in the development of pressure ulcers. This may indicate that the newest generation of low pressure air mattresses with a multi-stage inflation and deflation cycle is not more effective in the prevention of pressure ulcers in geriatric and medical patients.

C8-252

Pressure ulcers: knowledge and attitudes of nurses in Belgium

Beeckman Dimitri, Defloor Tom

Ghent University, Ghent, Belgium

Introduction: Geriatric patients and nursing home residents are particularly vulnerable to pressure ulcers. Knowledge and attitudes might be related with preventive care. No evidence about this relation is available. The aim of this study was to get insight into the knowledge and attitudes of nurses in Belgian hospitals regarding pressure ulcers and to explore the relation between knowledge/attitude and the application of prevention.

Methods and Materials: A random sample of 14 Belgian hospitals, representing 207 wards, was selected. Out of that group, 94 wards were selected at random (2105 patients). Data regarding risk, prevalence and preventive measures were collected. The uniform methodology of the European Pressure Ulcer Advisory Panel (2002) was used to collect the data. Five nurses from each participating ward completed the 29 items Pressure Ulcer Knowledge Assessment Tool and the 32 items Attitude towards Pressure Ulcers instrument. In total, 553 nurses participated.

Results: Pressure ulcer prevalence was 13.5% (284/2105) and non-blanchable erythema (grade 1) was observed in 5.6% (117/2105) of the patients. Approximately 30% (625/2105) of the patients were at risk (Bradenscore<17 and/or presence of pressure ulcer). Only 13.9% of the patients at risk received fully adequate prevention in bed and when seating. Only 6.2% received adequate preventive care when seating. The mean knowledge score was 48.7%. A statistically significant difference was found between knowledge of non-expert nurses (49.5%) and tissue viability nurses (56.7%) ($t=23.25$, $df=30$, $P<0.001$). There was no relation between knowledge and the application of adequate prevention.

Conclusion: Knowledge and attitude of nurses regarding pressure ulcers were inadequate. A relation between attitudes and the application of prevention was found. Education should focus on classification and observation of pressure ulcers and on measures to reduce the amount of pressure and shear. Interventions to improve attitudes concerning the priority of pressure ulcer problem, the support by management and the own responsibility should be developed.

C9-262

Assessing the adequacy of pressure ulcer prevention in Belgian geriatric hospital wards

Defloor Tom¹, Vanderwee Katrien¹, Bouzegta Nadia¹, Van Durme Thérèse², Beeckman Dimitri¹, Gobert Micheline²

¹Ghent University, Ghent, Belgium

²Université Catholique de Louvain, Brussels, Belgium

Introduction: Pressure ulcers are a serious complication of hospitalisation in terms of increased morbidity, mortality and health care expenditure as well as patient suffering. Multipathology and ageing

make older patients vulnerable to pressure ulcers. The main aim of this study was to obtain insight into the adequacy of preventive measures for pressure ulcers in Belgian geriatric hospital wards.

Methods and Materials: The setting for this cross-sectional multicentre prevalence study consisted of the Belgian geriatric hospital wards. All hospitals were invited to participate in this study. The methodology to measure pressure ulcer prevalence developed by the EPUAP was used.

Results: The total sample consisted of 3222 geriatric patients (70 hospitals). The prevalence of pressure ulcers category 1–4 was 18.9% and of category 2–4 12.3%. Sacrum (45.4%) and heels (43.2%) were the most frequently affected locations. Only 12% of the at risk geriatric patients received fully effective prevention. The majority of the at risk patients (73%) received partly adequate prevention. Generally, a higher percentage at risk patients received effective prevention in an armchair (36.5%) than in bed (28.3%).

Conclusion: The pressure ulcer prevalence in Belgian geriatric hospital wards was high according to international standards. Regrettably, the adequacy of pressure ulcer prevention in geriatric hospitals was suboptimal. Only one out of 10 patients at risk for pressure ulcers received fully adequate prevention. Conversely, many patients not at risk received some kind of preventive measures which was an unnecessary and expensive strategy. Barriers for adequate preventive pressure ulcer care such as knowledge, motivation, attitude, priority, and availability of equipment may partly explain these low figures. A challenge for the hospitals is to disseminate and implement pressure ulcer guidelines to individual wards and to address barriers.

C10-300

Pressure ulcers: knowledge and attitudes of nurses in Belgian nursing homes

Demarré Liesbet¹, Beeckman Dimitri², Defloor Tom¹

¹Ghent University, Ghent, Belgium

²University College Arteveldehogeschool, Ghent, Belgium

Introduction: Knowledge and a positive attitude of nurses and nursing assistants towards pressure ulcers are cornerstones in the prevention of pressure ulcers. The aim of the study was to evaluate the relation between knowledge and attitude and the application of preventive measures in the nursing home care.

Methods: Data were collected in March 2008. A convenience sample of nine nursing homes was selected in Belgium. Twenty-six wards participated in the study, 809 patients were included and 163 nurses or nursing assistants. To measure the pressure ulcer prevalence and the preventive strategies, an expanded version of the EPUAP minimum dataset was used. The PUKAT-questionnaire (Pressure Ulcer Knowledge Assessment Tool) and the Attitude towards Pressure Ulcers questionnaire (APU) were used.

Results: In total 809 patients were included in the study. No more than 5.5% ($n=18/329$) of the patients at risk received adequate preventive measures. No preventive measures were taken in 28% ($n=92/329$) of the patients at risk.

The results of the knowledge and attitude tests were low. The mean knowledge and attitude score was respectively 29% (SD=8) and 39% (SD=15). There was no significant difference in knowledge between nurses and nursing assistants. Nurses had a significant more positive attitude towards pressure ulcer prevention than nursing assistants. The mean attitude score at ward level was a significant predictor for the use adequate prevention for all patients on that ward. No relation was found between the overall knowledge on a ward and the use of adequate measures.

Conclusions: Pressure ulcers are a frequent problem in nursing homes, but only a limited number of patients is receiving adequate preventive care. There is a lack of knowledge about pressure ulcers and the attitudes toward this subject are rather negative. A more positive attitude towards pressure ulcers was related to more patients receiving adequate preventive care.

C11-134

'Lively Legs': increased physical activity and fewer wound days in venous leg ulcer patients

Heinen M, Borm G, Achterberg T van

Radboud University Medical Center Nijmegen, Nijmegen, the Netherlands

Introduction: The project LEG TEST aims at testing 'Lively Legs' a compliance promotion program for patients with leg ulcers. The study tests the program on effects regarding: compliance with compression therapy and exercise levels, wound-free time after healing and cost-effectiveness from a societal perspective.

Method: Leg Test is a multicentre study, using a randomized controlled design. Patients in the study ($n=184$) are equally randomized to either the experimental or the control group. Data are collected at baseline, directly after the intervention period at 6 months and at follow-ups at 12 and 18 months. Quality of life is additionally assessed at 3, 9 and 15 months.

Study Population: The study-population consists of leg ulcer patients, suffering from peripheral circulation disorders of venous or mixed (venous and arterial) origin. The population is restricted to patients treated at outpatient clinics for dermatology.

Intervention: Individual counseling is performed by nurses, based on the Lively Legs lifestyle-program for leg ulcer patients. The program aims at improved compliance with compression therapy and prescribed exercise levels in all patients. In a maximum of six consultations, dermatology nurses offer tailored counseling and the application of the Lively Legs program.

Results: The results on exercise behavior show that significantly more patients in the intervention group have walks on a minimum of 5 week days, more patients have a sufficient (>2.5 h a week) amount of moderate strenuous physical activity and more patients conduct leg exercises. The results on compliance with compression therapy show an increase in both groups. The difference between the groups is not significant. The results also show that patients in the intervention group have significantly more wound free days and a higher quality of life.

Conclusion: The results of our study show the effectiveness of the Lively Legs program. Therefore we would advice its implementation as a part of integrated care.

C12-147

Low risk for undernutrition is a predictor for perceived good health in older patients

Söderhamn Ulrika¹, Flateland Sylvi¹, Jessen Liss², Söderhamn Olle¹

¹University of Agder, Faculty of Health and Sport Sciences, Kristiansand, Norway

²Medical Department, Sørlandet hospital HF, Arendal, Norway

Introduction: A nutritional screening is recommended after admission to hospital in order to detect undernutrition or risk for undernutrition. An association between lower perceived health and being at nutritional risk in older people is also known. The aim was to perform a nutritional screening using different screening instruments in a group of older hospital patients and relate the results to the patients' perceived health. A further aim was to identify possible predictors for perceived good health.

Methods and Materials: A convenience sample of 158 newly admitted older (≥ 65 years) medical hospital patients in southern Norway were interviewed using a questionnaire, the Mini Nutritional Assessment (MNA[®]) and the Nutritional Form For the Elderly (NUFFE-NO). Body Mass Index (BMI) was calculated, as a part of MNA[®].

Results: According to MNA[®], 39% had no risk for undernutrition, 44% were at risk for undernutrition and 17% were undernourished. Using NUFFE-NO, 38% were at low risk, 29% at medium

risk and 33% at high risk for undernutrition. The both screening results were significantly associated to perceived health, i.e. patients who were at nutritional risk or undernourished were more likely to perceive ill health than those screened to be at no or low risk for undernutrition. A lower BMI, being satisfied with life and lower risk for undernutrition, screened by MNA[®], were found to be predictors for perceived good health in the first regression analysis. In the second analysis more advanced age, being satisfied with life and lower risk for undernutrition, screened by NUFEE-NO, emerged as predictors for perceived health.

Conclusion: The results showed that a large amount of older patients were at nutritional risk or undernourished using two nutritional screening instruments developed for older people. In order to be able to prevent and treat undernutrition and to use such screening instruments for identifying older nutritional at-risk patients and thereby enhance older patients' perceived health.

C13-237

Elderly male cancer patients: traumatic stress and need for support in prostate cancer patients

Visser Adriaan¹, Voerman Bert², Garssen Bert²

¹Rotterdam University, Rotterdam, the Netherlands

²Helen Dowling Institute, Utrecht, the Netherlands

Introduction: The psycho-social care for cancer patients is mainly aiming at younger women with breast cancer. Elderly cancer patients are a growing group of patients, however often neglected in the specific support they need. This is especially the case for elder male cancer patients, which do not express their need for support. In a survey among men with prostate cancer the extent of post traumatic stress (PTS) symptoms was studied. Further, the influence of socio-demographical and medical characteristics on the level of posttraumatic stress symptoms was studied and the relationship of these symptoms with the need for psychosocial support.

Methods and Material: For the recruitment of patients, leaflets with a response card were used, handed out by urologists in five hospitals, and mailed to all members of the Dutch prostate cancer patients' association. When an affirmative response card was received, a questionnaire was mailed to the patients.

A questionnaire was mailed to 285 men and 260 questionnaires were returned (91%).

Results: Up to 30% of the prostate cancer patients scored above the cut-off score of 26 of the IES, indicating severe symptoms of post traumatic stress, even after years of the diagnosis. A higher socio-economic status is associated with less avoidance, and advanced disease is related to a higher IES total score.

More than half of the men had been actually searching for a form of supportive care, concerned educational meetings (wished for by 39% of the patients), a support group (18%), phone counseling (12%), and individual supportive care (12%). Patients with a need for support have higher levels of PTS symptoms.

Conclusion: This study indicates that PTS symptoms frequently occur in elderly men with prostate cancer, indicating a need for support. Early detection of PTSD and its treatment could be beneficial for this group of cancer patients.

C14-324

Alcohol use among older adults and an early intervention model for home care

Immonen Sirpa¹, Valvanne Jaakko¹, Pitkälä Kaisu²

¹City of Espoo, Espoon Kaupunki, Finland

²University of Helsinki, Helsinki, Finland

Introduction: Recognition of alcohol use and its related health problems among elderly people is challenging. The aim of the study was to examine the prevalence and at-risk drinking patterns in community-dwelling older adults and their associations with sociodemo-

graphic and health related factors and older adults' own reasoning for their alcohol consumption. Based on the study results an early intervention model for home care is developed.

Methods and Materials: The data were collected with a postal questionnaire from a random sample of 2100 elderly people (≥65 years). The response rate was 71.6%. At-risk drinking was defined by having >7 drinks/week, >3 drinks on several days/week or >5 drinks on 1 day. We used a 5-day process training to build up an early intervention model for home care. During the training, we also looked at how the team members and their work community worked with clients, and discussed the values, attitudes, beliefs, assumption and prejudices with substance abuse among older adults.

Results: Of the respondents, 8.2% (N=114) were at-risk drinkers.

Most common reason for using alcohol was for having fun (56%). At-risk drinkers reasoned their alcohol consumption more often than the non-risk drinkers as a relief for meaningless life (OR 3.1), depression (OR 7.6), anxiety (OR 3.5) and loneliness (OR 3.7). Process training was considered a better form of teaching than lectures. The early intervention model is well-defined and it can be adopted also by other home care team. In order to work and change into practices, training and tailoring is needed.

Conclusion: The alcohol use should be taken into consideration in any health counselling. Older adults are a heterogeneous group, and they report drinking for various reasons. At-risk drinkers may use alcohol as medicine or as relieving meaningless life, anxiety, loneliness or depression. An early intervention model was developed in cooperation with health and social care workers.

C15-91

Construct validity and homogeneity of the German version of the QUALIDEM by people with dementia

Dichter Martin¹, Bartholomeyczik Sabine¹, Mayer Herbert², Fischer Thomas³, Nordheim Johanna⁴, Halek Margareta¹

¹German Centre for Neurodegenerative Diseases, Witten, Germany

²University of Witten/Herdecke, Witten, Germany

³Technopolis Germany, Berlin, Germany

⁴Charité-Universitätsmedizin, Berlin, Germany

Introduction: One important aim of nursing interventions is the maintenance and promotion of their Quality of Life (QoL), especially with regard to the psycho-social aspects. Therefore, QoL is a widely selected outcome in intervention studies. In the scientific literature there is an enormous number of different standardised QoL-instruments. The QUALIDEM (Ettema *et al.*, 2007) is a standardised QoL-measurement from the Netherlands which has especially been developed to measure the QoL of people suffering from dementia. In 2008 the QUALIDEM was translated into German. Until now, there has been no evaluation of the psychometric properties of the German version available. The aims of this study are the evaluation of the homogeneity and the construct validity of the German version of the QUALIDEM.

Methods and Materials: A secondary data analysis will be performed on the basis of two data sets from research projects using the QUALIDEM as an outcome measure of 486 residents with dementia, in German nursing homes. The evaluation of the construct validity is based on a factor analysis and a comparison of QoL with challenging behaviour (Neuropsychiatric-Inventory, NPI-NH). Within the factor analysis the nine factors of the Dutch version of the QUALIDEM will be evaluated. For the homogeneity evaluation of the resulting factors Cronbach's alpha will be calculated.

Results: The results of the construct validity and homogeneity will be presented. Data analysis will be finished in March 2010.

Conclusion: Based on the results an estimation of the construct validity and the homogeneity of the German version of the QUALIDEM is possible. Furthermore, it is possible to provide information for the further application of the QUALIDEM in research projects.

C16-244

Managing dementia in residential aged care using Snoezelen and other multi-sensory therapies

Bauer Michael, Rayner Jo, Koch Susan

La Trobe University, Bundoora, Australia

Introduction: The use of multi-sensory therapy including Snoezelen has become increasingly popular in Australian residential aged care facilities (RACFs), particularly with residents living with dementia who may exhibit behaviours staff find challenging. To date there has been no Australian research that has examined the use of these therapies for this group of residents. This study aimed to build a comprehensive picture about the use of multisensory therapies in RACFs, in particular what is used, how the therapies are used, the indications for their use, and how the efficacy of therapies is determined.

Methods and Materials: A 33-item Computer Assisted Telephone Interview (CATI) survey consisting of single and multiple response items and some open ended questions was developed. Information was collected on demographics, the management of dementia related behaviours, resident assessment, the delivery of multi-sensory interventions, staff education and training and the evaluation of resident outcomes. All 800 residential aged care facilities in Victoria were invited to participate and where necessary contacted multiple times to encourage participation.

Results: The response fraction was 48% and participating facilities reported the use of 41 different multi-sensory interventions. The most popular interventions used to manage dementia related behaviours were music (89%), massage (74%) and aromatherapy (72%). Seven percent of facilities referred to the interventions used as Snoezelen therapy however, the majority of staff (85%) administering the interventions had no specific training in this approach. Only 38% of facilities reported evaluating the various multi-sensory interventions used, primarily through observation of the resident; and no facilities used any formal process or assessment tools to assess the efficacy of the interventions.

Conclusion: A large number of multi-sensory interventions are being used by residential aged care facilities to help manage residents' dementia related behaviours. Educational preparation in the use of these interventions varies markedly and few facilities have adopted rigorous practices to evaluate their efficacy.

C17-256

Quality of life in shared housing arrangements – a comparison of various dementia-specific scalesGräske Johannes¹, Fischer Thomas², Kuhlmeier Adelheid¹, Meyer Saskia³, Wolf-Ostermann Karin³¹*Charité Universitätsmedizin Berlin, Berlin, Germany*²*Technopolis GmbH, Frankfurt A.m., Germany*³*Alice Salomon Hochschule Berlin, Berlin, Germany*

Introduction: The assessment of quality of life (QoL) in people suffering from dementia is regarded as complex and challenging. Various methods and instruments have been developed and validated. No consensus has yet been reached regarding the appropriateness of the different instruments for specific sub-populations and settings. This is especially true for the setting of shared housing arrangements (SHA), a special kind of German small-scale living facility.

Methods and Materials: The aim of the study is to identify the appropriate scale to measure dementia-specific quality of life in German SHAs. The first step was a systematic literature search. We selected instruments available in a German version and covering all stages of dementia, including self-rating (e.g. QoL-AD) and staff-proxy rating (e.g. Qualidem) instruments. The study is a cross-sectional survey of persons with dementia (MMSE<24) living in SHAs.

Results: We surveyed 30 SHAs in the city of Berlin with an average number of 6–8 (mostly fe-male) residents. The average age was

approximately 80 years. Self and proxy ratings were completed to assess quality of life, and for all instruments only moderate levels of quality of life were measured. We analyzed differences between both self and proxy ratings and effects of independent factors on measured QoL. Further results concerning interfering factors and the differences observed between self and proxy ratings will be available in June 2010 and presented at the conference.

Discussion: The present survey compared and contrasted various dementia-specific self and proxy rating QoL instruments and investigated how different personal and setting factors influence quality of life. Further research is needed to get a deeper insight into interfering factors with regard to various and especially severe levels of dementia. The identification of confounding variables as well as advantages and disadvantages of self and proxy ratings in different settings will support the choice of an appropriate instrument in specific settings.

C18-49

Standardization of a research-based advanced nursing practice home intervention for elderlyNaef Rahel¹, Imhof Lorenz¹, Mahrer-Imhof Romy¹, Petry Heidi²¹*Zurich University of Applied Sciences, Winterthur, Switzerland*²*University of Washington, Nursing Program, Bothell, WA, USA*

Introduction: Advanced practice nurses (APNs) are considered to be instrumental for home-based health promotion and counselling. In Switzerland, the implementation of this new role is being tested with research. Despite individually diverse clinical situations and needs encountered by APNs, interventions need to be strictly controlled and standardized. This dilemma needs to be addressed to balance methodological and clinical concerns.

Methods: Based on a comprehensive literature review, a conceptual framework, and expert interviews, standardized interventions were developed for the research project that tested an advanced nursing practice home visiting program for elders and their families. Health issues that required the most home care interventions were identified and standardized to ensure best practice. The processes of dealing with the standardized measures that allowed for participative, autonomous and individualized decision-making and action between the APN and the research participant were described.

Results: Eight health issues were identified for standardization: pain, mobility, cognition, nutrition, continence, vision and hearing, case management and family system. Decision algorithms consisted of a step-wise outline of the decision-making process to guide nursing assessment, intervention, and evaluation. Based on the assessment, the standardized selection criteria defined in the existing eight standards and participants' individual goals, both ANP and participants decided together which of the health issue was of greatest concern and needed to be addressed. APNs delivered the home visits according to predefined time intervals. Using the standard and decision algorithm as a reference, concrete nursing and participant activities were discussed and decided on.

Conclusions: Standardization of nursing interventions for complex clinical situations on a high abstraction level does not inhibit individualized practice with diverse patient and family situations. On the contrary, it provides important resources to ensure both, best practice, patient self-determination, and study validity. However, standardized procedures can only work in combination with advanced nursing competencies and the proactive involvement of participants.

C19-67

Filling up the hours: how do stroke patients on a rehabilitation nursing home spend the day?

Huijben-Schoenmakers Marleen¹, Hafsteinsdóttir Thora^{2,4},
Gamel Claudia², Rademaker Arno³

¹ROC West-Brabant, Etten-Leur, the Netherlands

²University Medical Center Utrecht, Utrecht, the Netherlands

³Avans University for Applied Sciences, Breda, the Netherlands

⁴Faculty of Nursing, University of Iceland, Reykjavik, Iceland

Objective: The aim of this study was to describe the time use of stroke patients on rehabilitation units of a nursing home focusing on the time spent on therapeutic activities, non therapeutic activities, interactions and the location wherein these took place.

Design: A cross-sectional, descriptive study.

Setting: Rehabilitation units of a nursing home.

Subjects: Seventeen chronic stroke patients, including nine men, eight women, with a mean age of 77 years (± 7.6 years).

Main Measures: Daily activities of patients were measured using Behavioural Mapping, including therapeutic activities, non therapeutic activities, interactions and their location. Functional status was measured with the Barthel Index.

Results: Of the patients 15 (88%) were partly/fully paralysed, with a mean BI-score of 9.4 (± 4.3). The patients spent 20% of the day on therapeutic activities, whereas 80% of the day was spent on non therapeutic activities; 9% on therapeutic activities with the nurse. For 60% of the day patients were alone and not interacting with others.

Conclusions: Stroke patients spend only short periods of time during the day on therapeutic activities. For the largest part of the day, the patient is alone and passive. A challenge for nurses is how to activate patients and engage them in purposeful task-oriented training in daily activities. Close multidisciplinary collaboration may improve therapeutic impact of task oriented interventions provided in the daily care. Improved education and more support from the management is essential for nurses to be able to provide evidence based care for stroke patients in nursing homes.

C20-390

The impact of hospitalization on physical decline of elderly people living at home

Vliet Majogé van, Deeg Dorly

VUmc, Amsterdam, the Netherlands

Introduction: From longitudinal literature it seems that hospitalization can have a negative influence on physical functions of older people. There are no data of this subject for the Netherlands at a national level. Therefore, a prospective cohort study was done to make transparent the impact of hospitalization on the course of physical functions of older Dutch people.

Method: The sample was selected from the first cohort of the Longitudinal Aging Study Amsterdam (LASA). This sample consisted of 289 independently living people from 57–90 years old. The independent variable was hospitalization. Hospitalization was asked using a timeline. The effect measure was physical functioning. Physical functioning was operationalized in mobility and self-care. These two scores were individually corrected for the differences in the reliability and regression to the mean with the Edwards-Nunnally method. This allowed us to determine individual change scores of mobility and self-care three years later. To determine the effects of

hospitalization on mobility and self-care, multiple logistic regression analysis have been done adjusted for gender, age, number of chronic diseases and education.

Results: The participants had a higher odds on reduced mobility if hospitalized once (odds ratio 2.1, $P=0.05$) and if hospitalized more than once (odds ratio 3.0, $P<0.01$) compared with no hospitalization. In contrast, hospitalization showed no significant effect on self-care.

Conclusion: A limitation might be the exclusion of people living in nursing homes because this can mask the effects of hospitalization on mobility and self-care. The conclusion of this study is that older Dutch people in hospital have two till three times more chance of reduced mobility than the people who are never hospitalized. This knowledge can support nurses to focus on the recovering of physical functions of older people from hospitalization until complete recovery well after discharge. For further information: <http://www.lasa-vu.nl>

C21-19

The DIRECT-project: interventions to improve job-related outcomes in nursing homes

Spoor Ellen¹, Jonge Jan de¹, Hamers JPH Jan²

¹Eindhoven University of Technology, Eindhoven, the Netherlands

²University of Maastricht, Maastricht, the Netherlands

Introduction: Because of high demands at work, nurses are at high risk for occupational burnout and physical complaints. Job resources and recovery opportunities could counteract the adverse effect of high job demands. However, it is still unclear how job resources and recovery opportunities can be translated into effective workplace interventions aiming to improve employee health, well-being, and performance-related outcomes. The aim of the DIRECT-project (DIsc Risk Evaluating Controlled Trial) is optimizing job resources and recovery opportunities, which may lead to improved job related outcomes of nurses. The interventions will be based on the Demand-Induced Strain Compensation (DISC) Model (De Jonge & Dormann, 2003; 2006), i.e. the amount of specific job resources and recovery opportunities have to match with the corresponding type of job demands to optimize job related outcomes.

Methods and Materials: The DIRECT-project is a longitudinal, quasi-experimental field study. Nursing home staff of four intervention wards and four comparison wards are involved. Based on the results of a base-line survey, interventions will be implemented to optimize job resources and recovery opportunities. After 12 and 24 month the effect of the interventions will be investigated with follow-up surveys.

Results: Based on the results of the base-line survey, risk-profiles were developed for each intervention ward, which reported the specific job demands, job resources, and recovery opportunities of the wards involved. The risk-profiles were the starting-point for the researchers to generate ideas for workplace interventions. These profiles showed that interventions should be mainly directed at increasing physical job resources and recovery opportunities. At the conference the results of the first follow-up survey after the implementation of the interventions will be presented.

Conclusion: The DIRECT-project fulfills a strong need for intervention research in the field of work, stress, performance, and health.

Parallel Session D

D1-S3 Symposium

Care problems in nursing homes from an European point of view

Halfens RJG

Faculty of Health Medicine and Life Sciences, Maastricht University, Maastricht, the Netherlands

Goal of Symposium: This symposium aims to address the prevalence rates and care related aspects of several relevant care problems occurring in care homes within Europe and the way in which data about the prevalence and the way care is provided can be used to improve the quality of care in nursing homes.

Overview: Prevalence rates of care problems have been investigated frequently within Europe, but comparisons between data from health care sectors in different countries, e.g. the care home sector are difficult to draw, since most studies use different definitions, methodology and instruments.

In the Netherlands a National Prevalence Measurement of care problems (in Dutch: LPZ) started in 1998. This annual survey provides data on the prevalence rates of various care problems, such as pressure ulcers, incontinence and falls and about the way care is provided to patients suffering from these care problems. Next to hospitals and home care organizations, the care home sector is involved in this measurement as well.

Pressure ulcer guideline development and dissemination in Europe

Meesterberends Esther¹, Halfens RJG¹, Lohrmann Christa², Wit Rianne de¹, Schols Jos¹

¹*Maastricht University, Maastricht, the Netherlands*

²*Medical University of Graz, Graz, Austria*

Introduction: Pressure ulcer prevalence rates are influenced by many factors, one of them being the development and dissemination of pressure ulcer guidelines. It is not clear whether the development and dissemination of pressure ulcer guidelines differs between European countries, since these are difficult and complex processes. Therefore, the aim of this study is to explore the current state of pressure ulcer guideline development and dissemination, from national to local level (i.e. nursing homes) in six European countries, namely; England, Germany, Italy, the Netherlands, Portugal and Sweden.

Method: Semi-structured interviews were conducted in the six European countries at national level and nursing home level. In total 51 interviews were conducted between September 2007 and April 2008.

Results: National pressure ulcer prevention and treatment guidelines were developed in England, Germany, Italy, and the Netherlands. Portugal had no national guidelines and Sweden had shifted the responsibility to regional level. All participating nursing homes had pressure ulcer guidelines except those in Portugal. The strategies used to disseminate the national pressure ulcer guidelines in the six countries differed in terms of number and type. Nevertheless, all national organisations used a multifaceted strategy. Control and monitoring of guideline dissemination was carried out only in Sweden and England.

Conclusion: All countries studied have national or regional pressure ulcer prevention and treatment guidelines, except Portugal. Portugal is also the only country where none of the nursing homes included had pressure ulcer guidelines. Although dissemination of the pressure ulcer guideline is a necessary condition for its implemen-

tation, it does not imply that the guideline is actually implemented successfully within the nursing home. Further research should therefore focus on the process of PU guideline implementation in nursing homes in these countries.

Measuring care problems in nursing home residents in the Netherlands, Germany and Austria

Nie Noémi van, Meijers Judith, Schols Jos, Halfens RJG

Maastricht University, Maastricht, the Netherlands

Introduction: The Dutch national prevalence measurement of care problems (LPZ) is now disseminated throughout Europe, starting with the German-speaking countries. To guarantee the validity and reliability of the measurements, collaboration was established with scientific institutes in these countries. After a pilot study in 2008, the first measurements were carried out in Germany, Austria and Switzerland on the 7th April 2009, the same day as in the Netherlands. Over 500 institutions participated, including more than 50 000 clients. In this presentation we will focus on the results concerning nursing homes in the Netherlands, Germany and Austria from 2009.

Methods and Materials: The LPZ measurement is a cross-sectional multi-centre study that is performed annually in hospitals, care homes and home care organisations. Standardised questionnaires are used that measure at three levels (institution, department and patient). All patient are assessed by two caregivers: one from the ward of the patient and one from an other ward.

Results: Results from Dutch, German and Austrian nursing homes (N=213) show that the prevalence of malnutrition in these institutes is comparable, respectively 23, 27 and 24%. No differences were found either in the incidence of falls between the Netherlands (9%) and Austria (8%). In contrast, the prevalence of pressure ulcers, incontinence and restraints differed significantly between these three countries. Pressure ulcers are more present in Dutch nursing homes (10%) whereas in Austria this was not more than 6%. Both the prevalence of incontinence and the incidence of restraints were higher in Austria than in the Netherlands, respectively 76 and 35 and 58 and 24%.

Conclusion: Using the same measurement instruments, data can be compared better. This study shows that, if well prepared and introduced, a large prevalence study can be performed in different countries at the same time.

Fall prevention in cognitively impaired older people: state of the art in German nursing homes

Härlein Jürgen¹, Dassen Theo², Halfens RJG³, Heinze Cornelia²

¹*General Hospital Fürth, Fürth, Germany*

²*Charité – Universitätsmedizin Berlin, Berlin, Germany*

³*Maastricht University, Maastricht, the Netherlands*

Introduction: About 50–70% of residents in nursing homes are affected by dementia or cognitive impairment. Falls are a major cause of morbidity and mortality in the course of these diseases. Approximately 60% of these residents fall at least once annually, while only about 40% of cognitively intact residents experience a fall each year. Several integrative literature reviews discuss possible specific fall risk factors: type and severity of dementia, impairments of specific cognitive functions (e.g. executive function, attention, and orientation), behavioural disturbances (e.g. wandering), disease-

specific motor impairments (e.g. extra-pyramidal symptoms), psychotropic medication, physical restraints, age, functional status, and postural hypotension. There are controversial results concerning the effectiveness of fall prevention programmes in cognitively impaired nursing home residents. Although there is consensus in scientific literature that a subgroup-specific strategy should be developed, it is still unclear. This was the reason for studying which measures nurses undertake in nursing homes.

Methods and Materials: Two researchers conducted focus-group interviews with experienced geriatric nurses in nine nursing homes in Germany. Group sizes varied from two to fourteen participants. In total 39 nurses participated. Interviews were analysed following the principles of qualitative content analysis developed by Mayring (2002).

Results: Nurses assume that general fall preventive strategies, such as physical training or use of assistive devices have to be adapted with respect to cognitive and behavioural disorders of dementia patients. Further, they mentioned three specific strategies to prevent falls in cognitively impaired nursing home residents: targeted surveillance, orientation training and interventions addressed to ameliorate agitation and wandering.

Conclusion: Fall prevention strategies in nursing home residents should integrate targeted surveillance and interventions addressed to ameliorate cognitive and behavioural disturbances.

Improving quality of care in care homes by performing a yearly national audit of care problems

Schols Jos¹, Meijers Judith², Neyens Jacques², Nie Noemi van², Halfens RJG²

¹Maastricht University, Bemelen, the Netherlands

²Maastricht University, Maastricht, the Netherlands

Introduction: Care home residents mostly are very frail old people, showing a geriatric profile of multimorbidity, considerable disabilities and handicaps. Their care dependency is high and often they also suffer from problems like pressure ulcers, malnutrition, incontinence and falls. Moreover, these care problems have a negative impact on their quality of life. The way care homes target their policy to prevent and treat these care problems, gives an indication of the basic quality of care in these settings. Performing a regular measurement of the prevalence as well as the prevention and treatment policy related to a set important care problems in care homes may provide transparent information about the quality of care in the institutional long-term care sector and also provide a basis for (national) programs to improve the quality of basic care.

Methods and Materials: In The Netherlands, since the last decade, an annual independent cross-sectional, multi-centre/level, prevalence study (called LPZ: Dutch National Prevalence Measurement of Care problems) is performed in all health care sectors including the care home sector. The measurement involves general and specific questions about the prevalence, prevention and management of care problems on institutional level, ward level, and patient level. The LPZ provides participating institutions with relevant and benchmarking information, enabling them to undertake actions to improve their quality of care. The results also offer the opportunity to start care improvement activities on a national level.

Results/Conclusion: In this presentation, it will be shown, to what extent the annually national assessment of care problems in the institutional long-term care sector has led to national and local programs to improve the quality of medical and nursing care. It will be shown as well that increasing awareness of basic care problems in health care has shaken awake all relevant actors in the Dutch health care system.

D2-S13 Symposium

Home care for the elderly in Europe: the EURHOMAP-project results

Goal: Demand for health and social care services in the community will grow as a result of the ageing of populations across Europe. At present, however, very little is known about the preparedness of national home care systems for changing demand. The goal of the symposium is to give a comprehensive overview of home care systems across Europe, i.e. policy and regulation on home care and aspects of financing, organisation and provision of services. In this way we can show the variation in the degree of development and the levels of provision and utilisation of professional home care in the European countries.

Overview:

- 1 Governance on home care in Europe.
- 2 Financing home care in Europe.
- 3 Human resources in home care in Europe.
- 4 Recipients of home care and the role of informal care in Europe.
- 5 Current trends and challenges and how they are dealt with.

Governance on home care in Europe

Genet Nadine¹, Boerma Wienke¹, Hutchinson Allen², Garms-Homolova Vjenka³, Naiditch Michel⁴, Lamura Giovanni⁵, Chlabicz Slawomir⁶, Ersek Katalin⁷, Gulacsi Laszlo⁷, Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²Sheffield University, Sheffield, UK

³Alice Salomon University of Applied Sciences, Berlin, Germany

⁴Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

⁵INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

⁶Medical University of Bialystok, Bialystok, Poland

⁷Corvinus University of Budapest, Budapest, Hungary

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: Demand for health and social care services in the community will grow as a result of the ageing of populations across Europe. At present, however, very little is known about the preparedness of national home care systems for changing demand, which is not just quantitative but also qualitative in kind. There is a need for insight into the state of home care, including policy and regulation and aspects of financing, organisation and provision of services.

Methods & Materials: EURHOMAP study has developed an extensive set of indicators to map home care systems that focus on: policy and regulation; financing; organisation & service delivery; and clients & informal carers. Data were collected in 31 European countries. We also used the answers of key informants on questions related to four 'vignettes' (hypothetical case descriptions of home living people in need of care).

Results: Home care systems widely vary in their degree of development and that the structures of governance, regulation and models of provision are very heterogeneous. An aspect of home care that creates challenges at all levels is the mix of social, nursing and health services, which are supposed to be delivered in an integrated way to clients and patients. Cost control in community care is a common issue of most countries, but budgetary and efficiency measures taken and mechanisms developed are very different. Maintaining and improving home care services is a priority in many countries which does not always match with needs to increase efficiency.

Conclusion: Although home care is a major point of policy in many countries, it is not heavily regulated. In many countries home care governance is split between different types of care and,

consequently, not well integrated. Despite the dominance of public provision, tendencies towards more privatisation, contracting and competition can be identified.

Financing home care in Europe

Genet Nadine¹, Gulacsi Laszlo², Boerma Wienke¹, Hutchinson Allen³, Garms-Homolova Vjenka⁴, Naiditch Michel⁵, Lamura Giovanni⁶, Chlabicz Slawomir⁷, Ersek Katalin², Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²Corvinus University of Budapest, Budapest, Hungary

³Sheffield University, Sheffield, UK

⁴Alice Salomon University of Applied Sciences, Berlin, Germany

⁵Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

⁶INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

⁷Medical University of Bialystok, Bialystok, Poland

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: Financial incentives are widely used to get better value for money. Incentives can be applied to authorities responsible for home care, or to agencies that provide services or to clients who receive care. Details of the financing system of home care services very much determine the possibilities for financial incentives. At present, there is a need for comparative information on financing mechanisms for home care.

Methods & Materials: This presentation is based on the results of the EC-financed EURHOMAP project. Indicators have been developed in this project to map the home care systems in Europe, including details of financing. In 2009 and early 2010, EURHOMAP partners have collected data on these indicators in 31 countries in collaboration with experts in these countries.

Results: Prevailing models of financing for home care will be presented as well as information of the extent to which home care across Europe is pressured by financial restraints. Especially in Eastern European countries, where home care is not well developed yet, funding is a major problem. Co-payments are applicable in most countries to reduce expenditures and to prevent over-utilisation of services. Usually, financing mechanisms for social community based services differ from the mechanisms in place for home health care services. Consequently, modes of reimbursement for providers of different sorts of home care services and the financial implications for clients differ. Co-payments are more prevalent with social services than with health care. Another financial allocation mechanism is means testing, which is frequently used with publicly financed home care services.

Conclusion: There is a large diversity in the type of financing mechanism, both between and within countries in Europe. Budgetary restraints are one of the main problems with regard to home care in almost all countries. Usually, access to home care services is restricted in some way by financial restrictions.

Human resources in home care in Europe

Genet Nadine¹, Lamura Giovanni², Boerma Wienke¹, Hutchinson Allen³, Garms-Homolova Vjenka⁴, Naiditch Michel⁵, Chlabicz Slawomir⁶, Ersek Katalin⁷, Gulacsi Laszlo⁷, Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

³Sheffield University, Sheffield, UK

⁴Alice Salomon University of Applied Sciences, Berlin, Germany

⁵Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

⁶Medical University of Bialystok, Bialystok, Poland

⁷Corvinus University of Budapest, Budapest, Hungary

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: The increasing old-age dependency ratio implies future reduction of human resources available to provide services. Little information is available about the level of qualification, contractual aspects, payment and working conditions of home care workers and the existence of staff shortages and recruitment problems in different countries.

Methods & Materials: This presentation is based on the results of the EC-financed EURHOMAP project. Indicators have been developed in this project to map the home care systems in Europe, including details of human resources. In 2009 and early 2010, EURHOMAP partners have collected data on these indicators in 31 countries in collaboration with experts in these countries. Results were described in uniformly structured country reports and fed back to national experts for validation.

Results: In many countries numbers of those working in private organisations are not available. Furthermore financial incentives and working conditions will be compared, as well as the task division between home care workers and to what extent educational requirements are explicitly formalised. Mechanisms of quality control of human resources differ strongly (e.g. recertification of nurses; rules for the education of home care nurses). An interesting phenomenon, related to pressures to increase efficiency, is the transfer of tasks or substitution which is taking place between home care workers of different qualification levels. In contrast to the provision of technical nursing, the provision of personal care and domestic aid is less strictly related to specific qualifications.

Conclusion: Shortages in human resources are a common problem in many countries, but expectedly most in countries just having developed home care. There is a strong variation in mechanisms of quality control of home care professionals; in the level of education required; and in the strength of the position of home care workers.

Recipients of home care and the role of informal care in Europe

Genet Nadine¹, Naiditch Michel², Boerma Wienke¹, Hutchinson Allen³, Garms-Homolova Vjenka⁴, Lamura Giovanni⁵, Chlabicz Slawomir⁶, Ersek Katalin⁷, Gulacsi Laszlo⁷, Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

³Sheffield University, Sheffield, UK

⁴Alice Salomon University of Applied Sciences, Berlin, Germany

⁵INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

⁶Medical University of Bialystok, Bialystok, Poland

⁷Corvinus University of Budapest, Budapest, Hungary

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: As resources and criteria of eligibility are very different across countries, clients differ in their dependency, frailty and availability of informal care. In some countries recipients of home care more behave like critical consumers knowing their rights than those in other countries. Henceforth, systems may differ in the way clients are informed, can choose and, if necessary, can submit complaints. Another difference concerns the acknowledgement and role of informal carers, which is reflected, for instance, in the possibility for

informal carers to be supported (e.g. with respite care). Very little comparative information is available at this point.

Methods & Materials: The EC-financed EURHOMAP project has developed an extensive set of indicators to map home care systems, including the position and situation of clients and informal carers. Data were collected in 2009 and early 2010 in 31 European countries. Additional information came from the answers of a panel of key informants to questions related to four 'vignettes' (hypothetical case descriptions of home living people in need of care).

Results: In most countries the largest share among recipients of home care consists of people above the age of 65 years. The number of recipients of home care varied enormously. In some countries home care is almost limited to the elderly, while in other countries a wider range of services is provided to a wider variety of client and patient groups, including those in need of palliative (end-of-life) care and those in need of post-hospital care. Great differences were found in empowering recipients of home care (such as: offering choice of provider, type of provider; personal budget as an option; and availability of benchmark information to enable recipients to compare providers).

Conclusion: Countries strongly differ in the number of home care recipients, their position in the system and the role of informal carers in the allocation and provision of formal care.

Current trends and challenges and how they are dealt with

Genet Nadine¹, Garms-Homolova Vjenka², Boerma Wienke¹, Ersek Katalin³, Hutchinson Allen⁴, Naiditch Michel⁵, Lamura Giovanni⁶, Chlabciz Slawomir⁷, Gulacsi Laszlo³, Fagerström Cecilia⁸, Bolibar Bonaventura⁹

¹NIVEL, Utrecht, the Netherlands

²Alice Salomon University of Applied Sciences, Berlin, Germany

³Corvinus University of Budapest, Budapest, Hungary

⁴Sheffield University, Sheffield, UK

⁵Institut de Recherche et Documentation en Economie de la Sante (IRDES), Paris, France

⁶INRCA Istituto Nazionale Riposo e Cura Anziani, Ancona, Italy

⁷Medical University of Bialystok, Bialystok, Poland

⁸Blekinge Tekniska Hogskola, Karlskrona, Sweden

⁹IDIAP, Barcelona, Spain

Introduction: Besides the ageing of populations there are many more factors that have an influence on home care demand or supply; such

as increased mobility; changing character of family structures; inter-generation solidarity; labour participation of women and the labour market for home care. This presentation will sketch the current trends, problems and how they can be tackled. The year 2025 is still far away but we will try to look ahead without losing the sense of reality.

Methods & Materials: This presentation is drawn upon the EC-financed EURHOMAP project, which included an inventory of contextual factors, problems related to policy, financing and delivery of home care and future challenges in each country. The study has collected a wealth of data in each of 31 countries on a large set of indicators.

Results: Trends influencing home care will be presented. We will notice that different trends may apply to groups of countries. The possible affects of more or less general problems will be explored, such as scarcity of financial and human resources. Besides less general, but still burning problems in some countries, will be examined; for instance the lack of integration and coordination between types of home care services; inequalities resulting from decentralisation of authority; limited access to home care services for middle income groups; and absent or poor control of the quality of services. Examples will be presented of how countries respond to the earlier mentioned challenges.

Conclusion: Some problems, such as those related to financial and human resources apply to most countries and are expected to be persistent. Private models of provision may also be considered to be of growing importance. However, cross-country differences in trends and problems will continue to exist, especially between countries with a long tradition of home care and those where it was recently developed.

D3-S31 Symposium

The Dutch National Care for the Elderly Programme

Jonkers Karianne

ZonMw, The Hague, the Netherlands

Introduction: The Netherlands Organisation of Health Research and Development (ZonMw) has launched the ambitious National Care for the Elderly Programme to improve care and support for frail elderly persons. This programme (2008–2011) is initiated by the Ministry of Health, Welfare and Sport. The budget is 80 million euro.

Methods: The programme consists of three steps. First, regional networks were formed consisting of all parties that can contribute to the organisation of care and support for frail elderly persons. These parties include associations for the elderly, general practitioners, care and nursing homes, hospitals, home care services, health insurers, and municipalities. Second, innovative experiments were formed within these networks that focus on reorganisation and integration of care and support and are formally evaluated. The demands of the elderly are the central focal point. The experiments can operate beyond the boundaries of existing legislation and funding. They should lead to added value for elderly people, in terms of greater self-reliance, better retention of function, and reduced care use and treatment burden. The third step is dissemination and implementation of knowledge.

Results: Eight networks are formed and continue to grow. Elderly persons have a major say in these networks. Their problems and wishes take centre stage. They are involved in discussions about new subjects and projects at a regional and national level. The networks developed experiments on the following topics: screening of frailty, reactivation after hospitalisation, improvement of primary care, integrated care, and new information systems. This year, new experiments will start aimed at wellbeing, self-management and autonomy. A number of the ongoing experiments include nursing care. Three examples will be presented at this symposium.

Conclusion: We aim for better integrated care and added value for frail elderly persons through formation of networks and experiments. Whether this approach works is still to be tested.

Towards an integrated chain of care model for the frail elderly

Maraóte Nicole

Maastricht University Medical Center, Maastricht, the Netherlands

In Limburg the university medical centre has contributed to the foundation of a network, called ACZIO, in which primary and secondary health care institutions and professionals, public health agencies, regional patient organizations, social and wellness organizations, municipalities as well as the research school CAPHRI participate.

Aczio has started a process aiming to frame the activities for the frail elderly within its region in line with the Chronic Care Model (CCM) that WHO has adopted. The essence of this model is that all activities on each level of the health care system focus on optimizing the functioning and quality of life of its target population. Selfmanagement support, decision support, effective and efficient organization and communication-technology form the key-elements of CCM. The health care system and all public regulations must be in line of the focus of CCM. To organize this *Aczio* will apply a circular chain of care model in which frail elderly people and informal caregivers take a central position, surrounded by primary and secondary care providers in mutual synchronisation and interaction.

As a starting point for this transition it is necessary to identify the frail elderly and their problems. Therefore initiatives have started by which the older patients of general practitioners (GPs) who have a

high risk of frailty will be visited and interviewed systematically by trained nurses using validated questionnaires. If identified as vulnerable, further investigation can take place in day centres specialized in somatic or psychiatric disorders. The region has three sub-regions around the three local hospitals. The social and cultural characteristics of these sub-regions and the diagnostic procedures applied there differ. Therefore the effects of the interventions as well as the processes of care will be studied and compared. By creating a 'learning network' of key-participants it is expected that experiences and lessons learned can be optimized and disseminated.

The ISCOPE-study

Blom Jeanet

Leiden University Medical Center, Leiden, the Netherlands

Aim of this Study: The introduction of a simple, structural monitoring system to detect deterioration in functional, somatic, mental or social functioning of elderly of ≥ 75 years. A care plan will be made for elderly with a combination of functional, somatic, mental and social problems (complex situation).

Methods: The ISCOPE-study is a cluster randomised trial with the aim to measure the (cost) effectiveness of a screening questionnaire to identify elderly with complex problems, followed by a care plan for these elderly. All older persons of ≥ 75 years in 70 general practices will be screened using a simple mailed questionnaire. The questionnaire contains four domains: a functional, somatic, mental and social domain. The results of the questionnaire will be fed back to the 35 general practices in the intervention group. For the older persons with problems on 3 or 4 domains the general practitioner (GP) in the intervention group will make a care plan. Depending on the kind of problems, the care plan will incorporate indicated diagnostic strategies, interventions, medication review, referral to home care, contacting social work or bringing together the caregivers involved in the patient. The key figure in this process is the practice nurse of the GP. The GP and practice nurses will receive a training to implement this monitoring and proactive way of working.

The 35 GPs in the control group will not receive the results of the screening and will provide care as usual.

Outcome Measures: Competence to perform ADL independently, quality of life, satisfaction with delivered care, process measures, indicators for proactive, coherent care.

Feasibility of a new intervention programme for vulnerable older people in primary care

Bleijenberg Nienke, Drummel Irene

Utrecht University Medical Center, Utrecht, the Netherlands

Introduction: Care for vulnerable older people and their family caregivers is most effective when care and care will be integrated within the context of primary care. In a large cluster randomized, controlled, open intervention study in primary care an innovative intervention programme meeting the above principles will be implemented. Prior to the RCT the feasibility of this innovative programme, including the introduction of the Geriatric Nurse Primary Care (GNPC) and the developed geriatric assessments and a 'tailor-made' care plan will be tested.

Method & Materials: This feasibility study will take place in three general practices with four GNPC's and at least 30 vulnerable older patients and their caregivers. First the GNPC will complete an educational program how to use the assessments and 'tailor-made' care plan. The trained GNPC will visit patients at home to examine the level of frailty and care needs of the patients and of their caregivers. After this visit the GNPC will prepare and coordinate a 'tailor made' integrated care plan for vulnerable older people and their caregiver in need of complex care.

Results: Results of this feasibility study will describe the experiences barriers and facilitators by the GNPC, general practitioner and patients and family caregivers who tested this new intervention programme. With the introduction of the GNPC and the use of a 'structural risk identification and monitoring system' (UPRIM), we aim to improve functioning, quality of life and self-sufficiency for these vulnerable older people. Results of the feasibility will be expected before summer 2010 and can be presented at the Fourth European Congress.

Conclusion: If the introduction of the GNPC, the assessments and the tailor made care plan are feasible, they will be tested in the large trial in the 'Central Utrecht Older People project' with 5000 patients and 90 general practitioners. This intervention will be compared to the innovative UPRIM group and a usual care group.

D4-L24

Primary care and care for older personsBoeckxstaens Pauline¹, De Graaf Pim²¹*Department of Family Medicine, Ghent University, Ghent, Belgium*²*Consultant in health services development, Utrecht, the Netherlands*

Introduction: In its series of Positions Papers, the European Forum for Primary Care (EFPC) currently develops a Position Paper on Care for Older Persons: an overview of policies, practices and challenges in European countries related to the question: How does Primary Health Care address the needs of older persons. Care in the community and an ability to provide comprehensive care – for which multi-disciplinary teams are required – are key characteristics of Primary Care, that has a different organisational set up in different countries. Prevention of falls and development of dependence; the use of domestic appliances; maintenance of health; adequate care at home by informal care or formal services; frequent diseases; multimorbidity and use of medicines; relationships with social services and secondary health care; these are among the many topics primary care addresses.

Methods and Materials: During 2010, through data searches and expert opinion we first identified key health issues for primary care. Through networks of the EFPC we gathered information and evidence from a number of countries on these key issues. Subsequently, we discuss these findings with professionals from various disciplines, representatives of organisations of older people and policy makers. This presentation and workshop are meant to invite feed back from participants.

Results and Conclusions: Advances and challenges in the care for older persons provided by primary care in European countries will be described, with an emphasis on the key health issues. Approaches in countries with a stronger developed primary care will be compared with those in less strong primary care countries, both for policy and for daily practice. Research questions will be identified and approaches for dissemination of the findings will be discussed.

D5-138

The art of working in the care for the elderly – work is in the eye of the beholderNijhuis Carolien¹, Hupkens Susan²¹*Humanitas, Rotterdam, the Netherlands*²*Research Group Participation Occupation and Health of the Hogeschool Rotterdam, Rotterdam, the Netherlands*

Introduction: Steenplaat-Humanitas in Rotterdam offers residential care as well as home care and is part of the Humanitas foundation, a large organisation for care for the elderly. Humanitas' vision of care has four key values: a Yes Culture, Use It Or Lose It, Autonomy, and the Extended Family approach. These values all contribute to well being.

Humanitas' key values, though generally known by the employees, still need more day to day implementation. Working with elderly people, with steadily increasing demands of organisation, clients, family, and last but not least, government, poses many challenges, especially for employees who only too often are themselves vulnerable regarding education and social circumstances. The objective of this research is to establish a way of realizing Humanitas key values by means of co-creation, by mutual effort of staff and the working floor: 'The Art Of Working In the Care For The Elderly'.

Methods and Materials: This action research is part of a PhD study. Dialogue and creating appealing methods are part of the research. The first phase focuses on employees: their objectives, ideas, stories and needs. Using the Social Photo-Matrix (SPM, Sievers) we worked in group sessions to explore employees' image of their work and the organisation.

Results and Conclusion: SPM proved to be an attractive and effective method to investigate the organisation from the perspective of the employees. The sessions provided issues for further action research. A major advantage was that the method awakened motivation for quality improvement in employees. Results will be presented in the workshop at the congress. Participants will join in a short photo matrix session to experience the method, followed by discussion of the advantage and disadvantages of the method, the role of the researcher/director and the assistant researcher.

D6-46

Impact of individualized case conferences on residents' behaviour and quality of lifeHardenacke Daniela¹, Halek Margareta¹, Mayer Herbert², Bureick Gertrud², Wilm Stefan², Knee Ruth², Krüger Cornelia³, Bartholomeyczik Sabine⁴¹*Deutsches Zentrum für Neurodegenerative Erkrankungen, Witten, Germany*²*University of Witten/Herdecke, Witten, Germany*³*Paracelsus Medical University, Salzburg, Austria*⁴*Deutsches Zentrum für Neurodegenerative Erkrankungen, Witten, Germany*

Introduction: A German nursing guideline for nurses in nursing homes caring for elderly with dementia showing challenging behaviour contains seven recommendations. The first two refer to 'understanding diagnostics' and the use of 'standardized assessment tools'. Nurses first have to understand why a person with dementia behaves as he/she does before they decide to initiate or even better to omit interventions. A second German medical guideline for dementia in particular for GPs recommends a three-step strategy: firstly, to create needs oriented environment and care; secondly to try appropriate and suitable non-pharmacological interventions and finally to start with medical treatments. Parts of both guidelines were implemented in nursing homes by training nurses and GPs followed by individualized case conferences. The aim of the study is to reduce residents' challenging.

Methods and Materials: The intervention study uses a pre-post-test design with two data collection points. The intervention contains (1) training of nurses in understanding diagnostics and the use of a standardized assessment tool (IdA), (2) training of GPs in the medical guideline, (3) introducing interdisciplinary case conferences in the nursing homes. The intervention took 9 months. 163 residents with dementia (MMSE ≤ 24) in 15 nursing homes were included.

Results: Of the 163 residents 107 finished the intervention. At baseline 87% of residents showed any kind of challenging behaviour, this was reduced to 77% after the intervention. The decrease can be observed in all 10 subscales of the NPI-NH, for 6 subscales the reduction is significant ($P < 0.05$). There are no differences in residents' quality of life, except for the subscale 'negative affect'. The values for QoL remain at a good level.

Conclusion: The intervention has a relevant positive effect on challenging behaviour of residents with dementia. Effects on quality of life could not be shown except in one subscale.

D7-242

Pleasantly living together: Anton de Kom, for Surinamers with dementiaVerhoeven Annemiek, Abendanon Anne-Rose
Cordaan, Amsterdam, the Netherlands

Introduction: Meeting centre Kraka-e-Sewa, right in the middle of Amsterdam Bijlmermeer, leans on three pillars: support (family), care (for the person with dementia) and social integration (taking part in society). The day activities: Suriname radio, listening and playing

music, reading news papers, handicraft. When dementia is getting worse, the clients can become residents in Anton de Kom. Anton de Kom has 24 apartments for elderly with dementia. Target clients are from Suriname origin. The living has colored furnishing, tropical plants and are decorated on a Suriname manner.

In existential matters, the Iman, a Hindi priest, or a Winti professional can be called in. The family is the indispensable link as a partner in the care. The caregiver pays honour to the customs of the client and the family. The rhythm of family life is normative for the activities of daily living. Experiencing of smells and colours and following the customs which belong to it, have a big priority. Many caregivers have a Suriname background, they were all trained according to the method 'living together'. Every 2 months living-room conversations are organised in which all sorts of matters are discussed.

Evaluation: In december 2009 we started this location. In february 2010 the process of implementation of living and working is evaluated. First results januari 2010: clients and family feel at home, all apartments are occupied.

Results: Results from a questionnaire will be presented on the nursing congress. The results of Kraka-e-Sewa meeting centre have been incorporated in the research (2004) by J. Oste, Free University Amsterdam.

Conclusion: Kraka-e-Sewa fulfilled the needs of clients and family. When clients have more serious dementia they could come and live in this small community, Anton de Kom, where Suriname people live together.

D8-39

Effects of introducing a nursing guideline on depression in psychogeriatric nursing home residents

Verkaik Renate¹, Francke Anneke², Meijel Berno van³, Bensing Jozen¹, Ribbe Miel⁴

¹NIVEL, Utrecht, the Netherlands

²NIVEL/EMGO /VUmc, Utrecht/amsterdam, the Netherlands

³INHolland University for Applied Sciences, Amsterdam, the Netherlands

⁴EMGO /VUmc, Amsterdam, the Netherlands

Introduction: The prevalence rate of depression in psychogeriatric nursing home residents with dementia is recently estimated at 19%. Comorbid depression in dementia has been associated with decreased quality of life, greater health care utilization and higher mortality rates. The effects of introducing an evidence based nursing guideline on psychogeriatric nursing home wards were studied. Main principles of the guideline were (1) increasing individualized pleasant activities, (2) decreasing unpleasant events.

Methods and Materials: A multi-centre ($n=9$) controlled intervention study with randomization at ward level ($n=18$) with pre-test, post-test and follow-up measurements was used. Participants were 97 residents of psychogeriatric nursing home wards with dementia and comorbid depression. Primary outcome was severity of depression measured with the MDS/RAI-Depression Rating Scale and the Cornell Scale for Depression in Dementia.

Results: Residents on the experimental wards showed a significant reduction in depression on the Depression Rating Scale. With the Cornell scale a (not significant) reduction of depression was found as well.

Conclusions: This study shows significant reductions in depression severity by introducing a nursing guideline on psychogeriatric nursing home wards. Better compliance with the guideline could probably enlarge the effects. Some ways to achieve this are: (1) additionally train non-certified nurse assistants, and (2) emphasize necessary conditions for successful introduction of the guideline to nursing team managers.

D9-73

How to tell patients and caregivers about dementia

Pol Renate¹, Taekema Diana¹, Van Mierlo Patricia²

¹Alysis Zorggroep Rijnstate Hospital, Arnhem, the Netherlands

²Geriatrician, Rijnstate hospital Arnhem, the Netherlands

Introduction: In our memory clinic during the first nursing consultation patients and caregivers frequently said that the geriatrician had not given them sufficient information about dementia during the earlier consultation. We therefore studied if the content of the geriatrician's consultation met criteria as described in literature. Furthermore, we studied satisfaction of patients and caregivers with the content of this consultation.

Methods and Materials: First, we did a systematic search for published material on how to tell the patient the diagnosis dementia (in PubMed, Invert and Dutch nursing database). Second, after consent from patient or caregiver, the consultation with the geriatrician was recorded on tape. Third, following the consultation with geriatrician, patients and caregivers were interviewed by the investigator to assess satisfaction with the consultation.

Results: A total of 33 consultations were recorded, all taped consultations met most of the criteria. Some items didn't meet the criteria: the remaining abilities of the patient were not addressed (64%), the MRI scan was not shown (25%), and no information leaflets were given (97%). Additional observation were that the geriatrician discussed typical nursing issues. The interviews showed that all patients and caregivers were satisfied (61 and 18%) or very satisfied (39 and 82%) with the previous consultation by the geriatrician, but also said that the amount of information was extensive and therefore they couldn't all understand it.

Conclusion: The geriatrician tells patients the diagnosis of dementia according to international criteria. However, it seems that most of this information is soon forgotten by patients and their caregivers. Based on our findings we shortened the time between the consultation with the geriatrician and the nurse practitioner. Furthermore, we supplied all interview rooms with patient information leaflets, so these are always available to hand out to the patient.

Finally, the content of the different consultations has been standardized.

D10-220

Videomonitoring as part of care delivery to independently living seniors

Spreeuwenberg Marieke¹, Kienhuis Maartje², Willems Charles¹

¹Hogeschool Zuyd, Heerlen, the Netherlands

²Vilans, Utrecht, the Netherlands

Introduction: Since there will not be enough health providers available to meet the growing demand of care of the elderly, there is a need to reorganize the Dutch health care system in a more efficient way. In this process, innovative technologies can play an important role. Currently, an implementation study is conducted to implement ZorgTV at health care service Proteion Thuiszorg. ZorgTV is a visual audio connection by which a client at home can easily notify a nurse of a home care organization. At this moment 95 frail elderly clients of Proteion Thuis receive ZorgTV

Methods and Materials: To study the effects of ZorgTV 95 frail elderly clients of home care organization Proteion have been monitored on a half yearly basis. Measurements are Quality of life, feelings of safety, loneliness of clients, the feelings of burden of direct caregivers and the job satisfaction of health providers.

Results: Most clients use ZorgTV on a weekly or monthly basis. 22 clients use the 'Good Morning, Good Evening' for a social talk or for medication reminding. Some clients find the control element of ZorgTV difficult to understand and improvements on the usability should be made. Preliminary results reveal that clients have a reduced feeling of loneliness and increased feeling of safety when

using ZorgTV. The transition of ZorgTV has taken place at target groups with psychosocial problems.

Conclusion: One has to realize that the development of a communication system for care and welfare is an ongoing process. A good interaction of health care providers, clients and developers of the system is required to optimize the system according to the clients' needs. After optimizing the usability of the system, the focus of the project is on adding extra functions according to the clients wishes, such as family contact or memory training.

D11-292

Healthy older persons perceptions about care and the use of Assistive Technology Services (ATS)

Harrefors Christina, Sävenstedt Stefan, Axelsson Karin
Luleå University of Technology, Luleå, Sweden

Introduction: Dignity is a basic concept for quality care regardless of how and where care is given. Researchers have described the use of Assistive Technology Services (ATS) in order to promote quality care and support of older persons. However, in perceptions of the use of ATS there are values imbedded that only to limited extent are studied. The aim of this study was therefore to describe healthy older persons' perception about care and the use of ATS.

Methods and Materials: Qualitative research interviews were conducted with twelve healthy older couples living in their own homes. All participants were 70 years of age or older and received no professional care or social support. Open, individual, semi-structured interviews were conducted with the support of written vignettes where three levels of care needs were described. A qualitative content analysis was used to analyze the interviews.

Results: Regardless of whether participants were discussing quality care in general or ATS supported care, they were convinced that the best place to receive care was the home. Values associated with the use of ATS in care were closely connected to the ability of being in control of the care situation. ATS as a tool to facilitate care was perceived as an asset as long as the couples were in control of their care situation. Hesitation in their abilities to use ATS increased if they lacked a partner and their cognitive impairment increased. Regardless of other factors, dignity is highly valued, and has greater importance when other values like autonomy and independence are reduced.

Conclusion: These findings highlight older persons' values about quality care and the use of ATS in care and should be taken into consideration when planning care of older persons, and implementing new technology related to their care. It is necessary that politicians and care planners explore various options to deliver the best care, as perceived by older persons.

D12-303

E-Health in care of older persons in the future

Axelsson Karin, Harrefors Christina, Sävenstedt Stefan, Wälivaara Britt-Marie
Luleå University of Technology, Luleå, Sweden

Introduction: To achieve quality care in the person's home implies that the way we perform the care has to be developed. In this development new technology services, including mobile distance-spanning technology and information- and communication technology, has to be used. The aim of this presentation is to explore some issues important to consider before implementation of e-health services in care of older persons at home.

Method: The presentation is based on studies where healthy older persons ($n=23$), older persons who had experience of being cared for with mobile distance-spanning technology ($n=9$) and general practitioners ($n=17$) were interviewed about their perceptions, views and experiences concerning the use of technology in care at home and

quality care. The interviews were analysed by qualitative content analysis.

Results: In the results from the different studies there were some common results. One was the importance of human meetings; another was that the person in need of care and the health professional need to know each other if virtual meetings should be possible. Other issues brought up in the different studies were trust, quality care, the need of combining home care services with visits at health care centres and hospitals, different technical equipment are only useful in specific circumstances, and mobile distance-spanning technology should not be looked at separately but as one part of a complex chain of health care services where all parts of the chain are needed.

Conclusion: E-health including mobile distance-spanning technology and information- and communication technology is on its way to be accepted and used in home care for older persons. It is important that nurses as professionals actively take part in the development, designing and testing of the technical devices.

D13-345

Robotics for elderly care; a roadmap study for the European commission

Gelderblom Gert Jan, Cremers Ger
Zuyd University, Heerlen, the Netherlands

Introduction: To gain understanding in the potential of Robotics in Healthcare the European Commission issued a roadmap study. In this paper the results in the domains relevant for Elderly Care are addressed. The focus of the study is on solutions that (1) contribute to quality, safety and efficiency of care. (2) promote the shift to preventive and personalized care. (3) support the availability of long term care for people in need. Since the application of robotics in healthcare is not only an issue of technology but also heavily dependent on societal acceptance, attention was paid safety and reliability issues as well as regulations.

Methods and Materials: The methodology was a combination of desk research and expert consultation. During the project, over 50 experts were consulted. The study produced a State of the Art report, followed by roadmaps describing societal needs, technological development and robot systems to be developed with a time horizon of 2025.

Results: For elderly care, six robotic areas are of relevance. (1) Robotized patient monitoring, (2) Socially assistive robotics, (3) Robotized physical rehabilitation therapy, (4) Intelligent prosthetics, (5) ADL supporting robotics and (6) Care supporting robotics (nursing care and paramedical activities).

Conclusions: All stakeholders consider the developments as very interesting for the future, but very few of them show an urgent drive to adopt these new applications now. For future application suppliers play a supporting role, but patient involvement in research and development is small. Government is not a key player, but governmental funding for related R&D is crucial. This field is still in its infancy, the first products are commercialised. There is a market, just entering its growth phase. With time important products will find their way into regular elderly care. Some ideas will not even be realised within the study's time horizon of 2025.

D14-225

Life orientation among older people in Finland and Sweden

Fagerström Lisbeth
Buskerud University College/University of Skövde, Drammen, Norway

Introduction: The European Union funded an interdisciplinary research project named the Gerontological Regional Database and

Resource Centre (GERDA) from 2005 until mid-2007. The aim was to study how medical, social, and economic resources affect older people's ability to maintain a good quality of life. The aim of a partial study was to discover the experience of life orientation of 65- and 75-year-olds in relation to background factors as gender, language group and living conditions.

Material and Methods: The study settings were regions of Ostrobothnia in Finland, with a bilingual population (52% Swedish; 48% Finnish) and Västerbotten in Sweden, where the inhabitants primarily speak Swedish. The actual study was a population based cross-sectional survey and the material consisted of in total 3370 questionnaires. The Life Orientation Scale (LOS) is one instrument used to measure people's personal values and/or positive life orientation.

Results: The overall conclusion is that older people aged 65 and 75 possess a positive life orientation. Approximately 80% expressed a high degree of positive life orientation. In the study, respondents clearly expressed zest for life (93.5%), overall satisfaction with their lives (88.4%), and feelings of being needed (83.7%). Lower scores were given for questions regarding feeling depression/sad and loneliness; 43.4% reported that they were sometimes depressed/sad and about one fourth (26.3%) occasionally suffered from loneliness. Approximately half (51.9%) had plans for the future.

Conclusions: Positive life orientation is an important inner health resource among older people. According to the actual framework and the results of the study, health promotion for older people should focus on supporting the meaningfulness in life and creating the possibilities for older persons to keep up important and close relationships and to support the experience of being needed.

D15-426

Healthy ageing in all policies

Voutilainen Päivi

Ministry of Social Affairs and Health, Helsinki, Finland

Introduction: In order to reach the goal of healthy ageing by increasing promotive and preventive actions in municipalities, the Ministry of Social Affairs and Health established a Working Group. The task of the multidisciplinary and multiactoral group of experts was to make suggestions on how to ensure all older Finns ways of getting advice and guidance at low-threshold advisory units. Suggestions on both the structure and the contents of advisory centers were outlined. The group also made suggestions to further the development and use of measures that enable early interventions.

The Working Group presented altogether 18 proposals. They concern the provision and funding of activities to promote older people's wellbeing and health, organising, targeting and content of the advice services and home visits, and developing the related skills and knowledge. Proposals are also put forward for reinforcing the knowledge basis regarding the wellbeing and health of older people, and for monitoring and assessing the relevant activities.

It's emphasised that older people must have equal opportunities for participating in activities promoting wellbeing and health. It's proposed to take activities and services promoting the wellbeing and health of older people and the structures required for them into account in the legislative reforms regarding social and health care that are under way. An increase is proposed in the central government transfers to local government to enable the development of advice services. The advice services should remain free of charge.

According to the Working Group, advice services promoting wellbeing and health are easily available services in the local community. Those can be provided by telephone, in the form of web services, services provided at low-threshold units, ambulatory services, and by making use of technology. The advice services.

comprise information provision on wellbeing, health, services and social security, as well as individual and group-specific counselling and guidance.

D16-436

Safety visits to senior citizens in Kópavogur 2007

Kristinsdóttir Dagbjört

Slysavarnafélagið Landsbjörg, Reykjavík, Iceland

Introduction: The aim of the government policy in Iceland is to insure that more than 75% of people 80 years and older enjoy such good health that they are able to live in their homes with support. Our responsibility as a society is to join forces to face those tasks and increase the quality of life for senior citizens while enhancing their security at home.

Method: The town of Kópavogur offered all senior citizens of 75 years and older a safety inspection of their homes. The visits were carried out from early March until November, 2007. Visits involved checking general safety issues, such as smoke detectors, fire extinguishers, fire blankets, handles in showers and bath tubs, non-slip mats in bath tubs and showers, night lights and stairs. Upon finding security issues that could be corrected in the home, ICE SAR representatives offered fire extinguishers, smoke detectors, handles and other items for sale at cost. SAR representatives installed the equipment and also changed batteries in the smoke detectors for free. People were also given brochures about what the community has to offer senior citizens. One brochure was about Life Line Medical Alerts that Securitas offers, and another brochure was about safety in homes from ICE SAR.

Conclusions: About 1600 people 75 years and older live in Kópavogur, in just over 1300 homes. 886 homes accepted an inspection (66%). Falling on stairs often occurs because people think they are already at the bottom or don't see the last step. Results show that in 19% of the homes, the lowest step was hard to see.

Many improved their safety by buying a fire blanket, which was the most commonly sold item in this project. In 30% of the homes there was no fire extinguisher or the people didn't know how to use it.

D17-36

The implementation of evidence-based nutrition guidelines in an acute geriatric setting

Daem M¹, Vanderwee K¹, Verhaeghe S¹, Courtens A², Durme T van³, Bocquaert I¹, Gobert M³, Defloor T¹

¹Universiteit Gent, Gent, Belgium

²AZ Groeninge, Kortrijk, Belgium

³Université Catholique de Louvain, Brussel, Belgium

Introduction: Malnutrition is a frequently occurring health-problem in elderly patients and has a number of consequences for both the patient and the hospitals, hence the significant need to track and treat malnutrition adequately. The aim of this study was to optimize nutritional care in acute geriatric settings. This was realized through an improved prospecting, the identification of malnourished patients and by conducting an adequate nutritional policy.

Methods and Materials: A practice oriented research was conducted throughout 6 months on eight different geriatric wards in 2008. Malnutrition was traced by means of the Mini Nutritional Assessment. The attitude of the nurse staff was measured by means the Nutritional Nursing Care scale (SANN). Finally general patient characteristics were collected using a questionnaire.

Results: The study included 634 geriatric patients. One out of three were undernourished on admission. The prevalence increased with the age of the patient and the presence of underlying diseases, e.g. cancer, dementia or a cerebro-vascular accident. The nutritional status of each geriatric patient was assessed and those who were malnourished (or had an increased risk) received a multidisciplinary treatment approach. Follow up took place by observing nutrition intake and weight evolution. A raised awareness was realized among the nursing staff by education. Despite the positive behaviour change, the attitude of the nurses did not show the expected alter-

ation. A neutral attitude was found at the end of the study in the majority of the nursing staff.

Conclusion: The practice oriented research allowed to implement evidence-based guidelines successfully. Success could be explained by the aim to fit the organization structure and the constructive dialogue with the different stakeholders. Feasible, individualized strategies were adapted to the ward and acquired by the nursing staff. This offered an optimal guaranty toward permanent quality enhancement.

D18-347

Empowerment by the written patient instructions at the emergency policlinic

Salminen-Tuomaala Mari¹, Leikkola Päivi², Kurikka Sirpa², Vanninen Johanna², Paavilainen Eija³

¹Seinäjäki University of Applied Sciences, Seinäjäki, Finland

²Seinäjäki Central Hospital, Seinäjäki, Finland

³University of Tampere, Tampere, Finland

Introduction: Empowerment and locus of control are important for older patients when they face an acute illness. An acute situation may cause insecurity for them. In order to manage the situation and cope with their self care at home they need information about the disease, medication and how to take care of themselves at home. Empowerment can be viewed as a social process of recognizing, promoting and enhancing patients' abilities to solve their problems and mobilize resources in order to feel control of their own lives. The purpose of the study is to describe the experiences of older patients about written patient instructions given to them at the emergency policlinic of one Finnish Central Hospital.

Methods and Materials: The data were collected with a questionnaire in the autumn of year 2008 and the spring of year 2009. The response rate was 77% ($n=77$). The data were analyzed using the SPSS for Windows 15- program. The participants included 55% women and 45% men.

Results: Older patients consider written instructions as essential from the perspective of coping with the situation at home. It is important that they can read the written instructions again. There might be some misunderstandings due to their memory problems if they had to manage the situation only by oral counseling. However, it's important for the nurse to go over the patient instructions with the older patient before they are discharged.

Conclusions: The written patient instructions add safety and continuity in older patients' follow-up treatment after an acute disease at home. They enhance coping with the situation and becoming empowered and reduce possibilities of misunderstandings. The older patients can also share the information of the written instructions with their family members. It enhances family members to participate in the patient's care at home.

D19-378

Pain, anxiety, and agitation in critically ill older patients on the intensive care unit

Jeitziner MM¹, Hantikainen V^{2,3}, Hamers JPH³

¹Bern University Hospital, Bern, Switzerland

²University of St. Gallen, St. Gallen, Switzerland

³University of Maastricht, Maastricht, the Netherlands

Introduction: Because the symptoms manifest themselves quite similarly, it is difficult to determine whether a patient is experiencing pain, anxiety and/or agitation. Therefore, this study has two aims: (1) the identification of pain, anxiety and agitation in elderly critically ill patients on the ICU and (2) the correlation between pain, anxiety and agitation.

Methods/Materials: In a prospective study 52 elderly, mechanically ventilated patients over 65 years old were observed during pain- and anxiety-producing procedures at different time intervals.

This study was performed in an interdisciplinary 30 bed intensive care unit at a Swiss university hospital. The severity of illness was measured using the Acute Physiology and Chronic Health Evaluation and the Simplified Acute Physiology Score. To assess the sedation and agitation level, the Richmond Agitation Sedation Scale (RASS) was used. The data collection was performed throughout the patients' ICU stay.

Results: The relationship between the severity of illness and their pain level showed a significant correlation. The sedation level of the patient showed a RASS score of -2. The majority of the patients were lightly sedated, although the results show a broad finding between very agitated and deep sedation. The pain intensity was on the average 5-55. An anxiety score of 3-4 was documented. A middle high correlation was shown between pain and anxiety. Intratracheal suctioning and patient positioning showed a higher pain level and also a higher anxiety level. The level of agitation correlated to the level of anxiety.

Conclusion: For elderly critically ill patients, being on the ICU is associated with experiences of pain, anxiety and agitation. Both pain and anxiety are perceived from the same discomforting situations. This reflects their similar clinical presentation. The distinction and relationship between pain, anxiety and agitation prove to be a great challenge. Further studies are needed to differentiate these significant patient problems.

D20-214

Socio-demographic factors related care dependency among older Egyptians

Boggatz Thomas¹, Farid Tamer², Mohammedin Ahmed², Lohrmann Christa³, Dijkstra Ate⁴, Dassen Theo⁵

¹Essen, Germany

²Ain Shams University Hospital, Cairo, Egypt

³Medical University of Graz, Graz, Austria

⁴University of Groningen, Groningen, the Netherlands

⁵Charité-Universitätsmedizin Berlin, Berlin, Germany

Aims: The aim of this study was to determine the relation of socio-demographic factors to functional limitations and care dependency among older care recipients and non-care recipients in Egypt.

Background: Population is aging in Egypt and age related functional limitations are increasing. Age and gender influence this phenomenon but its relation to socio-economic status has not yet been supported for Egypt. Functional limitations are an antecedent to care dependency which also may be associated with these socio-demographic factors.

Method: A cross-sectional study with a two-group comparative design was conducted in Greater Cairo. The sample was composed of 267 non care recipients and 344 care recipients. Path analysis was used to determine the relation between the investigated variables. Age, gender, and the acceptance of care were covariates in the multiple regressions. Analyses were conducted separately for care recipients and non care recipients.

Results: Among non care recipients, lower socio-economic status was related to more functional limitations and a higher care dependency. Among care recipients this relation was not found.

Discussion: In contrast to non care recipients, the majority of care recipients belonged to the upper strata of the Egyptian society. For this reason, different results with regard to socio-economic status were observed.

Conclusion: Socio-economic status is related to functional limitations and care dependency among older Egyptians who do not receive care. Findings among care recipients should not be generalized to all older persons.

D21-276

Spouse caregivers face complex position of health deficits at the early stage of caregiving

Välimäki T, Vehviläinen-Julkunen K, Pietilä A-M, Pirttilä T
University of Eastern Finland, Kuopio, Finland

Introduction: Alzheimer's disease (AD) is progressive degenerative illness that poses dynamic caring demands for family caregiver. It is important to examine factors that might contribute successful home care of persons with Alzheimer's disease. Our objective was to explain the factors which are related to caregiver's quality of life, subjective health and depressive symptoms at the early phase of home care.

Methods and Materials: This study is a part of ongoing intervention study ALSOVA in Finland. The follow-up study includes 170 recently diagnosed AD patient-spouse caregiver pairs which are randomized one of two groups: (1) Intervention group will get intensive psycho educational courses during first two years after diagnosis + traditional care, and (2) traditional care.

Results: The spouse caregivers' mean age was 71.6. The mean time of cohabitation was 44.0 years (range 0–61). Persons with AD mean age was 74.2 years and their AD was in the mild or moderate phase. The mean CDR sum of boxes was 4.0 and the mean MMSE was 21.7 ± 3.9 . More than one of three (37.6%) of spousal caregivers could be considered as depressed ($BDI > 12$) and one of three (35.5%) of them received no medication for depression. The severity of

depressive symptoms correlated with distress, total amount of medication and low income. Female caregivers reported more depressive symptoms and distress than male caregivers. Female caregivers also had difficulties with sleeping. Caregivers' HRQoL was high 0.8714. However the main predictors for high HRQoL were female gender, low distress and lack of depressive symptoms.

Conclusion: Spouse caregivers reactions to novel phase of life with loved one's progressive disease are individualized. The health care systems should recognize the variations among caregivers and the attention should be directed to recognize the vulnerable group of caregivers.

In an ongoing project, this Dutch countrywide prevalence measurement is now disseminated throughout Europe, starting with the German speaking countries. After a pilot study in 2008 the first measurements were carried out in Germany, Austria and Switzerland, using the same methodology and instruments. It appeared that if well prepared and introduced, a large prevalence study can be performed successfully internationally, in different countries at the same time.

Moreover, this annual prevalence measurement of care problems has increased the awareness of basic care problems in nursing homes.

A couple of studies related to this international project will be presented during this symposium.

Parallel Session E

E1-S15 Symposium

International approaches to reduce the usage of physical restraints in nursing homes

Bleijlevens Michel, Hamers JPH Jan

Maastricht University/School for Public Health and Primary Care, Caphri, Maastricht, the Netherlands

The use of physical restraints is still common practice in the care for the elderly in various settings in Europe, Asia and the USA. Physical restraints can be defined as any limitation in an individual's freedom of movement by using measures or equipments such as belts, and chairs with a locked table. Prevalence estimates of restraint use range from 20% to more than 60% (including restrictive bedrails, belts, deep or overturned chairs, chairs with a table). In most cases physical restraints are used as safety measures, mainly for the prevention of falls. However, there is growing evidence that reducing the number of physical restraints does not lead to an increased number of falls or fall-related injuries. The use of restraints has negative physical, psychological and social consequences for nursing home residents. Therefore, effective restraint reduction approaches are urgently needed.

The current symposium focuses on the development, evaluation and dissemination of innovative approaches to reduce the usage of physical restraints in different countries. The first presenter addresses the effects of a Dutch programme aimed at reducing the use of belts in nursing homes. The second presenter focuses on the efficacy and safety of a complex intervention programme based on an evidence-based guidance developed to deliver restraint-free care in German nursing homes and to overcome practice variations. The third presenter addresses safety issues associated with the use of physical restraints in the elderly. Finally, the last presenter discusses contextual factors that have been employed in nursing homes in various countries that have effectively reduced restraint use. In conclusion, implications for practice regarding approaches to reduce restraint usage will be discussed.

Reducing the use of physical restraints in Dutch nursing homes: a pilot study

Gulpers Math¹, Bleijlevens Michel¹, Rossum Erik van¹, Capezuti Elizabeth², Hamers JPH Jan¹

¹*Maastricht University/School for Public Health and Primary Care, Caphri, Maastricht, the Netherlands*

²*New York University College of nursing, NY, USA*

Introduction: Several attempts have been made to reduce the use of physical restraints. Most studies used educational approaches and introduced a nurse specialist as a consultant. The success rate of these interventions has been inconsistent. Among restraints used in Dutch nursing homes, belts are the most restrictive measure. Therefore, we developed a multi-component intervention program, named EXBELT, which primarily focuses on belt use reduction. The EXBELT intervention includes four components: (1) promotion of institutional policy change that discourages belt restraint use, (2) education, (3) consultation by a nurse specialist, and (4) development and availability of alternative interventions.

Methods and Materials: EXBELT was piloted in one psychogeriatric ward (30 residents) with a high prevalence of belt use (40%). Data regarding the use of belts (primary outcome measure) and other physical restraints, number of falls, injuries, and alternative intervention were collected at baseline, and after one, three and 9 months follow-up.

Results: At baseline, 12 belts (in 30 residents) were used. After 1 month follow up, no belt was used, and after three and 9 months follow up 1 belt was used. This reduction in belt use did not result in either an increase in the number of falls and related injuries or the use of other restrictive measures. Belts were replaced with resident-centered interventions, such as balance training, lower beds, hip protectors, extra supervision and monitoring devices.

Conclusion: The results of this pilot study are very promising. A limitation is that this study has been conducted on only one ward. The recent expansion to other wards in the same nursing home has shown similar results. However, further testing of EXBELT is needed on wards in other nursing homes prior to widespread dissemination. We recently started a study investigating the effectiveness and feasibility of EXBELT on 26 wards in different regions in the Netherlands.

Evaluation of a guidance on the reduction of physical restraints in nursing homes: a cluster-RCT

Meyer Gabriele¹, Haut Antonie¹, Gerlach Anja², Köpke Sascha²

¹*University Witten/Herdecke, Witten, Germany*

²*University of Hamburg/Unit of Health Sciences and Education, Hamburg, Germany*

Introduction: An evidence-based guidance may be a powerful tool to deliver restraint-free care in German nursing homes and to overcome practice variations. We developed such a guidance and currently investigate the efficacy and safety of a complex intervention programme based on the guidance.

Methods and Materials: Cluster-randomized controlled trial with nursing homes randomized either to the intervention group or to the control group with standard information. The intervention comprises a structured information programme for nursing staff, information materials for legal guardians and residents' relatives and a 1-day training workshop for nominated nurses. A total of 36 nursing home clusters including approximately 3000 residents have been recruited. Each cluster had to fulfill the inclusion criteria of at least 20% prevalence of physical restraints at baseline. The primary endpoint has been defined as the number of residents with at least one physical restraint at 6 months. Secondary outcome measures are the number of falls and fall-related fractures.

Results: The intervention has been successfully implemented in all intervention clusters. None of the clusters has been dropped out so far. Data collection will be finished soon. The final data will be available for the symposium.

Conclusion: If successful, the intervention should be implemented throughout Germany. In case the intervention does not succeed, a 3-month pre-post-study with an optimized intervention programme within the control group will follow the randomized trial.

Safety problems associated with the use of physical restraints on the elderly

Fariña-López Emilio, Estévez-Guerra Gabriel

University of Las Palmas de Gran Canaria, Las Palmas De Gran Canaria, Spain

Introduction: Physical restraints are considered by many professionals as an appropriate measure to increase the safety of older people, as can be evidenced by its high prevalence rate. However, this procedure also generates complications related to prolonged immobility as

well as other important adverse effects. In this study, the circumstances surrounding the accidents of six elderly people, restrained with different devices, are analysed.

Methods and Materials: Accidents happened both in geriatric institutions and in the family home of the elderly. The information was collected through a semi-structured interview with the carers. Also an electronic search of databases was carried out to compare the results with the findings of other investigators.

Results: While they were on restraints, patients suffered diverse injuries and even death in three cases, side rails and lap belts being the mechanisms involved. The problems rose mainly when they were trapped by the device, which caused external compression on chest or upper abdomen, creating suffocation as well as other complications. Findings indicate that the accidents present a common pattern, and a combination of complex factors could increase the likelihood of occurrence. These would include, among others, the patient's inability to recognize risks, poor supervision or improper placement of the devices.

Conclusion: In order to improve security, family carers and professionals must be aware of the risks associated with the application of these devices. Previous findings have revealed that, in Spain, there is a positive attitude of restraining and limited knowledge of alternatives. Researchers recommend the implementation of training programmes to help reduce the use of restraints and to improve the quality of care. It's also suggested that precise protocols and specific laws should be drawn up in order to prevent arbitrary application.

Contextual interventions to reduce variation in physical restraint use

Capezuti Elizabeth, Boltz Marie

New York University College of Nursing, NY, USA

Introduction: Despite evidence documenting the negative sequelae of physically restraining nursing home residents, these devices continue

to be employed to promote 'safety'. More than 20 years of legislative and research interventions have resulted in reduced usage of physical restraint overall, however, there is also considerable variation in use across countries, regional differences within each country, and inter-facility differences across institutions within regions. Nursing homes that have successfully eliminated or at least significantly reduced restraint usage are most often reported to be not-for-profit and less likely to be part of a multi-facility corporation or urban. These institutional factors, along with staffing and financial resources, do not capture the philosophical and organizational factors that drive adoption of non-restraint approaches to care. Interventions that aim to change the knowledge, attitudes and beliefs of nursing staff toward restraint have not been consistently successful in reducing usage.

Methods and Materials: An integrative review of relevant biostatistics, medical and nursing literature, case exemplars, and policy papers that describe the influence of contextual factors on restraint use in European, American, and Asian nursing homes.

Results: Staff motivation to seek and consistently utilize non-restraint interventions for nursing home residents at risk for falls and related injuries require more than individual enthusiasm. Rather, it is the strategic context that fosters evidence-based innovation by motivated staff that is needed to effectively reduce both restraints and falls.

Conclusion: Contextual factors such as legislative/regulatory incentives to reduce restraints, consumer endorsement of non-restraint care practices, administrative support (resources, safety culture) to minimize restraint usage, and an organizational culture that encourages individualized care are the critical determinants for restraint elimination.

E2-S25 Symposium

Preservation of functioning in older people

Goal: Nursing knowledge and nursing tools for preservation of functioning in older people.

Overview: Functional decline in older people is one of the greatest threats for living independently because it can lead to functional limitations such as motor, cognitive and sensory limitations. In addition several risk factors for medication-related hospital admissions have been established. Knowledge of these risk factors may help to avoid potential preventable drug-related admissions.

A hospital admission in general is always a risky event for older patients. Nurses can play an important role in the care for older patients. Identification of patients at risk, assessment of geriatric problems, targeted interventions, discharge management and multi-disciplinary care are the ingredients to improve the care for older patients.

Older patients do have a higher risk on functional and/or cognitive decline due to occurrence of adverse events during the hospital admission like pressure ulcer, infection, falls, delirium and depression. This leads to a heavy burden to the patient and a steep increase in healthcare costs. Over 99% of the older cardiac surgery patients is elective. During the preadmittance time preventive nursing action can be taken.

Prevention decline in older cardiac surgical patients (PREDOS study)

Ettema Roelof

Hogeschool Utrecht, Utrecht, the Netherlands

Introduction: Over 99% of the older cardiac surgery patients is elective. During the preadmittance time preventive nursing action can be taken. The aim of the PREDOS study is to develop a prehospital admittance multicomponent nursing intervention.

Methods and Materials:

1 Identification of preadmittance patient characteristics which have a predictive value (risk factors) for the occurrence of adverse events during medium care stay and regular ward stay in older cardiac surgery patients.

2 Identification of patient characteristics which have a predictive value for the occurrence of adverse events during surgery and in the intensive care unit (ICU).

3 An inventory based on a systematic review of existing interventions for the prevention of pressure ulcers, infections, falls, delirium and depression in older cardiac surgery patients.

4 Practice analysis of patient needs and current practice features in a multicentre study by checking the needs in practice of older cardiac surgery patients and beliefs of nurses about them.

5 Development of the multicomponent preadmission nursing intervention.

6 A study of the feasibility of the multicomponent preadmission nursing intervention in practice.

Results: For the identification of risk factors for adverse events during medium care stay and regular ward stay, during 2009 data have been collected. The patient characteristics diabetes, malnutrition, low hemoglobin, kidney problems, 75 years and older, female gender and myocardial infarction are the main risk factors for the occurrence of adverse events during surgery and in the intensive care unit (ICU). This research was done on a large database of over 11 000 patients. An inventory based on a systematic review of existing interventions for the prevention of pressure ulcers, infections, falls, delirium and depression in older cardiac surgery patients.

Conclusion: Healthcare organizations are not always aware of the heterogeneity of the population. Healthcare systems in most countries are not equipped to handle large amounts of older cardiac surgery patients.

Prescription change intensity and hospitalization

Sino Carolien¹, Stuffken Rutger², Heerdink Eibert³, Souverein Patrick³, Schuurmans Marieke⁴, Egberts Toine³

¹*University of applied science Utrecht, Utrecht, the Netherlands*

²*Tergooi Hospitals, Hilversum/blariucm, the Netherlands*

³*Utrecht University, Utrecht, the Netherlands*

⁴*University Medical Center Utrecht, Utrecht, the Netherlands*

Introduction: Several risk factors for medication-related hospital admissions have been established. Knowledge of these risk factors may help to avoid potentially preventable drug-related admissions. Based on clinical practice, we examined the intensity of prescription changes as a risk factor for hospital admission. The objective is to assess the possible association between the intensity of prescription changes and hospital admission, and to compare the Prescription Change Intensity (PCI) to the Chronic Disease Score (CDS).

Methods and Materials: A retrospective, matched case-control study was conducted using data obtained from the PHARMO RLS database. Prescription changes were classified into mutually exclusive categories and assessed for hospitalized cases and non-hospitalized controls. Odds ratios between hospitalized and non-hospitalized patients were calculated for each PCI category and compared to the CDS score.

Results: The study population included 8681 cases and 8681 matched control patients. The odds ratio of hospital admission increased per Prescription Change Intensity (PCI) category. The odds ratio at 3 months before the index date increased per PCI category from PCI=1 OR 1.4 [95%CI 1.3–1.5] to PCI=2–3 OR 2.2 [95%CI 1.9–2.4] and to PCI≥4 OR 4.1 [95%CI 3.1–5.1]. A higher CDS score was also associated with an increased risk of hospital admission (CDS=1–2 OR 1.5 [95% CI 1.4–1.6], CDS=3–4 OR 1.7 [95%CI 1.6–1.9] and CDS≥5 OR 3.6 [95%CI 3.3–3.9]).

Conclusions: The intensity of prescription changes is associated with hospital admission and can be helpful in predicting hospital admission.

The best care for your older patients, how to make your hospital senior friendly?

Hoogerduijn Jita¹, Man Marjorie de², Barneveld Robert van², Weldam Saskia², Schuurmans Marieke²

¹*Hogeschool Utrecht, Utrecht, the Netherlands*

²*UMC Utrecht, Utrecht, the Netherlands*

Introduction: On the wards of the Division Heart and Lungs of the University Medical Centre Utrecht, nurses were concerned about the increasing length of stay of older frail patients. The nurses could not find a clear defined problem and solution and were interested in the possibilities of more targeted care for the older patients. The objective was to develop a geriatric assessment targeted towards interventions and discharge planning for older patients at risk for functional decline, in order to decrease length of stay and prevent functional decline in older patients.

Methods: A best practice project with Delphi rounds for nurses and experts was conducted from Nov 2006–Nov 2008. Target group and setting: patients aged 65 and older, admitted in the Division Heart and Lungs of the UMCU. Project development was realized by the UMCU in cooperation with the HU.

Results: Students of the Bachelor program (Nursing) developed: (1) A geriatric assessment, based on predictors found in the literature, the experiences of the nurses of the ward and the opinion of experts. Validated measurement instruments and some extra questions are included in the regular assessment (organized in health patterns of Gordon). (2) Targeted interventions, based on literature, the experiences in the hospital and opinion of experts were developed and convenient arranged in a 'decision outline'. (3) An improved discharge planning was presented, based on the experiences of nurses

and many other health care workers. Implementation: started in November 2008.

Conclusion: The project was inspiration for health care workers, the management of the hospital, students and researchers. Not only Bachelor students, also students of the Master programs were involved. The project speeded up the implementation of EPD. For education reasons a movie was made, and a program to test and increase the knowledge of the nurses. Nurses are much more aware of the problems of older patients.

Preservation of living independently in older people

Ouden Marjolein den¹, Arts Ilse², Schouw Yvonne van der¹, Schuurmans Marieke³

¹*Julius Center for Health Sciences and Primary Care, Utrecht, the Netherlands*

²*Hogeschool Utrecht, Utrecht, the Netherlands*

³*University Medical Center Utrecht, Utrecht, the Netherlands*

Introduction: Living independently is an important component of quality of life. Functional decline is one of the greatest threats for

living independent because it can lead to functional limitations such as motor, cognitive and sensory limitations. Eventually this can lead to limitations in (instrumental) activities of daily living, role and social functioning, so called disability.

Methods and Materials: In this literature review we will discuss the known etiological factors which determine disability in the older general population.

Results: At least half of end stage disability results from progressive functional decline. The other part is a result of acute clinical events. Disability is studied in a growing number of studies, however the pathway to disability is almost unknown due to the predictive and prognostic approach of most of these studies.

Conclusions: The lack of understanding of the physiology and etiology of functional decline leading to disability causes a problem in the development of effective preventive interventions. Preventive interventions could enable people, even in old age and with chronic conditions, to live independently the life they choose to live.

E3-S11 Symposium Care for older persons in a hospital

Erasmus MC, University Hospital Rotterdam, Rotterdam, the Netherlands

Goal: This symposium will give an insight in how to maintain and/or increase the quality of life of the elderly by:

- 1 An inter- and multidisciplinary network which aims on an integrated care and support structure focused on the elderly in the region to improve their ability to cope, take care of themselves and decreasing the burden of care and treatment.
- 2 Detecting risk factors for unnecessary functional decline in the elderly who are admitted into hospital, and to prevent further functional decline by interventions to promote a quick return to independent living.
- 3 Reducing the burden on the informal carer and to improve the quality of care.
- 4 A pro-active approach to screening at-risk individuals for vitamin D deficiency as this condition is still very prevalent.
- 5 Decrease of (avoidable) drug-related hospitalization.
- 6 The focus of nurses on as well physical interventions as psychosocial problems in hospital end of life care.

Co-operation in care and welfare

Smilde D, Zeegers M

Erasmus MC, University Hospital Rotterdam, Rotterdam, the Netherlands

The Erasmus MC has undertaken an initiative to set-up the Geriatric Network Rotterdam and Surroundings known as GENERO (its region includes the provinces of Zeeland and part of Noord-Brabant). This inter- and multidisciplinary network aims to contribute to improving the quality of care and welfare of the elderly in the region on an organisational and healthcare level. To achieve this, the network involves all relevant parties, including the elderly themselves involved in the care and welfare of the elderly. They will reinforce co-operation and dialogue within the region by means of among other things, formulating a shared schedule for the coming years, informative meetings and starting leading and monitoring projects that integrate and improve care and welfare. In the long term the aim is an integrated care and support structure focused on the elderly in the region to improve their ability to cope, to take care of themselves and decrease the burden of care and treatment.

Given the considerable involvement of nurses, carers and others in the care and welfare of the elderly, another goal will be to record their wishes and needs. Improving the care can only succeed if the care workers also contribute their ideas. This presentation will focus on the benefits of a geriatric network, the strength of which lies in the regional cooperation. GENERO now boasts over a hundred partners, among whom general practitioners, hospitals, care and nursing homes, home care services, health insurers, pharmacies, and municipalities, and the elderly themselves.

We will discuss the necessities for setting up such a network how to maintain and activate it and the benefits of participating in a regional network.

The Prevention and Reactivation Care Programme: the prevention of functional decline after hospital stay

De Vreede PL, Bakker TJEM

¹Erasmus MC, University Medical Center, Rotterdam, the Netherlands Department of Public Health, Rotterdam, the Netherlands

²Argos Zorggroep, Schiedam, the Netherlands

Introduction: The Prevention and Reactivation Care Programme (ZPH) is developed to detect risk factors for unnecessary functional

decline in elderly who are admitted to hospital, and to prevent further functional decline by interventions to promote a quick return to independent living. The ZPH also aims to reduce the burden on the informal carer and to improve the quality of care.

Methods and Materials: The ZPH combines effective strategies and methods for reactivation in such a way that they better fit the demands of the elderly. The programme uses multidisciplinary and goal-oriented approach from admission to the hospital up to the follow-up care at home. Follow-up care involves a case manager who coordinates the multidisciplinary treatment plan for primary care (in cooperation with GPs and district nurses). For some of the more vulnerable elderly intensive reactivation treatment will be given in the Prevention and Reactivation Centre (CPH).

This study evaluates the process and (cost) effectiveness of the ZPH and involves three types of hospitals: (1) a hospital without clinical geriatrics, without hospital replacement care, and no follow-up in primary care (control site); (2) a hospital with coordinated discharge, with hospital replacement care, and no follow-up in primary care (control site); (3) a hospital with clinical geriatrics, CPH and ZPH with follow-up in primary care (intervention hospital).

Results and Conclusion: The first results of the study are expected in July 2011. We expect: (1) Improvements in process quality of care for elderly during and after hospital admittance; (2) Sensitive and specific triage-criteria to detect elderly with an increased risk for loss of functional capacity during hospital stay; (3) Improved functioning and quality of life of elderly 12 months after hospital admission; (4) Lower burden on informal carers; (5) Reduced readmissions or admissions to nursing homes after hospital admission; (6) Improved cost-effectiveness of care for vulnerable elderly during and after hospital admission.

The multiple effects of vitamin D in old age

Oudshoorn C, Van der Cammen T

¹Erasmus MC, University Medical Center, Rotterdam, the Netherlands

²Department of Geriatric Medicine, Erasmus University Medical Center, Rotterdam, the Netherlands

The hormone vitamin D is essential for the development of bone and muscle tissue. There are many reasons why older persons are prone to develop vitamin D deficiency, such as a decreased nutritional intake and a reduced sun exposure. Vitamin D deficiency is associated with osteoporosis and sarcopenia. Two recent meta-analyses proved that vitamin D supplementation can be effective in the prevention of falls and fractures. The positive effects of vitamin D supplementation on falls and fracture reduction are presumably caused by effects of vitamin D on muscles. Increased muscle strength may decrease falls and fractures. Results of intervention studies on muscle strength and mobility are inconsistent. This may be caused by study size, choice of intervention population and dose of vitamin D used. Most studies used doses of 400–800 International Units (I.U.). Recent studies suggest that supplementation with vitamin D in doses of up to 2000 I.U. may be beneficial for muscle strength and muscle function.

Besides effects of vitamin D on bone and muscle tissue, neuroprotective effects have been reported, as well as effects on immuno-modulating functions, cardiovascular health and cancer.

In the treatment of older patients, a pro-active approach to screening at-risk individuals for vitamin D deficiency is needed, as this condition is still very prevalent.

Adverse drug events as cause of hospitalisation

Van den Bemt PMLA

Erasmus MC, University Medical Center Rotterdam, Rotterdam, the Netherlands

Introduction: Medication related hospitalizations have been the subject of many studies, which were often limited to one hospital.

Methods: A prospective, multicenter study was set up to determine the frequency of medication-related hospital admissions. Within this study a case-control design was used to determine risk factors for potentially preventable admissions. All acute admissions in 21 hospitals were assessed during 40 days. Controls were patients admitted for elective surgery.

Results: Thirteen thousand acute admissions were screened, of which 714 (5.6%) were medication related. 46% of these admissions were potentially preventable, resulting in 332 case patients matched with 332 controls. Main risk factors for preventable admissions were: impaired cognition [OR 11.9 (95% CI 3.9–36.3)], 4 or more co-morbidities [OR 8.1 (95% CI 3.1–21.7)], dependent living situation [OR 3.0 (95% CI 1.4–6.5)], impaired renal function [OR 2.6 (95% CI 1.6–4.2)], non-compliance [OR 2.3 (95% CI 1.4–3.8)] and polypharmacy [OR 2.7 (95% CI 1.6–4.4)]. Elderly patients (over 65 years of age) were almost twice as likely to be admitted for a medication related cause than younger patients and the admissions were more frequently potentially preventable.

Conclusion: Adverse drug events are an important cause of hospitalisations, especially in elderly patients. The identified risk factors provide a starting point to prevent medication related hospital admissions.

Nursing care in the last days as reported by hospital nurses

Witkamp E¹, Van Zuylen L¹, Van der Heide A²

¹*Erasmus MC, University Medical Center Rotterdam, the Netherlands*

²*Department of Public Health, Medical Center, Erasmus MC University Medical Center Rotterdam, the Netherlands*

Introduction: In the Netherlands one third of all deaths ($n=45\,000$ per year) occur in hospitals. However, little is known about the

quality of end-of-life-care in these hospitals. Our aim was to investigate the characteristics of dying in the hospital, as reported by nurses.

Methods: In our university hospital, 17 general wards and a unit for acute palliative care participated in this study. For every deceased patient older than 18 years and admitted at least 6 h in advance of dying, we collected some general data and nurses were asked to fill in a questionnaire. They reported on symptoms, medical treatment and nursing care, and general characteristics of patients' last days of life in hospital.

Results: One hundred and sixty-seven adults died on the participating wards. The mean age was 67 years, 43% were female. Nurses completed questionnaires about 102 patients. They had foreseen the patients' death more than 24 h in advance in 52% and <6 h in 20%. The approaching death had been discussed with the patients in 36%. Nurses estimated that 57% of the patients were prepared to die and that 62% were able to say goodbye to their loved ones. The most frequently applied interventions in the last 24 h were body care, urinary catheter care, administration of intravenous fluids and measurement of vital functions. The possibility for patients to see their loved ones 24 h a day increased from 55% at day 3–81% at day 1 before the patients' death ($P<0.000$).

Conclusion: The approach of death is discussed with a minority of patients. Nurses tend to focus on physical care interventions and have limited insight in psychosocial problems. The number of nursing interventions decreases during the last days of life. Most dying patients could be together with their family during the last 24 h of their life.

E4-L25

Retaining older nurses in the workforce: a wise decisionTer Maten Ada¹, Maas Lillian²¹*Rho Chi Chapter of STTI, Rotterdam, the Netherlands*²*University of Applied Sciences, Rotterdam, the Netherlands*

Introduction: The nursing workforce is aging along with the rest of the European population. Subsequently, older nurses experiencing some aging effects themselves are caring for more elderly patients needing more assistance with illness management and wellness maintenance. To meet the growing demand for care in this era of nursing shortage, predicted to last beyond 2020, these nurses are needed to remain in the workforce longer. It is imperative that older nurses be retained, not only for their experience and expertise, but also to prevent worsening of an already critical nursing shortage. Specific recommendations have to be made to assist nurse managers in retaining the older RN. It requires a multifaceted approach and subsequent strategies to create a work environment conducive to retaining the mature, experienced nurse. In this workshop, we plan to explore factors which contribute to the retention of nursing staff, especially older nurses who contribute a wealth of knowledge and experience to their employing organization. In addition, strategies will be explored to keep older, experience nurses active in the workforce.

Methods: PowerPoint presentation: Results of literature review.

Roundtable Discussion: What innovative strategies can help keep aging nurses in the workforce?

Results and Conclusion: Retention incentives need to be implemented to assist aging, experienced nurses to delay retirement or prevent them from leaving the profession early, as well as encouraging younger and future nurses to work longer. Transforming the work environment is essential to help limiting the nursing shortage and ultimately act as a mentor, an advisor and role model to support the next generation or nurses.

E5-452

'Failed expectations': understanding sudden informal caregivers' transition experiences

Pereira Helder

University of the Azores, Ponta Delgada, Portugal

Introduction: There is an increasing awareness in nursing research and clinical practice that special attention must be paid to individual meaning of caregivers' experiences in their process of role redefinition as caregivers (Ayres, 2000; Pereira, 2006).

However, concerning sudden informal caregivers that didn't anticipate that role, knowledge is still scarce. The aim of this paper is to address and explore 'Failed Expectations' as one of major themes that describe the experience during the transition towards the role of informal caregiver after an unexpected event. These are partial findings from a study aiming to illuminate the meaning that caregivers attribute to their transition process and how they restructure their world after an unexpected and unwanted event.

Methods and Materials: This study takes a phenomenological approach drawing from Van Manen's (1990) and Munhall's (2007) methodological framework. Unstructured interviews were repeatedly used for collecting data from adult informal caregivers that had to embrace that responsibility unexpectedly (N=14).

Results: The caregivers experience after an unexpected event is characterized by an ongoing movement of 'zooming in/zooming out' on the caregiving situation and 'Failed expectations' emerged as major theme in this process. 'Failed expectations' can be described (1) as perceptual disparity between: 'what I need as a caregiver' and 'what others feel/think I need'; (2) as an inner feeling of lack of appreciation/recognition for the work done as a caregiver.

Conclusion: Achieving mastery in caregiving, for new sudden caregivers, seems to result essentially from a redefinition of their personal

life that integrates caregiving in daily lives. To facilitate a well-succeeded transition, which is in the scope of nurses' professional role, is crucial to understand, assess and monitoring how caregivers are managing their expectations related to needs of support and their expectations about themselves as caregivers.

E6-339

Quality time: professional care for informal carers of community-living older persons with dementia

Leven Netta van 't, Lange Jacomine de

University of Applied Sciences, Rotterdam, the Netherlands

Introduction: Both persons with dementia and their informal carers need professional care. Informal carers, however, are not likely to seek support from professional caregivers. In addition, interventions for informal carers of persons with dementia are less effective than interventions for carers of elderly with other problems. This study investigates the experiences of informal caregivers with caring and their needs for professional support.

Method: For this qualitative study, semi-structured interviews have been conducted with 14 informal caregivers (ten spouses, three daughters, one grandchild) of community living older people with dementia. The constant comparative method was used for the data analysis.

Results: Most of the caregivers said to be satisfied with health care-services. Some of them would like more care. All respondents, however, expressed feelings of helplessness and exhaustion, and having to manage on their own. Three major themes regarding the needs for professional support were found: (1) expert and person-specific support, (2) support to maintain attachment in a changing relationship with the person with dementia, (3) pro-active support.

Looking back on the years of caregiving, all informal carers stated that they would do it again if necessary. But they also perceive an increasing burden of care that puts them at risk of burn out. Informal caregivers are reluctant to ask for help, and they are not familiar with existing support services for persons with dementia and their caregivers. More pro-active support from professional caregivers is needed.

Conclusion, discussion: Informal caregivers are in a transition from being a partner or child to being a caregiver and a coordinator. They need pro-active, dementia-oriented and person-oriented health care services provided by competent professionals. Interventions for informal caregivers and people with dementia that meet their needs of maintaining feelings of being together have to be developed and implemented.

E7-446

Caregiving together: synergy on the journey to a good death

Golembeski Susan

Baptist Health South Florida, Miami, FL, USA

Introduction: The Palliative Care Steering Council of Baptist Health South Florida identified a need to examine end-of-life care in the BHSF hospitals for the culturally diverse community. A qualitative research study was conducted and the emergent theory used to inform curriculum development for an evidence-based Palliative Care Education Program.

Method: Grounded theory methodology was utilized. The researcher sought to understand the experience of culturally diverse patients, families and healthcare providers as they prepare for death in the hospital setting. A purposive sample consisted of 52 racially and ethnically diverse people. Twenty-six participants were healthcare providers from BHSF. Eight different healthcare roles were represented. Twenty-six participants were community members, defined

for this study as family members who had a loved one die at a BHSF hospital. Over 20 ethnicities were represented.

Findings from this study offer insight into the complex process of caring for someone who is dying in a hospital setting. The emergent core category, Caregiving Together explains the essence of palliative/end-of-life care as something we do with patients and their families, not something we provide to them. Data did not emerge specific to culture, although, differences between people surfaced throughout. The conceptualization of collaboration within an expanded 'care team' including family/informal caregivers is explicit. These collaborative relationships at the point of care facilitate synergy for a harmonious, appropriate plan of care.

The grounded theory, Caregiving Together, is thread through a blended learning Palliative Care Education Program at BHSF. Over 1000 healthcare providers have successfully completed the program. Program evaluation began in January 2010 and findings will be shared.

In an effort to prepare for the global concern- 'a growing population of older persons in the future', this researcher will share theoretical evidence with regards to a model of care incorporating family/informal caregivers in the hospital setting for palliative/end-of-life care.

E8-407

Discursive constructions of elder abuse: Irish community nurses' accounts

Phelan Amanda

University College Dublin, Dublin 4, Ireland

Introduction: Healthcare professionals should be vigilant to the possibility of abuse, in particular community nurses, who represent one of the most common healthcare visitors to the home. However, Manthorpe et al. (2007) observe that community nurses represent a poor reporting source. Consequently, this study focuses on explicating discourses related to community nursing and elder abuse in Ireland. The study reveals the discourses of community nurses and investigates how elder abuse is constructed and the consequences of such a construction.

Methods and Materials: The data for this research is drawn from 18 community nurses through in-depth semi-structured interviews. Using Foucauldian discourse analysis, the participants' narratives were deconstructed and examined for the complex causal antecedents of their social production of elder abuse. In contrast, the second analytical approach, discursive psychology, investigates the micro-perspective of how versions of social reality were produced by the participants.

Results: Findings reveal particular insights of the participants' practice related to elder abuse. When accounting for community practice in the context of elder abuse, the participants established particular subject positions for themselves, older people, the perpetrator and the healthcare system. Participants spoke of dilemmas such as elder abuse being beyond their scope of disciplinary power yet paradoxically all participants could articulate cases in their practice and commonly stated that this was a familiar issue in community nursing work. Specific mechanisms were employed in the context of the participants' interviews which indexically managed these paradoxical dilemmas.

Conclusions: The discursive practice of Irish community nurses demonstrate an uncertainty regarding the topic and practice related to elder abuse. Consequently, knowledge is scanty and cases are managed cautiously and without confidence. The findings indicate that responses are imperative in terms of education, policy and practice so that older people experiencing elder abuse in the community have a responsive and effective input from community nursing services.

E9-90

Views of Turkish and Moroccan immigrants on 'good care' in the palliative phase of cancer

Graaff Fuusje de¹, Francke Anneke², Muijsenbergh Maria van den³, Geest Sjaak van der⁴

¹*MUTANT and University of Amsterdam, Den Haag, the Netherlands*

²*NIVEL and VUmc/EMGO, Utrecht and Amsterdam, the Netherlands*

³*Radboud University Nijmegen and PHAROS, Nijmegen and Utrecht, the Netherlands*

⁴*University of Amsterdam, Amsterdam, the Netherlands*

Introduction: Palliative cancer care aims to improve quality of life and ultimately quality of dying, while prolonging life is not an objective anymore when death nears. The question is, however, whether these perspectives on palliative care tally with the perspectives of immigrant families with a Turkish or Moroccan background.

Methods and Materials: A qualitative design was used as we were looking for the personal views of 'very ill' cancer patients with a Turkish or Moroccan background, their family members and their Dutch care providers. We interviewed 83 people, involved in 33 cases, to obtain information about their views, values and norms on 'good care'.

Results: The main concerns about 'good care' expressed by Turkish and Moroccan families were: maximum treatment and curative care until the end of their lives, never having hope taken away, devoted care by their families, avoiding shameful situations, dying with a clear mind and being buried in their own country. Their views conflict, to some extent, with the dominant principles in palliative care, for example, the emphasis on quality of life and advanced care planning, which includes openly discussing diagnosis and prognosis with the patient.

Conclusion: Patients and families with a Turkish or Moroccan background often have different ideas about 'good care' from their Dutch care providers. As many of them are aiming at cure until the end of life, they find 'good palliative care' a contradiction in terms.

E10-312

Nurses' experience of palliative care in nursing homes

Beck Ingela¹, Törnquist Agneta², Broström Linus², Edberg Anna-Karin²

¹*Lund University, Swedish Institute for Health Sciences, Lund, Sweden*

²*The Swedish Institute for Health Sciences, Lund, Sweden*

Introduction: Palliative care to older people is mainly provided at home or in nursing homes where the staff have a rather low educational level. Previous research also show that staff needs continuous support and education in their work in order to provide high quality care to older people in their last period of life. In order to be able to tailor interventions to meet the needs from the staff, we need knowledge about how they experience providing palliative care to older people. The aim of this study was to illuminate nurse assistants' experience of providing palliative care to older people.

Methods and Materials: To reach an understanding of the experiences a qualitative method was used. The study was based on six focus group interviews with in all 25 nurse assistants, 22 women and three men, working in nursing homes in a municipality in Southern Sweden.

Results: Nurses wanted, but had difficulties, to focus on 'being' with the older person, as their daily work mainly was focused on aspects of 'doing' which also was reinforced by the management as well as the patients' relatives. The nurse assistants further experienced that it was difficult to encounter older peoples' thoughts of death and dying and that confirmation and support from other people was an important prerequisite for the provision of care. When

talking about dying in old age, the nurses mainly described death in old age as a relief.

Conclusion: The design of supportive means to nurse assistants in municipal care should mainly focus on the relationship aspect of caring for older people at the end of life. It further seems important to involve the management when designing supportive means as they are the ones who can support a change of culture and highlight the importance of the relationship level of care provision. The results will in turn form the base for an intervention study focusing on support to nurse assistants.

E11-331

Professional homecare communication and assessment of problems in patients at the end-of-life

Korte-Verhoef Ria de¹, Teunissen Saskia²

¹Baambrugge, the Netherlands

²Utrecht Palliation Centre, Utrecht, the Netherlands

Introduction: As most patients prefer to die at home, it is important to establish how professional homecare organizations assess and communicate on physical, psychosocial and spiritual problems early in the course of life-threatening illnesses. Aims: to establish (1) the types of information brochures used by homecare organizations; (2) which nursing assessment tools for physical, psychosocial and spiritual problems are used and whether they are registered in the patient's file; and (3) whether these tools are used early in the course of a life-threatening illness.

Method: In the fourth quarter of 2008, a nationwide cross-sectional survey was conducted among 139 key persons (nurses), each representing a professional homecare organization in the Netherlands. The questionnaire was designed after open interviews with eleven key persons working in or with homecare organizations.

Results: The response rate was 55% ($n=77$). Three types of information brochures for patients and their families are used: (1) patient information on pain (53%), (2) information to support patients' families (61%); and (3) psychosocial information for patients with advanced cancer (65%). Although the majority of respondents (66%) use an assessment tool for pain, only 39% record the results in the patient's file. The assessment tool for delirium is often deployed (43%). Assessment tools for other symptoms or for caregiver strain are virtually not used. The results of assessment tools other than those for pain are seldom recorded in the patient's file. Fewer than 10% of the organizations use assessment tools at fixed times.

Conclusion: Two thirds of professional homecare organizations use brochures on pain, psychosocial information and family support to communicate with patients and their families. Brochures on other physical problems or on spiritual problems are seldom available. Systematic early assessment of pain and other problems is hardly practised in homecare organizations. Thus, the prevention and relief of suffering for patients with life-threatening illnesses is not as impeccable as it should be in professional homecare organizations.

E12-367

Pain control at end of life – a comparative study of cancer patients and chronically ill in hospital

Steindal Simen, Sørbye Liv W

Diakonhjemmet University College, Oslo, Norway

Introduction: Dying patients experience uncomfortable symptoms in the final phase of life in hospitals. Most studies have focused on cancer patients and pain is reported as a frequent symptom. Even though some studies indicate that chronically ill patients may experience symptoms that are at least as severe as those of cancer patients, research has given less attention to dying elderly patients with

chronic illness. Most studies on symptom prevalence at the end of life have been conducted in a nursing home or hospice setting.

The purpose of this study was to compare the documented symptom burden in the medical records for patients who died of cancer and other causes in a hospital.

Method and Material: The study was conducted at a Norwegian hospital between 2007 and 2009. Patients were included after their death ($N=220$, 110 patients who died of cancer and 110 patients who died of other causes).

Results: Pain was reported as severe or excruciating for 76% of the cancer patients and 42% for non cancer patients ($P=0.001$). Pain was adequately controlled for 64 % of the cancer patients and for 49 % of the non cancer patients. A small number, approximately 10% from both groups, did not receive adequate pain control.

Conclusion: The preliminary results suggest that pain is a frequent symptom in the last days of life for both cancer and non cancer patients, though this study found that cancer patients experience significantly more frequent pain and stronger intensity of pain than non cancer patients.

E13-249

Pressure ulcers: development and psychometric validation of a knowledge assessment instrument

Beeckman Dimitri, Defloor Tom

Ghent University, Ghent, Belgium

Introduction: A lack of knowledge in certain areas of pressure ulcer care may result in inadequate prevention. A reliable and valid pressure ulcer knowledge questionnaire is important to assess pressure ulcer knowledge. The aim of this study was to develop a reliable and valid pressure ulcer knowledge questionnaire. A prospective psychometric instrument validation study was executed. Validity (content and face validity) and reliability (test-retest and internal consistency reliability) were determined.

Method and Materials: A psychometric instrument validation study was designed. In a double Delphi procedure, 10 trustees of the European Pressure Ulcer Advisory Panel (EPUAP) identified six topics on pressure ulcer prevention: aetiology and development, classification and observation, nutrition, risk assessment, and prevention (reduction of the magnitude and duration of pressure and shearing forces). 29 Multiple choice questions on each topic were developed based on national and international guidelines. Content validity index was determined in a double Delphi procedure by 10 trustees of EPUAP. A total of 312 nurses and 296 nursing students from Belgium and The Netherlands participated in the psychometric evaluation of the instrument.

Results: A 26-item instrument was developed, reflecting six themes expressing the most relevant aspects of pressure ulcer prevention. The content validity was excellent ($CVI=0.78-1.00$). Group scores of nurses with a (theoretically expected) high level of expertise were found to be statistically significantly higher than those of participants with (theoretically expected) less expertise ($P<0.001$).

Conclusion: Based on a rigorous construction process, a 26-item knowledge instrument was designed. The instrument reflects six themes expressing the most relevant aspects of pressure ulcer prevention. The psychometric evaluation showed that this knowledge instrument has acceptable reliability and validity properties. The instrument has several potential applications. This instrument can be applied in nursing education, research and practice to evaluate knowledge about pressure ulcer prevention.

E14-310

Development of an international pressure ulcer prevention guideline

Vanderwee Katrien¹, Defloor Tom¹, Dealey Carol², Schoonhoven Lisette³, Witherow Anne⁴, Clark Michael⁵, Cuddigan Janet⁶, Langemo Diane⁷, Black Joyce⁶, Call Evan⁸, Baharestani Mona⁹, Posthauer Mary Ellen¹⁰

¹*Ghent University, Gent, Belgium*

²*University Hospital Birmingham, Birmingham, UK*

³*UMC St Radboud Nijmegen, Nijmegen, the Netherlands*

⁴*Western Health and Social Care Trust, Belfast, Northern Ireland*

⁵*Cardiff University, Cardiff, UK*

⁶*University of Nebraska Medical Center, Omaha, NE, USA*

⁷*University of North Dakota, Grand Forks, ND, USA*

⁸*Weber State University, Centerville, USA*

⁹*East Tennessee University, Johnson City, TN, USA*

¹⁰*Supreme Care West, LCC, Evansville, IN, USA*

Introduction: Pressure ulcers have negative consequences for patients as well as for the society: an extended length of stay in the hospital, pain and discomfort, an impact on the quality of life and increased costs. Therefore, it is essential to prevent these ulcers. The aim of this project was to develop an updated international pressure ulcer prevention guideline.

Methods and Materials: The European Pressure Ulcer Advisory Panel (EPUAP) and the American National Pressure Ulcer Advisor Panel (NPUAP) collaborated to develop the pressure ulcer prevention guideline (2007–2009). The first step was identifying the evidence. In a second step the full papers of relevant references were divided according to topics and sent to one of the seven Small Working Groups (SWGs). The next step was drafting the recommendations. In step 4, strength of evidence rating was assigned to each recommendation. In the final step the SWGs summarized the evidence supporting each statement. The whole process of developing the guideline could be followed and commented by stakeholders online. The guideline was revised in the light of their comments.

Results: The literature search identified 3726 articles. The guideline comprises the topics: etiology, risk assessment, nutrition, skin assessment, support surfaces, repositioning and special population: operating room patients. The evidence for the recommendations was limited. Multiple recommendations had to be based on expert opinion. There are several changes and additions compared to previous guidelines, especially in the area of preventive interventions. The pressure ulcer classification system is modified.

Conclusion: This is the first 'world' guideline for pressure ulcer prevention. An extremely rigorous methodology was followed. This guideline assists evidence-based care for the prevention of pressure ulcers. The guideline is intended for the use of health care professionals in hospital, long term care, assisted living at home or any other care setting, and regardless of their diagnosis or health care needs.

E15-319

Malnutrition and nutritional care practices in hospital wards for older people

Vanderwee Katrien¹, Clays Els¹, Bocquaert Ilse¹, Verhaeghe Sofie¹, Gobert Micheline², Lardennois Miguel³, Defloor Tom¹

¹*Ghent University, Gent, Belgium*

²*Université Catholique de Louvain, Brussels, Belgium*

³*Service Public Fédéral Santé Publique, Brussels, Belgium*

Introduction: It is vital that hospital wards for older people have a nutritional care policy to prevent and/or treat malnutrition. No studies describe the association between nutritional care practices and malnutrition prevalence in Belgium. This study aimed to gain a bet-

ter insight into the current nutritional care practices in Belgian hospital wards for older people and to study the association between prevalence of malnutrition and nutritional care practices.

Methods and Materials: In 2007, a cross-sectional survey was carried out in a representative sample of Belgian hospital wards for older people. The nutritional status was evaluated using the short form of the Mini Nutritional Assessment (MNA-SF) scale. Ward data comprised information on the characteristics of the nutritional care practices given in the ward. For this study, a standardised questionnaire was developed to record these data, evaluated by a double Delphi-procedure.

Results: In total, 2094 patients from 140 wards for older people were included. The overall prevalence rate of malnutrition in wards for older people was 31.9%. The majority of the wards (55.7%) did not undertake any nutritional assessment at admission and in 45% of the wards no nutritional assessment was carried out during the total hospital stay of the older people. Almost 70% of the wards did not calculate the BMI of the patients. Almost 70% of the wards did not use a standardised nutritional screening instrument. In 86.4% of the wards a nutrition protocol was not available.

Conclusion: Malnutrition is a considerable problem in Belgian hospital wards for older people. The use of nutritional care practices such as nutritional screening and assessment, use of a standardised screening instrument and a nutritional protocol are suboptimal in Belgian hospital wards for older people. An increased awareness of the importance of nutritional care by health care professionals and policy makers is needed to address the problem of malnutrition.

E16-260

Pressure ulcer prevention: development of an attitude assessment instrument

Defloor Tom, Beeckman Dimitri
Ghent University, Gent, Belgium

Introduction: Pressure ulcers are mostly preventable if adequate prevention is timely provided. Attitudes towards pressure ulcers may influence the quality of care provided. The aim of this study was to develop a valid and reliable pressure ulcer attitude instrument.

Methods and Materials: A prospective psychometric instrument validation study was executed. Attitude topics were based on a literature review. Face and content validity were evaluated in a double Delphi procedure by an expert panel of nine trustees of the European Pressure Ulcer Advisory Panel (EPUAP) with a PhD and having an extensive experience in pressure ulcer care and research. External experts ($n=5$) with a extensive expertise in nursing, dermatology, psychology, sociology and geriatrics evaluated difficulty, clarity and readability of the attitudes. A convenience sample of 608 nurses and nursing students from Belgium and The Netherlands participated in the study.

Results: Construct validity was supported in the factor analysis. The KMO indicated sampling adequacy ($KMO=0.68$). Bartlett's test of sphericity was statistically significant ($\chi^2=892.1$, $df=78$, $P<0.001$). Five factors were extracted and explained 59.4% of the variance: competence, priority, impact, responsibility, and effectiveness of prevention. All items demonstrated factor loadings over 0.60. Pressure ulcer nurses and bedside nurses proved to have more positive attitudes (resp. 16.5/26 vs. 12.5/26, $t=-4.63$, $df=139$, $P<0.001$).

In all themes, a significant difference was observed between mean scores of pressure ulcer experts and non-pressure ulcer experts ($P<0.001$). Cronbach's alpha was 0.77 for the total instrument, 0.81 for competence, 0.75 for priority, 0.79 for impact, 0.82 for responsibility, and 0.76 for effectiveness of prevention.

Conclusion: The attitude assessment instrument demonstrated good psychometric properties. The instrument can be applied in both research and practice for evaluating attitudes towards pressure ulcers.

E17-201

Less adverse events with a patient safety programme in hospitals and nursing homes

Gaal Betsie van¹, Schoonhoven Lisette¹, Mintjes-De Groot Joke², Koopmans Raymond¹, Achterberg Theo van¹

¹Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

²HAN University of Applied Sciences, Nijmegen, the Netherlands

Introduction: Patients in hospitals and nursing homes are at risk for adverse events. For organisations it is difficult to implement all available guidelines necessary for good quality nursing care. This situation is at odds with the responsibility of professionals to ensure patient safety. Therefore, we developed a patient safety programme that allows organisations to implement multiple guidelines simultaneously, and thus to improve patient safety. Our aim was to investigate whether the patient safety programme decreased the incidence of three adverse events (AEs): pressure ulcers, urinary tract infections and falls.

Methods and Materials: This study was conducted between September 2005 and November 2008 on ten wards in four hospitals and ten wards in six nursing homes and existed of two phases: the development phase and the research phase. During the first phase, the patient safety programme was developed in cooperation with the participating wards. The patient safety programme existed of the recommendations of the guidelines for pressure ulcers, urinary tract infections and falls, which were reduced into a manageable set of bundles. In the second phase, the effectiveness of the programme was tested in a cluster randomised trial.

Results: Multilevel Poisson regression analyses showed an incidence rate ratio for the development of an AE of 0.57 (95% CI: 0.34–0.95) and 0.67 (95% CI: 0.48–0.99) for the hospital patients and nursing home patients, respectively.

Conclusion: This study showed that it is possible to implement multiple guidelines simultaneously, which is promising for organisations aiming at improving patient safety. In hospitals, patients in the intervention group had 43% fewer AEs as compared to the control group. In nursing homes intervention group patients had 33% fewer AEs.

E18-221

Clinical relevance of pressure ulcer risk assessment scales. The perspective of nurses in practice

Reuschenbach Bernd¹, Mahler Cornelia²

¹University of Applied Sciences, München, Germany

²University of Heidelberg – General Practice, Heidelberg, Germany

Introduction: There is growing evidence that well-established pressure ulcer risk assessments, such as the Braden-Scale, only have little clinical relevance in comparison to clinical judgement. In some countries, however, the use of pressure ulcer assessment scales is obligatory. The aim of our study was to analyse the perspective of nurses as users in this contradictory matter.

Methods and Materials: An online-survey, addressing nurses in different fields (e.g. paediatrics, geriatrics, acute care) and different countries (Germany, Austria and Switzerland) was conducted between June 2009 and August 2009.

Results: One thousand and twenty-four nurses participated in the study, most of them working in the acute care or geriatric field/setting and 41.1% being in a leading position. Although 85.1% of the nurses used risk assessment scales in their daily nursing routine, their evaluation of the efficacy and relevance revealed a contrary attitude:

47.4% consider such scales as irrelevant for initiating prophylactic methods, but only 7.8% consider them to be unnecessary.

Nurses' motivation to use the risk assessment scale was also ambivalent: 50.4% consented to the statement 'Such scales represent a valid risk assessment', but only 17.1% shared the opinion that 'Without such risk assessment scales the number of pressure ulcer will increase'.

Conclusion: The results demonstrate a sceptical attitude towards risk assessment scales in the nursing field, but also emphasize its perceived relevance. Because the implementation of risk assessment scales is obligatory (by law) in most German-speaking countries, the nurses see no possibility to reject them in favour of clinical judgement alone. According to most nurses the use of the risk assessment scale alone will not improve the clinical outcome. They assume that their clinical judgement contributes significantly to the correct assessment and to the prophylactic action that needs to be taken. This assumption results from their practical experience. To support this assumption further empirical evidence, which analyses the additional benefit of using risk assessment scales, is essential.

E19-326

Malnutrition and associated factors in elderly hospital patients

Bocquaert Ilse¹, Vanderwee Katrien¹, Clays Els¹, Gobert Micheline², Defloor Tom¹

¹Ghent University, Gent, Belgium

²Université Catholique de Louvain, Brussels, Belgium

Introduction: In recent years we are increasingly faced with obesity in our Western society. This health problem receives much attention. Conversely, malnutrition receives less attention, although it is a frequently occurring health problem. In Belgium, general data on the prevalence of malnutrition are lacking. This study aimed to obtain insight into the prevalence of malnutrition in Belgian elderly hospital wards and to identify factors associated with the malnutrition prevalence.

Methods and Materials: The sample for this cross-sectional, multi-centre study consisted of elderly patients from Belgian hospitals. All general and teaching hospitals with elderly wards in Belgium were invited to participate in this study.

The short form of the Mini Nutritional Assessment (MNA-SF) was used. A standardised questionnaire was used to record demographic data and data on potential factors associated with malnutrition, evaluated by a double Delphi-procedure.

Results: Eighty-one percent ($n=90$) of the hospitals with elderly wards in Belgium participated in the study. In total, 2329 elderly patients were analysed in this study. Almost 70% of the patients were female. Their mean age was 83.8 years (SD 5.19) and their mean BMI was 24.7 kg/m² (SD 5.20). Out of these 33% suffered from malnutrition. Almost 43% of the patients were at risk of malnutrition and 24% were well-nourished. A multivariate logistic regression analysis revealed that having swallowing difficulties, taste difficulties, and being transferred from a nursing home were strongly associated with being malnourished.

Conclusion: This study learns that malnutrition is a frequently occurring problem in elderly wards in Belgian hospitals. Given the negative impact of malnutrition on mortality and morbidity, an emphasis should be placed on an effective nutritional policy in Belgian hospitals. Based on the results of this study, it can be advised to provide adequate nutritional care to elderly who have swallowing difficulties, taste difficulties, or coming from a nursing home as these elderly are more likely to be malnourished.

E20-265

Adherence with leg ulcer lifestyle: a promising nursing intervention for community care settings

Van Hecke Ann¹, Vanderwee Katrien¹, Grypdonck Maria¹, Beele Hilde², Defloor Tom¹

¹*Ghent University, Ghent, Belgium*

²*Ghent University Hospital, Ghent, Belgium*

Introduction: Few nursing interventions to enhance adherence to leg ulcer regimen are developed and tested for their effectiveness. The aim of this study was to examine changes associated with an intervention to enhance adherence with wearing compression, leg exercises, physical activity and leg elevation from patients' perspective and exploring its effects.

Methods and Materials: Twenty six leg ulcer patients received an intervention to enhance adherence with wearing compression, leg exercises, physical activity and leg elevation. Five tissue viability nurses carried out the intervention in individual sessions at home. The intervention consisted of educational, cognitive and behavioural components.

Qualitative and quantitative approaches were combined in a pre-test-post-test study. Semi-structured interviews with patients were held after completion of the intervention. Data were also collected by participant observation.

Results: Knowledge about leg ulcer advice increased. The education contributed to more consciously following of leg ulcer lifestyle advice. Patients often experienced 'getting out of the groove' and looked out onto a 'new' perspective in which again healing and/or enhancement of quality of life might be attainable. Some patients regained independence after learning how to apply and remove compression garments themselves. Patients reported creative strategies to incorporate advice in daily life. More patients performed leg exercises after the intervention and at follow-up. The frequency of exercising and the duration of the daily exercises significantly increased. Step counts did not alter significantly. Patients not elevating the legs at baseline, elevated the legs more and for a longer period after the intervention.

Conclusion: The intervention resulted in behavioural change. The perceived associated changes suggest that the intervention holds a promise for current home care. Combining qualitative and quantitative research provided a more complete view of the perceived changes from the intervention. Complementary methodologies are recommended to evaluate the impact of and how interventions affect patients.

E21-266

Adherence to leg ulcer treatment: development of a theoretical framework

Van Hecke Ann¹, Verhaeghe Sofie¹, Grypdonck Maria¹, Beele Hilde², Defloor Tom¹

¹*Ghent University, Ghent, Belgium*

²*Ghent University Hospital, Ghent, Belgium*

Introduction: Compression therapy, leg exercises and leg elevation are recommended treatment options for leg ulcer. Non-adherence to leg ulcer regimen is a major problem. Reasons for non-adherent behaviour to leg ulcer lifestyle advice are not fully understood.

The aim of this study was to explore the processes underlying (non-)adherent behaviour in older patients with venous leg ulcers.

Methods and Materials: Twenty six leg ulcer patients received an intervention to enhance adherence with wearing compression, leg exercises, physical activity and leg elevation. Five tissue viability nurses carried out the intervention in individual sessions at home. The intervention consisted of educational, cognitive and behavioural components.

A qualitative field study was conducted. Semi-structured interviews with open-ended questions were held with the patients after the completion of the intervention. Participant observation was also a source of data.

Results: Trust in/feeling safe with the nurse was central in leg ulcer treatment adherence. Trust was facilitated when nurses took time to talk with the patient, went the extra mile, took time for wound care and gave attention to pain and other problems. Perceived physical improvements or sensations after following lifestyle advice convinced patients of the importance and positive effects of the advice in which they did not really believe at first.

Self-efficacy for performing leg exercises was often much higher than self-efficacy for being physical active and elevating the legs. Physical impediments, co morbidities, and socio-structural impediments influenced the patient's ability to adhere to leg ulcer lifestyle advice.

Conclusion: Interpersonal aspects between the patient and the healthcare professional permeate adherence with leg ulcer treatment in different ways. Healthcare professionals should take nurse-related factors into account in adherence-promoting interventions in the elderly. Aspects that foster trust could be incorporated into nursing leg ulcer care.

Parallel Session F

F1-45

Enhancing dignity for older people in health and social care setting

Succaram JAY

Thames Valley University, Brentford, UK

Background: Efforts for enhancing dignity in health and social care settings have been increasingly gathering momentum for the past decade but are still a central concern of older people, voluntary organisations, professionals and policy makers. There is still significant evidence in the literature of cases where clients/patients are not treated with dignity. The main objectives are to review the most quoted definitions of dignity, identify factors that are conducive to enhancing dignity in organizations, explore initiatives that portray older people more positively, identify available educational materials for enhancing dignity, identify professional attributes and competencies to ensure dignity, and highlight the impact of not being treated with dignity. The empirical and theoretical findings would enable health-care and social organisations in the formulation of a framework/protocol for the achievement of dignity for older people.

Methodology: Key sources relating to government, voluntary and local authority organizations, research and non research articles, grey literature. Searches from main and relevant databases will include Ebscot, Social Services Abstract, Social Citation Index and relevant books. An analytical approach consisting of theoretical and empirical data, content analysis and realist synthesis focussing on the objectives set.

Discussions and Results: Despite theoretical distinctions, dignity and quality of care are often used interchangeably and synonymously and are seen as key elements that would inform practice. Quality of care is in turn dependent upon the effective demonstrations of key skills for example communication, building therapeutic relationship and encouraging users to exercise their rights and self-esteem and making their needs known. The adoption and ownership from the professional, user and organizational perspectives of what would constitute dignity in these settings would be central to achievement of dignity. The importance of advocacy and supervision would also be part of the process for ensuring dignity.

F2-51

Health related quality of life in critically ill octogenarians

Hofhuis Jose¹, Stel Henk van², Schrijvers Augustinus², Rommes Johannes¹, Spronk Peter¹

¹*Gelre Hospital, Apeldoorn, the Netherlands*

²*Julius Center, University Medical Center Utrecht, Utrecht, the Netherlands*

Introduction: Intensive Care nurses and physicians (intensivists) frequently are concerned whether octogenarians will actually benefit from intensive care (ICU). We studied the time course of changes of health related quality of life (HRQOL) in the year following ICU discharge including the period during hospital stay in patients ≥80 years and compared their HRQOL with an age matched general population.

Methods and Materials: We performed a long-term prospective study in a medical-surgical ICU. Patients ≥80 years ($n=129$) admitted for >48 h were included in the study. We used the Short-form 36 (SF-36) to evaluate HRQOL before ICU admission (using proxies), at ICU discharge (patients), at hospital discharge (patients) and at 3, and 6 months following ICU discharge (patients).

Results: Patients could be evaluated at 6 months ($N=49$) after ICU discharge (71 patients died). Most SF-36 dimensions changed significantly over time. However, after an initial drop, mean SF-36 average scores of three dimensions (physical functioning, general health and social functioning) were lower at 6 months compared with their pre-admission HRQOL ($n=49$) although these differences were not significant. The physical component scores (PCS) also changed significantly over time. Interestingly, the mental component scores (MCS) showed only a modest decline at ICU discharge but recovered rapidly. The pre-admission HRQOL in surviving octogenarians was already lower when compared to the age matched general population and remained so at 6 months after ICU discharge.

Conclusions: Critically ill octogenarians demonstrate a sharp multidimensional decline of HRQOL and a gradual improvement during ICU stay and 6 months following ICU discharge. Consequently, age might not unduly influence treatment decisions regarding patients who require intensive care admission.

F3-58

Patient-centeredness in the long-term care of older people – patients' perspective

Steinmiller J¹, Varik M², Aro I³, Bruus I³, Kumm S³, Kalam-Salminen L⁴, Routasalo PE³

¹*University of Tartu/East Tallinn Central Hospital, Tartu, Estonia*

²*Tartu Health Care College, Tartu, Estonia*

³*University of Tartu, Tartu, Estonia*

⁴*Metropolia University of Applied Sciences, Finland*

Introduction: In Estonia as well as in all European countries the population of older persons is growing. The specific demands of older people create a challenge for health care and carers/nurses. The aim of the study was to describe patient-centeredness in the long-term care of older people in Estonian hospitals from patients' perspective.

Method: The convenient sample consisted of 121 older patients in the long-term care departments of 14 Estonian hospitals. The questionnaire of Coyle and Williams (2001) 'Patient-centred inpatient scale' was used for gathering data. Data were collected 2008 by means of structured interviews and analysed using descriptive statistics.

Results: The study showed that the staff supported personalization of older patients. The patients told that the staff understood and listened them carefully. Based on the results it can be affirmed that the patients experienced empowerment through partnership. Older patients were treated with respect, their privacy was taken into account. They experienced friendship with the staff while staying in long-term care. However, what older patients thought about treatment and which would have been their food preferences was not specified. The results of the study confirmed that the staff was always available when needed. The patients experienced they were informed enough about received care. They did not mention any shortages concerning communication with the staff and they acclimated soon to the hospital environment.

Conclusion: These results of the study show that the older patients rate the patient-centeredness in long-term care above average.

F4-68

Patient-centeredness from a nurses' and nursing assistants' perspective in the long-term care

Kumm S¹, Varik M², Aro I¹, Bruus I³, Steinmiller J⁴, Kalam-Salminen L⁵, Routasalo PE¹

¹*Department of Nursing Science, University of Tartu, Tartu, Estonia*

²*Tartu Health Care College, Tartu, Estonia*

³*Tartu University Hospital, University of Tartu, Tartu, Estonia*

⁴*University of Tartu/East Tallinn Central Hospital, Tallinn, Estonia*

⁵*Metropolia University of Applied Science, Helsinki, Finland*

Topic Care for older persons in Europe in 2025

Introduction: The population in Estonia is aging at an increasing rate. The aim of the study is to describe patient-centredness from nurses' and nursing assistants' perspectives in the long-term care of older people in the different hospitals of Estonia.

Methods and Materials: The study sample was composed of 403 nurses and nurse assistants in the long-term care wards of 14 regional, central and general hospitals in Estonia. The response rate was 67%. The data was analysed using descriptive statistical methods. The data was collected in 2008 using a five-step Likert scale structured questionnaire and analysed using descriptive statistics.

Results: The majority of respondents (86.3%) thought that cooperation between nurses and nurses assistants is good. Decisions concerning older patients' nursing were adjusted and reviewed. They agreed (92.9%), that they always paid attention to their patients' responsibility in their action and in its results. The study showed that in spite of estimating patients' needs in caretaking, nurses' and nurse assistants' opinions remained dominant. In setting patients' goals, nurses and nursing assistants took into consideration patients' (76.3%) and their family members' (84.5%) opinions. Slightly more than half (52.6%) of the respondents believed that decisions in nursing care could not be made without patients' consent: the patients' opinions were always paramount. 70.7% thought that nurses' and nursing assistants' professional skills in the nursing care of older patients were becoming more appreciated and in the future more important, too.

Conclusion: The nurses and nursing assistants submit that decisions concerning nursing care of older people cannot be made without patients' and their family members' approval. The study shows that nurses and nursing assistants don't always take patients' and their family's interests into consideration, referring to their work becoming more intense because of patients family's increased claims and additional tasks.

F5-79

Patient-centeredness in the long-term care of older people – patients' perspective

Bruus Ireen¹, Varik Merle², Steinmiller-Poom Jekaterina³, Kumm Signe⁴, Aro Ilme⁴, Kalam-Salminen Ly⁵, Routasalo PE Pirkko-Elina⁴

¹*Tartu University Hospital, Tartu, Estonia*

²*Tartu College of Healthcare, Tartu, Estonia*

³*East Tallinn Central Hospital Emergency Department, Tallinn, Estonia*

⁴*Department of Nursing Science, University of Tartu, Tartu, Estonia*

⁵*Metropolia University of Applied Sciences, Helsinki, Finland*

Introduction: Patient-centred approach increases patients' satisfaction and decreases patients' and their relatives' stress. In addition it has a positive impact to patients' improvement. Despite of developing patient-centred care from patients' perspective there has been too

little attention paid to older patients' opinions especially in long-term care.

Aim: The aim of the study was to describe patient-centeredness in long-term care of older people in different hospitals of Estonia from patients' perspective.

Sample and Methods: The sample was composed of 121 older patients in the long-term care departments of 14 regional, central and general hospitals in Estonia. The response rate was 91.7%. The mean age of the participants was 78.7 years. The data were collected by means of structured interviews using the combination of two earlier used questionnaires (de Witte et al 2006, Little et al 2001). The methods of descriptive statistics and correlation analysis were used for analyzing the data.

Results and Conclusions: The older people associated patient-centeredness above average in the long-term care. The evaluation of various statements about patient-centeredness differed. The patients considered most positive the possibility to perform independently all those daily activities they were able to. They found most negative that nobody asked their opinion about which person will take care of them. The patients agreed that the staff members take their wishes into account, listen them, understand their emotional needs and take into consideration what the patient tells them. Half of the patients complained that they have no possibility to arrange their self care and no possibility to decide together with the staff, what specific assistance they need, how often and in what way.

F6-152

Who are the institutionalized older persons of the future?

Anderiesen Hester¹, Sonneveld Marieke¹, Goossens Richard¹, Scherder Erik²

¹*TU Delft, Delft, the Netherlands*

²*VU Amsterdam, Amsterdam, the Netherlands*

Introduction: To be prepared for a new generation of institutionalized elderly, we need to understand who they are. The differences between the elderly of today and of the future are expected to be significant. Therefore, in order to improve the care system for of this future generation we have to be aware of the generation dependent characteristics. The goal of this review is to present insights about the institutionalized elderly of the future.

Method: To characterize the group of older persons who will be the residents of the health facilities in 2025 we reviewed, literature on trends in the domains of biological evolution, socioeconomics, social values, education, demographics and technology. These trends are often interrelated and will be presented as such.

Results: Physical and cognitive capabilities of the future elderly will improve due to the improved healthy lifestyles. For this reason and due to technological improvements in medical assisting products it is expected that elderly will live longer independently than today. Therefore, relocation of elderly will be in a later phase of their lives, and they will have more physical deficiencies compared to the current generation before relocation is unavoidable. These technical solutions for elders' medical problems will be better affordable for this group because of their increasing wealth and willingness to invest in their own health. The increasing wealth is the result of the fast-expanded value of the real estate in the 80's and 90's, the increasing amount of two-earning families, more inheritances and higher education. The higher level of education also contributes to the awareness of healthy living, which is strongly supported by the easy accessible and improved health education through the World Wide Web. Next to technology, the improved physical and mental health will make social activities possible and visa versa; their improved social involvement will prevent the elderly of the future from feelings of loneliness and related health issues.

F7-427

COPD patients' perceptions of patient and health education (PHE) implementation in specialized care

Patala-Pudas Leena, Kanste Outi, Kyngäs Helvi

University of Oulu, Oulu, Finland

Introduction: Patient and health education (PHE) is of great importance to COPD patients managing at home. However, PHE is not always of high quality, based on best practices (Kääriäinen & Kyngäs 2009). The purpose of this study is to explore COPD patients' perceptions of PHE in hospital settings and outcomes of PHE after discharge from hospital, and to test the validity of questionnaires used.

Methods: Two phased data ($n=154$) was collected with surveys in one outpatient and two inpatient pulmonary units and after discharging. Questionnaires delivered in hospital consist of four themes by patients' perspective: knowledge of core issues of COPD care related to disease management, perceptions of PHE implementation, managing care transition and severity of symptoms. Mail-posted home survey explored disease-related uncertainty and compliance to care as the variables of outcomes.

Results: Patient-centredness of PHE was considered to be quite well. However, there was a lack in certain elementary issues of managing COPD at home. Patients with advanced disease were more critical about information delivered. Some of the participants reported absence of PHE in hospital. Some of the participants even reported not to have been stated clearly of having COPD, even if they had the diagnosis for many years, according to records.

Conclusions: PHE delivery was not optimal, sometimes absent. Also there are certain defects of using latest research evidence in COPD nursing care and in PHE. Evidence-based nursing practice is to be enhanced systematically. Ethical aspects concerning of respiratory patients care are vital.

The results of the study can be used in improving COPD patients' PHE, nursing quality and nurses' capabilities in implementing PHE. Questionnaires have been tested repeatedly and their validity has been confirmed.

F8-L22

Aging with HIV in the Netherlands – can the health care system cope?Smit Cees¹, De Knecht-van Eekelen Annemarie²¹*Hoofddorp, the Netherlands*²*Nijmegen, the Netherlands*

Introduction: The complexity of the issue of aging with HIV in the Netherlands has been analysed by a large group of multidisciplinary experts in 2009. The aim was to set a policy agenda for the implications with respect to demands on health care and promoting research into medical and social aspects of aging with HIV. Some major outcomes of the analysis are presented.

Demands on the Health Care System: The main problem in the Dutch health care system is the lack of coherence. There are no programmes for 50+ patients with co-morbidity. There is little exchange of knowledge between HIV specialists and other specialists. Workers in old people's homes have no experience with HIV. To prepare the health care system criteria have to be met related to information, teaching and training, prevention, screening, organisation, financing. The 25 HIV care centres in the Netherlands have to rethink their position in the system.

A Research Agenda: Research on medical aspects of the aging process is needed. The effect of the virus and immune system on co-morbid diseases and frailty is unclear. More information is needed about the interaction of antiretroviral therapy and medication regarding the risk of co-morbid diseases.

Elderly persons are not well informed about HIV and the risk of infection. Special programmes have to be developed to inform them.

Pilot projects on cooperation between medical and social systems of care are to be executed.

F9-29

Hearing impairment in old age – a (no-) go in basic and further nursing educationDecker-Maruska Mechthild¹, Lerch Michael²¹*Krankenhaus St. Barbara Attendorn GmbH, Attendorn, Germany*²*Ev. Krankenhaus Bethanien Iserlohn, Iserlohn, Germany*

Introduction: The approximately 13 million patients with a hearing impairment (Sohn 2000) are still lacking the recognition of the need for specialized care and interventions in nursing education. Education is still mostly centred on the anatomy and pathophysiology of the ear or in rare cases featuring the basic concept of a hearing aid. The auditive sensory loss and its consequences is normally not an issue, neither in basic nor in further education. There being no lack of evaluated teaching concepts, the lack of problem consciousness becomes visible.

Methods: The authors interviewed 105 certified nursing staff from different fields of care (35 from a geriatric ward, 35 from a nursing home, 35 from a normal hospital ward) and a minimum working experience between 1 and 4 years with a standardized questionnaire before and 3 month after a 2 day training in specialized care for elderly patients with a auditory impairment. The questions focused on prevalence, detection, problem recognition and focus in formal education.

Results: In all fields the perceived prevalence grew after the training workshop (36%→67%). The ability to recognize hearing impairment increased significantly in the nursing home and geriatric sub-group. Especially the ability to evaluate required repetitions and frequent misunderstandings as signs of hearing impairment picked up (23%→52%). Staff from the nursing home and the geriatric ward recognized the time requirements of handicap-oriented communication as the core problem, whereas the staff from the normal ward put their emphasis on the handling of technical aids. Especially the staff from the geriatric wards and the normal wards saw the urgent need for further education of the professional caregiver in that particular field.

Conclusion: Our interviews revealed the need for more practice-oriented educational concepts developing competence in the recognition, handicap-oriented communication, and the handling of technical aids required by the auditory impaired elderly clientele.

F10-37

Developing interprofessional competencies for home team in elderly care

Kaaijk-Jacobs Francie

Hanzehogeschool Groningen, Groningen, the Netherlands

Introduction: A new educational model is needed for interprofessional education (IPE) in health care service for the elderly. The aim is to create new, academic competences for interprofessional care in home teams like solving non structured, complex situations, analyse scientifically, to criticize situational problems and to handle them creatively. They are divided in three domains of competencies: study and career competencies, research competencies and professional competencies (VUB, 2000).

Methods and Materials: Creating new knowledge for collaboration will take place in so called transition working places. Collecting data for IPE is considered as process outcomes of the research project and is done during 1 year in eight working places. How to

develop specific skills in collaboration? And do they effect on well-being of patients positively? To answer these questions each General Practitioner and Specialised Nurse has a portfolio to follow the process of individual developments. The portfolio contents: Competence cycle cards, SWOT-analyse and individual development plan (IDP), Self reflection reports by GRAS, Groninger Reflection Ability Scale (Aukes, 2009), 360° feedback reports, CanMeds rolls as working structure (Canmeds framework, 2005), Evaluation reports of collaboration by Belbin team rolls.

In both extramural and intramural settings data of the elderly will be collected in the Minimum Dataset. Repeated measurements of the effects on patient well-being outcomes will be done, using the triage-instrument: The Groninger Frailty Indicator (GFI) for frailty, the INTERMED for the complexity of care which contains biological, psychological & social problems and care needs.

Results: The results will be analysed and after interpretation implemented in the curricula of General Practitioners and Master ANP.

Conclusion: We expect positive results of competencies in collaboration and on well being of patients. However, further development and research will be necessary the next 10 years at least.

F11-71

The changing side of the nursing care: home health care/guideline

Talaz Deniz

Celal Bayar University, Izmir, Turkey

The most important aim of home health care is to maintain daily life of people who need continuous care and to improve their life quality without need for anybody's and any institutions' oversight. The patient's independence is kept at the highest level and their physiological and socio-psychological needs are met. Home health care personnels are mostly homecare doctor and nurse, psychologist, dietician, physiotherapist, speech-respiratory therapist, home care aides.

The concept of home health care is expressed as different terms in various countries: 'Hospital at home' in Israel, 'home health care-home nursing' in USA, 'home health care-home visiting' in Western Europe, 'homecare-domiciliary care' in UK. The basic of home health care was home visiting. Mary Robinson, who provided the patient care in Liverpool, was the first nurse visitor. While she was visiting homes, she not only maintained patient care but also learnt patient care and general hygienic rules to the family members.

The nurses in home health care perform all nursing initiatives including short-long term nursing services, wound-stoma care, infusion services, geriatric care, patient escort services, also they take part in patient following programs.

Some disadvantages of this system may be mentioned. To provide homecare service outside of medical places may reduce efficiency. The complications such as sepsis, thrombosis, embolism may be occurred in risky conditions. In ensuring health personnels' security may be had problem. Employees' right to work in safe may be damaged during unplanned home visits. The health staffs may have problems regarding medical waste control.

Many programs, projects, studies aiming at homecare services have started in Turkey too and they have become increasingly important. Many institutions-health staffs have performed and thousand of people have benefitted.

F12-102

The case study method to create reflective geriatric nurse practitioner

Maten Ada ter¹, Grypdonck Maria², Pool Aart¹, Streumer Jan¹

¹*Rotterdam University of Applied Science, Rotterdam, the Netherlands*

²*University of Gent, Gent, Belgium*

Introduction: The master's in Advanced Nursing Practice (MANP) program for nurse practitioners at Rotterdam University is implementing the case study method to facilitate reflective thinking. Reflective thinking is much discussed but under researched in ANP. The aim of this study is to understand nurse practitioner (NP) students' learning opportunities within reflective case studies.

Method: NP students are required to develop a case study in their own practice over a period of 8 weeks. Initially students have to write a clinical narrative about their professional practice within the NP-patient encounter that was particularly demanding for the student. Secondly, students closely examine and question in-depth their own decision-making process. A research started on the case studies from the students' cohort 2006 ($n=20$), 2007 ($n=21$) and 2008 ($n=36$) with a current total of 77 case studies. Qualitative analysis was applied to discover patterns and themes.

Results: The category Direct Clinical Care show that students work from a health care provider's perspective, unaware that their motives are not clear for others and possibly don't reflect ethical nursing standards. Students limit themselves to one single aspect of a problem and don't question thoroughly physiological causes, mental state of the patient and the context in which the problems occur. The learning opportunities in the case studies entails how students can adapt to patient needs and work from a shared perspective on both patients' experiences and her own opinion.

Conclusion: The findings demonstrate that learning opportunities exists within the case studies about nursing care for older patients and how to develop a new role as geriatric NP. Majority of students has difficulties to reach the level of critical reflection: assessment of the need for further learning, awareness that routines are not adequate, or that a change in perspective is needed. Faculties have to coach students intensely developing reflective skills to respond to older persons needs.

F13-117

HBO V learning community in care for older persons

Opzeeland Joke van¹, Wiegersma Nico²

¹*De Friese Wouden, Drachten, the Netherlands*

²*Noordelijke Hogeschool, Leeuwarden, the Netherlands*

Introduction: Early 2005 six student nurses started a learning community in the home care (elderly care) facility De Friese Wouden. After evaluation of the pilot on competency development, client satisfaction and production of care the decision was made to expand and broaden the learning communities for student nurses of higher education in the organization.

The students were supervised by a fully qualified nurse as their coach. In the learning community six students from different grades took, after an introduction period, the responsibility for a number of clients. The team organized and directed both client routes and client planning, taking the individual client's needs into account, and travel times and indication.

Students: The students have indicated that the learning community is a challenging learning situation. They were given responsibility and autonomy in their learning/working situation. Challenging assignments developed their skills.

School: The in-school assignments can be implemented in practice and there is a direct link between training and practice. Exchange of experiences, training sessions by participation in assessments and guest lectures are further stimuli.

Learning Facility: The learning community had the following effects on the learning facility: (1) Relevant contacts with the school, which means involvement and impact on nursing education. (2) The learning community as an example of functioning as a small independent (learning) team, coached by district nurses in training, supported by experienced district nurses. (3) The learning community as an example for team and individual learning. (4) Awareness and visibility of nursing roles in practice. (5) Stimulating the learning environment, by (unconscious) interaction and new learning situations, for example by questions from students, reflection, presentations, so contact with new knowledge for the learning facility. (6) Improving the image of home care/elderly care. (7) Pro-active, innovative change in education, practical learning, with a nation-wide appearance.

F14-150

How to motivate registered nurses for working in nursing homes

Martijn Rens, Goumans Marleen, Finnema Evelyn
University of Rotterdam, Rotterdam, the Netherlands

Introduction: In the future, nurses in all fields of care will encounter a growing number of older patients with an increasing complexity of care.

However, currently, in the Netherlands only few registered nurses work in the field of care for the elderly. The care for elderly people is mainly provided by nurse assistants with a lower level of education. The Dutch universities for nursing studies have developed a specific course leading towards a new competence profile for nursing students focused on gerontology and geriatrics.

Meanwhile in Rotterdam a ward-based learning and working environment is developed in cooperation with elderly care organizations. At selected wards students work and learn for 6 months, 3 days a week. They work together with students learning to become a nurse assistant, together they are responsible for the nursing process for a few patients at the ward. The nursing assistants working at the ward coach the students.

Method: Actiz, the Dutch organization representing institutional care and home care organizations cooperated in the development of the geriatric profile of registered nurses and they have asked the Rotterdam University to perform a business case on this subject. The business case together with an evaluation study of the ward-based learning environment which has been performed in the same period should give policy makers, the management of health care organizations and registered nurses enough information to choose for the implementation of jobs for registered nurses in the elderly care.

Results and Conclusions: October 2010 the Rotterdam University has 2 years experience with the ward-based learning method in nursing homes. The results of the evaluative study focused at the functioning of this learning method and the results of the business case of registered nurses working in elderly care are also ready to be presented in October at the congress.

F15-166

Applied gerontology – a new bachelor programme in the Netherlands

Jukema Jan¹, Bruggen A van², Duuren M van², Kater L¹, Smits CHM¹

¹*Windesheim University of Applied Sciences, Zwolle, the Netherlands*

²*Fontys University of Applied Sciences, Eindhoven, the Netherlands*

Introduction: Older persons expect professional advice, counseling and support in all domains. The professionals must be able to offer

integrated support by translating these wishes and needs into practical actions. Various studies in the Netherlands and Belgium demonstrate the need for highly trained professionals to meet these needs.

Programme: Fontys and Windesheim University of Applied Sciences start a new bachelor training Applied Gerontology in September 2010. It involves a 4 year full-time programme. A part-time program for mature students with working or educational experience in the area is also on offer. The course is characterized by its comprehensiveness, international orientation and focus on innovation and research skills. The study addresses developments in the field of work, housing and living, well-being and care, social involvement and leisure. Knowledge and skills of older adults who experience physical, mental, social and existential changes are at the basis of the corresponding professional competencies.

Four domains and four professional competencies constitute the components of the full-time curriculum: (1) Work/labour (2) Housing and living environment. (3) Well-being, social participation and leisure. (4) Care. The four professional competencies involve: service to older persons, management and direction, entrepreneurial and policy thinking. Three professional profiles are offered: case manager gerontology, entrepreneur /innovator gerontology, and consultant gerontology. Every student chooses two profiles. A practice oriented research project completes the final year and is linked to the Windesheim Research Group Innovation of Care of older adults. This link guarantees the quality of the educational support on research methodology and a feedback of research results into professional curricula.

Future: The Applied Gerontologist may work as a private consultant, entrepreneur or case manager in local governance, health insurance organizations, housing corporations, and social work institutions. After graduation they may proceed with a Master course, e.g. the European Master in Gerontology.

F16-168

Changing role of nurse teachers; transition provides better supervision for nursing students

Nordhagen Siv, Moen Øyfrid, Struksnes Solveig, Bogsti Wenche, Engelen Ragna Ingeborg, Solvik Elisabeth, Arvidsson Barbro
Gjovik University College, Oppland, Norway

Aim: The aim of this study was to describe how the new group supervision model 'Strengthened Supervision in Practice Study' affects the nurse teachers' function in community healthcare. The background was group supervision used in a new supervision model to improve the daily supervision of nursing students.

Method: An inductive qualitative method was undertaken based on qualitative content analysis. Data was collected through focus group interviews, with a theme guide. Two interviews were completed 3 months apart.

Result: As a result three qualitative categories emerge: Transformation, –consciousness raising, and anchored. The latent content was formulated in the theme: Changing role of nurse teachers; Transition provides better supervision for nursing students.

Conclusion: Implementation of the group supervision model 'Strengthened Supervision in Practice Study' was experienced as more professional efficient, as reflection with nurses in groups were found to be useful and raised the quality of student supervision. Changing role for the nurse teachers emerged. Thus, there was a shift of authority to the nurses. The nurse teacher had to accept the nurses' decisions and value their involvement. However, nurse teachers developed their group supervision skills. Mutual respect and co-operation between nurse teachers and nurses is essential and may pave the way for evidence-based practice.

F17-246

Learning by doing - the work practice experiences of undergraduate health care students

Äijö Marja, Koskinen Liisa

Savonia University of Applied Sciences, Kuopio, Finland

Introduction: The aim of this study was to describe health care students' experiences of learning at the interprofessional Empowerment Market.

Empowerment Market (VireTori) is a learning forum for higher education students that enhances and secures the well-being of the population of the Kuopio area in Eastern Finland. The Market exists on the university campus, but the services are brought to homes and enterprises. Market activities include health counselling, functional ability measurements, blood tests and dental hygiene education.

Method: This study was conducted at the Savonia University of Applied Sciences in Eastern Finland. A qualitative study among 42 undergraduate health care students was conducted. The participants were students in nursing, occupational and physiotherapy, bio analytics, dental hygiene, as well as paramedics who had practiced at the Empowerment Market. The length of practice varied from a couple of days to 6 weeks. The data were collected through six focus-group interviews and participant background questionnaires, and were analysed using inductive content analysis.

Result: The results show that the Empowerment Market enabled and encouraged students' various professional and interprofessional competences, such as independent working, initiative, responsibility, elderly client counselling and natural interaction between different student groups. The dialogue between the learning forum and faculty, preliminary information for students and occasional lack of customer contacts were seen as the problems of the Market period.

Conclusion: The Empowerment Market is a good experiential and unusual practice learning forum for both students and teachers. There is possible learning by doing and interprofessional work. However more information, collaboration and motivation will be needed in the school community. Teachers and students should be kept aware convinced that learning can take place in new and diverse work practices.

F18-281

Geriatric education in Baccalaureate nursing course in ItalyMatarese Maria¹, Ivziku Dhurata¹, Quaggia Giuliana²¹*Campus BioMedico University, Rome, Italy*²*Ospedale San Giuseppe Milanocuoore, Milan, Italy*

Introduction: Nurses should be trained already at their baccalaureate level to take care of the complex needs of the elderly. The existing national legislation establishes only general guide lines on education. We decided to carry out a national survey in order to find out which kind of education has been offered to nursing students in Geriatrics and Gerontology in the various baccalaureate nursing courses.

Methods and Materials: A questionnaire, already used in a previous American research and adapted to Italian university organisation, was sent out to all the coordinators/directors of the Nursing Schools in the 171 educational locations within the 38 Italian universities where the degree course was active during the academic year 2005/2006.

Results: 84.4% of the universities and 51.4% of educational locations participated. A certain variety is present at national level for theoretical and clinical education in Geriatrics and Gerontology, in terms, for example, of number of credits, type of clinical placements and time in the curricula for the educational experiences. Most Nursing Schools have specific courses dedicated to Geriatric/Gerontological contents. A small rate of venues do not contemplate Geriatric content in their study curricula, leading us to believe that a number of nurses are still graduating without any adequate training

in Geriatric care. Moreover, coordinators/directors believe that the space offered to Geriatrics education is enough.

Conclusion: We can assume that most Italian universities train their students in geriatric care throughout the whole curriculum, as well as through clinical training experiences with healthy or ill elderly people. The present survey highlights some critical issues which could be overcome, for example, by defining more clearly the core contents and expertise in Geriatric care which would have to be present in the 3 year degree course.

F19-283

Develop a sustainable 'therapeutic' garden for frail older persons

Martijn Rens, Lange Jacomine de, Klingeman Connie, Padmos Natascha

Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

Introduction: The Rotterdam University of Applied Sciences started a special learning project, a 'therapeutic' garden for frail older persons. Innovative students from different disciplines, such as speech therapy, nursing, occupational therapy work together to develop a new concept. The project cooperates with artists, the city of Rotterdam, organisations for older persons and Home care organisations. In direct contact with the natural environment of trees, flowers and greenery, such a garden will offer properly designed walks, facilities for exercise, and the opportunity to relax, sheltered spots for individuals. For older people affected by loss of autonomy, sensorial disorders, behavioural or mental problems, the garden would also offer a specially designed area to provide a sense of security, safe walks and easy supervision. In addition, the garden would not only benefit patients. Its facilities would be a valuable addition for visitors, relatives, friends, children, institution staff, and more generally the neighbourhood as a whole.

Method: The project started in December 2009 and will end in February 2011. The interdisciplinary setting and the subject is a guarantee for an innovative outcome. For the students the poster presentation is a part of the learning process. The project is part of a new form of practical education in the minor of the bachelor program. The Rotterdam University of Applied Sciences started this program in 2009.

Result/Conclusion: The students of the Institute of Healthcare are enthusiastic about the concept of a 'therapeutic' garden. The students have learned to work with different disciplines, the project owner, artists, local authority of Rotterdam, organisations for older persons and home care organisations.

They have explored the boundaries of their own profession and solved part of a delicate problem in Rotterdam. They explored and adjusted one vision and met the needs of frail older persons.

F20-301

Anticipate the experience of being old: a report by nursing students

Madeira Maria, Almeida Maria

Nursing School of Coimbra, Coimbra, Portugal

Introduction: The growing needs in health care, adapted to the specificity of human aging, require more global, effective and humanized responses so as to achieve a better organization and efficiency of existing resources. Laboratorial practices (LP) in nursing take on a vital role in preparing future professionals because of the opportunities and training provided in a simulated situation.

Materials and Methods: Laboratorial practices simulate practical situations aimed at learning and exploring the methods, processes and techniques. This will promote a better understanding of the facts

considered in the theoretical and/or theoretical-practical classes and the development of cognitive and psychomotor skills. All 3rd-year undergraduate nursing students practiced with the simulator and were divided into 24 groups. Each group was composed of 15 students who developed their laboratorial practice during 2 h under the supervision of the nursing teacher. We used the simulator of older people composed of the following objects: glasses, gloves, ear tampons, cane and various pieces for the upper and lower limbs, as well as for the low back area.

Results: Some of the difficulties most often reported by the students were sensory and motor difficulties.

Conclusion: The performance of the activities suggested made it possible to experience some of the most common difficulties faced by older people on a daily basis. From the students' perspective, the use of this methodology allows for a better understanding of the physiological changes of aging in the areas experienced. In addition, it makes it possible to reflect on the adoption of practices leading to the promotion of older people's well-being.

F21-323

Clinical learning outcomes and educational experiences in nursing homes

Frederiksen Anne-Marie Skovsgaard¹, Stenholt Britta²

¹Department of Nursing, Århus, Århus, Denmark

²Silkeborg VIA University College, Silkeborg, Denmark

Background: International studies describe that the numbers of qualified nurses in nursing homes have influence on quality of life among elderly people. In Denmark it is difficult to recruit nurses to work in nursing homes. There is also a shortage of clinical placements where nursing students can learn fundamental nursing care. Therefore nursing schools and nursing homes try to establish clinical placements.

Objective: To investigate if nursing students can learn fundamental nursing care in nursing homes.

Method: Learning outcome of clinical skills in nursing homes were studied. Observations, video recordings and interviews were used to test the clinical skills of 19 nursing student at the beginning and the end of a clinical period.

Results: Students' learning outcomes were positive. Most of the mentors had no education and little experiences in supervision of the students. Some of the mentors were only present in the periods where the students were present in the clinical placement. The students expressed disappointment in having their first clinical placement in nursing homes instead of a hospital.

Conclusions: Nursing homes proved to be clinical placements where nursing students can learn fundamental nursing care. However, to meet the nursing continuum skill and knowledge needs, well educated mentors are needed as well as at least two nurses in each nursing home. In addition motivation and support from the leader and the staff are needed to create a study and learning environment to ensure the quality in clinical education. Improving nursing students' knowledge of nursing homes is believed to improve recruitment of nurses to nursing homes.

F22-336

Workplace learning: a strategy to improve quality of care for the elderly

Cools Lynn, Sabbe Dorine, Driessens Frederik, Verhaeghe Sofie
Katho HIVB, Roeselare, Belgium

Introduction: During their education, bachelor students in nursing who choose geriatric nursing as main subject, are challenged to use new (theoretical) insights, critical and creative thinking to improve the quality of care for the elderly in hospitals or nursing homes. However, when in practice, students tend to copy behavior of care-

takers and are often more guided by habits and rules from the organization than by critical thinking and patient centeredness. They often lose their creativity to install good practices and to combine needs of patients with organizational needs.

Method: Based on the principles of workplace learning in the Netherlands, we developed a model for workplace learning in Flanders. A nursing unit with ten geriatric patients became the working place of nine last-year nursing students who choose geriatric nursing as main subject. The students completely took over the nursing unit for 3 weeks. They were free to choose the organizational model they wanted to use and could ask for changes in the routines of other disciplines and logistic services. Two mentors and two teachers were present most of the time during the day. Their role was to guide the learning process and give advice when needed.

Results: Workplace learning was evaluated by students, mentors and teachers as a powerful way of learning. Experiencing real nursing responsibility, not only for patients but also for the organization generated thorough learning. Students learned to deliberate, to plan, to administer, to deal with acute and unexpected situations, to inform family members, to work with other disciplines etc.

Conclusion: Workplace learning helps to narrow the gap between education (often seen as theoretical) and practice. It is a way to stimulate the learning process, to improve quality in nursing care for elderly patients and to establish responsible and creative future nurses.

F23-348

Learn how to use an Electronic Nursing Record (ENR) A training program, best or a bad practice?

Verwey Renée

Zuyd University, Heerlen, the Netherlands

Introduction: Nurses in Dutch hospitals and nursing homes are increasingly using electronic records. Specific competencies are necessary to make use of such a system in an optimal way. This article describes the training program as part of the implementation of an Electronic Nursing Record (ENR) in Maasland Hospital (Orbis Medical and Healthcare group) in Sittard, the Netherlands. The implementation process was carried out by several nurses in different roles (project management, project group members, key-users and teachers). The training program was an important part of the implementation process. How did nurses evaluate the ENR training program?

Methods and Materials: The training program and the ENR system were evaluated by questionnaires with answering options on a Likert scale and open text. The results ($N=372$) were analyzed in SPSS with descriptive statistics and the open questions were analyzed using qualitative methods.

Results: The basic training consisted of four meetings during which aspects of the methodical work and navigation in the system were raised alternately and were applied to ward-specific cases. More than 75% of the participants were satisfied or very satisfied with the overall training services. The majority of the participants answered positively about the achievement of the learning goals and the duration of the training, but in the end they valued training on the job better. Key-users were given extra time to coach their colleagues on the ward. Key-users were positive about the follow-up training because it gave them the opportunity to share experiences and learn from each other.

Conclusion: There were big differences between participants regarding their information technology competencies at the start of the training. In the development of the program this should have been taken more into account. Further customization of the program and using e-learning facilities could have improved the learning results of participants.

F24-376

Snoezelen and reminiscence: new tool to work with older people

Antunes Ligia, Rosado João, Almeida M de Lurdes, Teles Viviana

Nursing School of Coimbra, Coimbra, Portugal

Introduction: Older people should benefit from therapies associated with new technologies for their physical, psychic and social well-being. To this end, we used snoezelen and reminiscence in the context of clinical rotation so as to recreate a stimulating environment. We used the following techniques: snoezelen, which consists of a selective offer of primary cognitive stimulation, oriented towards sensory perception, using light, sound, touch, smell and taste; and reminiscence, which consists of remembering an experience or event to which the individual usually associates pain or pleasure.

Methods and Materials: The Barthel Index and the Mini-Mental State Examination were applied to a sample of 17 older people (♂ 76.47%; ♀ 23.53%) with a mean age of 83.58 years and a clinical diagnosis of dementia.

A typical beach environment was recreated so as to provide moments of well-being, relaxation, comfort, satisfaction and happiness joy to older people. This activity was developed using both sensory (primary senses – touch, taste, sight, hearing and smell) and cognitive (learning and memory) controlled stimuli. So as to stimulate older people's senses, all sorts of the following materials were used.

Results: The older people in this sample showed: (1) less apathetic behaviours; (2) a significant improvement in the types of behaviour and states of mind (e.g. happiness, environment awareness, spontaneous speech and level of activity); (3) they were able to remember past events, and talked more coherently and spontaneously; and (4) they improved their interaction with the surrounding environment, their communication, mood, well-being and relaxation.

Conclusion: Snoezelen and reminiscence should be considered therapies which stimulate communication, memory, learning, creativity, emotion expression, and relaxation, contributing to the re-adaptation and (or) integration of institutionalized older people. Nursing should invest in multi-sensory therapies, as promoters of positive effects, integrating these two techniques into the non-pharmacological therapeutic priorities, thus improving the quality of life of institutionalized older people.

F25-400

Need for changes in health technology education: development of a new professional education

Willems Charles¹, Holkers-Veldkamp BA², Dijk M van de²

¹*Hogeschool Zuyd, Heerlen, the Netherlands*

²*Saxion university, Enschede, the Netherlands*

Introduction: The Dutch Health Care Inspectorate (IGZ, 2008) states that current professionals are insufficiently trained in the use of health care technology and that the current educational system is not adequately equipped for these developments. Saxion University of Applied Sciences responds to this need by starting a bachelor study 'Health care and technology', within nursing education, starting September 2010 in Enschede, the Netherlands. The subject of the workshop is the development of a new health technology competency profile. Which competencies are important for this new professional? How should a course program be structured to fulfil this requirement?

Methods and Materials: A new health technology competency profile is developed in collaboration with professionals of both fields of health care and technology. Feedback groups are organised, to collect information from professionals in all ranges of relevant domains, e.g. managers and caregivers, students and teachers. A course curriculum is developed using the Four components and

Instructional Design Model (4C/ID model, van Merriënboer, Clark, et al., 2002). Field research is carried out on the competence profile and on the course curriculum. In this phase, exploratory qualitative research is carried out in interviews with key figures in the fields of health care and technology.

Results: The new health technology competency profile focuses on four main roles/competencies: (1) caregiving, (2) innovation, (3) coaching and (4) coordination. Sixty percent of the content of the new study is similar to the higher education for nursing; 40% of the curriculum is reserved for applied technology. Students will be qualified for a bachelor of Nursing and for BIG-registration.

Conclusion: It is feasible to develop a new competency profile and course curriculum together with health care professionals already active in the field. First results show a need for a new professional, in health care and technology, with new competencies in both domains.

F26-L2

Finals option (uitstroomvariant) gerontology and geriatric nursing

Tesink Marianne

Hogeschool Utrecht, faculteit Gezondheidszorg, Utrecht, the Netherlands

Introduction: A project was set up by Actiz, the organization of care providers, and the Netherlands Association of Universities of applied Sciences in 2005 in order to ensure a better link between higher professional education in nursing and the professional nursing practice in elderly care. This project has led to the development of the Gerontology & Geriatric Nursing (VGG) specialization option at the HU University of Applied Sciences Utrecht.

VGG Abilities: (1) The motives: What does a VGG-qualified nurse want, what motivates him/her towards certain types of behaviour or towards reaching particular goals and challenges? (2) The personal characteristics of the VGG nurse: both physical characteristics and specific ways of reacting to situations. (3) The VGG nurse's self-concept: attitude, values and self-image. (4) Knowledge: the information the VGG nurse possesses (professionally) in the fields of gerontological, geriatric, psychiatric and first-line nursing. (5) The skills and abilities of the VGG nurse required to carry out specific physical and mental tasks.

Intergenerational Discussions* I and II: At two meetings the students will meet and talk to senior citizens employed through the *Uitzendbureau 65+* temping agency. These meetings are intended to inform the students of the life and generational backgrounds of senior citizens.

Evaluation: Students were enthusiastic about the topics covered in the 10 week theory cluster and the variety experienced: 'It's great to have a 10 week period where you can really learn about a particular category of patients'. The meetings with the senior citizens were highly valued and regarded as inspirational: 'I changed my view of elderly care, this is an area that I might want to work in, after all'.

F27-L5

'Clinical circles in EBP' as a tool to evidence-based practice (EBP) in Norwegian nursing homes

Liv Berven

Betanien Deaconal University College, Fyllingsdalen, Norway

Introduction: Nurses in nursing homes with long experience will not be familiar with evidence based practice EBP. Their practice will be based on their educational background, and on experience. Nurses have been telling that they want to deliver research based care, but that they find it difficult to access the research. This is very evident in nursing homes. Students experience a severe gap between their college-based education in EBP, and the practical nursing they

experience in the nursing homes. This was our background at Løvåsen Teaching Nursing Home when we started our work with interchange of experience-based practice to EBP.

Methods and Materials: 'Clinical circles in EBP' is a model for development of EBP in nursing homes. The aim for these projects is that both nurses and nursing students in nursing homes should learn to use the principles for EBP and to increase the knowledge of some clinical issues. Three such projects were set up, with nurses from six different nursing homes in Bergen, in cooperation with three university colleges. The project has worked with issues related to wound, nutrition, and fall.

Results: The results from this work will be presented at a large conference in Bergen on February 4, 2010. To this conference, nurses and students from nursing homes and university colleges in Bergen will be invited.

Conclusion: The nursing homes aim to be attractive employers for nurses and students. To reach this goal, we must have nurses who are able to guideline students also within EBP. The overall aim is that the patients at the nursing homes should receive evidence based nursing and practice that involves complex and conscientious decision making which is based not only on the available evidence but also on patient characteristics, situations, and preferences. Quality of life for these patients is essential.

F28-L6

Students collaborate with nurses from a nursing home to get an evidence based practice

Liv Berven

Betanien Deaconal University College, Fyllingsdalen, Norway

Introduction: Challenges in treatment and care of the elderly are increasing in complexity. To be successful requires a multidisciplinary approach and the ability to act in accordance with current knowledge and research. The theories of evidence based practice are becoming more commonplace in nursing care in Norway. The students in the program are from their mid twenties to 60+, with varying previous knowledge, training and skills in use of computers and accessing databases for research

Methods and Materials: A problem based learning approach has been used.

Groups of students cooperated with professionals at Løvåsen teaching nursing home in identifying clinical issues that could be feasible to investigate and develop up to date state-of-art guidelines in relation to model for evidence-based practice.

The first issues the students got from the nurses and the medical doctoras: Preventing falls, Correct pain treatment in patients with rheumatoid arthritis, Correct care of tracheotomy, Prevent and treat *Clostridium difficile* in nursing homes, Successful sleep without drugs.

Results: Evaluation of learning is difficult, and the feedback to the students was done immediately after the presentations, by having the students filling in a questionnaire with comments. A large majority of the students agreed that the content in the module helped them to develop skills on important topics such as theoretical knowledge, practical skills and communication skills. The methods for assessment and evaluation of the problem based learning approach have allowed them to display what they have learned and understood. They express a better understanding of evidence-based practice.

Conclusions: Students have developed their understanding that the process of evidence-based practice should be utilized in clinical practice and especially focus on the resources in databases for handling clinical challenges. Understanding the model also includes knowing the criticism of the model.

Additional lectures – but more importantly, training – hands-on-experience working in groups with support is important.

F29-64

The Geriatric Fracture Centre: co-managed care in the elderly fracture patient

Folbert Ellis, Velde Detlef vd, Regtuijt Marlies, Klaren-Florijn

Hester, Smit Ruth, Hegeman Han

ZGT Almelo, Almelo, the Netherlands

Introduction: To optimise the complex care of elderly fracture patients the idea has risen to create a new concept, the Geriatric Fracture Centre. Co-managed care is a multidisciplinary cooperation between surgeons, geriatricians, nurse practitioners, nurses, physiotherapists and nursing homes. The Geriatric Fracture Centre is the first centre of its kind in the Netherlands and Europe and is located at Ziekenhuisgroep Almelo.

Methods: A characteristic of the concept is rapid diagnosis on the Emergency Department and quick surgical treatment, co-managed care by the surgeon and geriatrician, multidisciplinary clinical pathways with age-related features (f.e. nutrition deficit, fluid, decubitus prevention, fall risk assessment, delirium prophylaxis) and follow-up with screening on osteoporosis as part of the fracture treatment.

Results: Eight months after establishing the Geriatric Fracture Centre, 101 patients with a hip fracture were admitted. There were 33 males and 68 females with a mean age of 81 years (65–97 years). This study shows that the mean length of stay on the Emergency Department was 79.5 min (range 9–213 min). Ninety-six percent of the patients underwent surgery within 24 h. Fifty-five percent of the population has a high risk of developing a delirium and received haloperidol prophylaxis. Despite introducing structural delirium prevention 22 patients still developed a delirium. The overall complication percentage is 30.7%. An evident reduction in the days of admission in the hospital was seen from an average of 18 days in 2006 to 11.4 days in 2008.

Conclusion: The co-managed care concept in the Geriatric Fracture Centre is quality enhancing and leads to a reduction in the days of admission. Because of these positive results we implemented this new care plan nowadays for all types of fractures. Starting the 1st of January 2010 all the fracture care is defined in clinical pathways and all elderly patients with a trauma, will be treated within the GFC-concept.

F30-125

Designing and implementing an evidence-based nursing model for developing care of older patients

Sarajärvi Anneli, Eriksson E

Helsinki, Metropolia University of Applied Sciences, Helsinki, Finland

The purpose of this study is to describe the design and implementation of an evidence-based nursing (EBN) model for developing care of older patients in acute wards of health centres. The study was conducted by applying the principles of action research and its approach was both qualitative and quantitative. The initial data collection was carried out in spring 2007. Ward managers ($n=26$), nurses ($n=127$) and practical nurses ($n=156$) working in health centres were asked to complete a questionnaire concerning their background information (9), attitude towards EBN (18), and knowledge base (6).

After designing the model, it was implemented in clinical nursing practice for 18 months. During this time, staff members documented their actions. New data were collected from the same sample group in spring 2009 and compared with the initial data. In the design and implementation of the model, staff participation, motivation, education, self- and peer assessment were used as interventions.

According to the results, the new model improved and simplified the care of older patients. Staff attitudes were more positive and staff members got better with their work. They felt they had more responsibility, motivating them for search of research knowledge and

patient-oriented care. Staff members searched for research knowledge as a foundation of their work and considered patients' viewpoint more in their decision-making. Patients were more involved in the planning and implementation of their care as well as the decision-making process. Because of the model of EBN, staff members considered they had more time for patient care and could prioritise their work better. Based on these results, staff competence in EBN for care of older patients as well as the participation of patients and their significant others in decision-making will be further reinforced. The results will be presented in more detail in the congress.

F31-354

Family members' presence is important for older persons at the emergency department

Salminen-Tuomaala Mari¹, Leikkola Päivi², Kurikka Sirpa², Vanninen Johanna², Paavilainen Eija³

¹Seinäjoki University of Applied Sciences, Seinäjoki, Finland

²Seinäjoki Central Hospital, Seinäjoki, Finland

³University of Tampere, Tampere, Finland

Introduction: Older persons may suffer from uncertainty, different fears and cognitive problems when they arrive at the emergency department. They need emotional, cognitive and social support from their family members and health care personnel. It would be important to develop older patients' care in a more family-centered way. It is important to take consideration into the family members who take care of the patient at home. The purpose of this study is to describe the experiences of counseling received by family members accompanying older patients in the emergency room of a central hospital.

Methods and Materials: The study method was statistical. The data were collected by questionnaires and analyzed by SPSS for Windows 15 – statistical analysis program. The response rate was 77% ($n=77$). There were 93 participants; 71% women and 29% men.

Results: The patient's family members felt it important to receive information about the older patient's illness, their general status, examinations, nursing procedures and further treatment. It was essential that nurses kept them up-to-date during waiting period in the emergency department. Their presence had a positive influence on the patient's mood and emotions. Older patients were more restful and relaxed when the family members shared a waiting period with them.

Conclusion: The family members' presence during waiting period should be recommended because it enhances the continuity of the older patient's follow-up care at home. It is also emotionally important for older patients to have family members close to them. Sharing difficult topics concerning the disease and its' treatment and medication with the family members makes it easier for the older patients to cope with the situation. It is also essential for the family members to get more information and abilities to take care of their loved one.

F32-361

Long-term outcomes of delirium in the elderly

Foreman Marquis¹, Holm Karyn², Wang Edward³

¹Rush Univ College of Nursing, Chicago IL, USA

²DePaul University, Chicago IL, USA

³University of Illinois at Chicago, Chicago IL, USA

Introduction: Little is known about the long-term (i.e., >36 months) outcomes of delirium in older hospitalized patients. Thus the purpose of this study was to evaluate the long-term effects of delirium on functional and cognitive status, and mortality.

Methods and Materials: Criteria for inclusion in this study was based on being: 65 years of age or older, admitted to an acute care hospital for greater than 48 h, and willing to participate in a study

of 36 months duration. People were excluded if they: were delirious or unconscious upon admission to the hospital, or had a diagnosis of intra-cranial tumor or increased intra-cranial pressure.

Results: Two hundred and thirty-one patients enrolled in this study. Patients with delirium were significantly older (79.7 vs. 76.2, $P<0.05$), and had a significantly higher rate of mortality than patients without delirium (48.6 vs. 13.8%, $P<0.05$) over the 36 months period. Of the 231 subjects, 35 experienced at least one episode of delirium. Twenty-seven experienced only one episode of delirium, 7 two episodes, and one subject three. Of the 43 episodes of delirium, 29 were of the hypoalert-hypoactive variant, five hyper-alert-hyperactive variant, and the remaining nine were mixed. The rate of physical functional decline was significantly greater in subjects with delirium, a decline from which these subjects never recovered. As with physical functioning, there was a significantly decline in cognitive function in patients with delirium over the 36 months of study. Subjects with delirium were also less likely to regain baseline status over the course of the 36 months of study than the non-delirium group. Only the presence of delirium was a significant predictor of mortality. The presence of delirium was associated with a 2.43 greater risk of mortality.

Conclusions: Delirium is a significant negative health problem associated with hospitalized from which older people never fully recover.

F33-392

Long-term consequences of pain, anxiety, and agitation in older patients on the intensive care unit

Jeitziner MM¹, Hantikainen V², Hamers JPH³

¹Bern University Hospital (Inselspital), Bern, Switzerland

²University of St. Gallen, Switzerland, St.gallen, Switzerland

³Maastricht University, Maastricht, the Netherlands

Background: Patients affected by untreated pain, anxiety, and agitation can have long-term physical and psychological problems, which can impair their cognitive and socio-economic life. Furthermore, health related quality of life studies investigate the consequences of these experiences only minimally. Also, because long term effects on the elderly patient have rarely been examined, it remains unclear how much they impact patients' utilization of the health care system.

This study compares critically ill older patients who have been admitted at an ICU and older people from the swiss population who have not been ICU patients for at least 15 years. The aim of the study is: (1) to explore the pain, anxiety and agitation during ICU stays and experiences of the same symptoms in later life; (2) to investigate if the assessment and treatment of pain, anxiety and agitation on the ICU is associated with subsequent experiences of these symptoms; and (3) to explore the associations between pain, anxiety and agitation experienced during ICU stays on subsequent health related quality of life, use of the health care system (readmissions, doctor visits, rehabilitation, medication use), and social and functional abilities in later life.

Methods/Design: A prospective, longitudinal study is currently underway (December 2008–2010). Elderly critically ill patients must fulfill the following criteria: minimum age of 65 years, the duration of their stay on the ICU must be at least 48 h, they must be physically able to participate, they must be able to speak and read either German or French, and they must reside in Switzerland. The criteria for inclusion from the comparison group are the same and not hospitalized (no hospital stay during the last 3 months). A total of 150 elderly critically ill patients and 150 healthy participants will participate.

Discussion: Challenges inherent in this longitudinal study are planning the study, developing the protocol, sampling, recruiting and tracking subjects, data collection and management.

F34-L20**Effectiveness of planning hospital discharge and follow-up in primary care patients with chronic obstructive pulmonary disease**

Abad-Corpa E, Pérez-García MC, Rodríguez-Mondéjar JJ, Iniesta-Sánchez J, Royo-Morales T, Sáez-Soto A, Carrillo-Alcaraz A, Vivo-Molina MC

Research Unit. J. M. Morales Meseguer General University Hospital, Murcia, Spain

Introduction: Chronic obstructive pulmonary disease (COPD) is one of the main causes of morbidity and mortality internationally.

Methods and Materials:

Aim: To evaluate the effectiveness of a protocolized intervention for hospital discharge and follow-up planning for primary care patients with COPD in terms of readmission rate, patient satisfaction with nursing care, quality of life and level of knowledge about the COPD.

Design: A quasi-experimental design was adopted, with a control group and pseudo-randomized by services. Patients with COPD admitted to two tertiary-level public hospitals in Spain and their local healthcare centres were recruited between June 2007 and November 2008. Follow-up phone calls at 2, 6, 12 and 24 weeks after discharge.

Results: A total of 143 patients were recruited (Intervention group=56; Control group=87). The groups are comparable in clinical and sociodemographic variables. The results about effectiveness show improvements in second period for evolution of quality of life at 12 (18.2 ± 16.9 vs. 10.4 ± 10.9 ; $P:0.008$) and 24 weeks (21.3 ± 16.9 vs. 12.7 ± 11.7 ; $P:0.028$), level of knowledge about the COPD at 2 and 24 weeks. No differences for satisfaction and readmission rate. Analysis of the variables with statistical significance at 24 weeks was carried out using multivariate techniques (non-conditional logistic regression) and the results show the intervention not effective in reducing the readmission rate. The same results were obtained for the multivariate analysis using Cox regression analysis and K-M curves for first readmission rates.

Discussion: The planning discharge for patients with CPOD is effective in terms of quality of life and patient level of knowledge about the disease. However, the characteristics of patients with CPOD make it necessary to include them in hospital discharge planning programmes using personnel such as specialist coordinating nurses.

F35-87**Empowering staff to provide palliative care for older persons in care homes**

Cameron Susan, Defilippi Kathleen

Hospice Palliative Care Assoc of South Africa, Cape Town, South Africa

Introduction: The needs of older persons have often been eclipsed by the demands of the country's HIV/AIDS epidemic and a pilot project to assess and address the needs of older persons in care homes is urgently needed. In South Africa, residential care for older persons is provided by professional nurses and non-professional caregivers. Although many have qualifications and skills in geriatric care, there is an identified lack of knowledge and skills in palliative care. A pilot project to assess the current situation, conduct a needs assessment, provide training and support for staff and monitor the outcomes in one identified care facility has been developed and will be implemented from January to July 2010.

Methods and Materials: Reviews of similar projects in the UK have been conducted. Initial meetings have taken place and a format for the project has been agreed. Staff members will be asked to complete a needs assessment questionnaire and focus group interviews will be arranged. Based on the results, a training and support pro-

gramme will be implemented. Pre and post intervention evaluations will be done to assess levels of change in knowledge, skills and attitude. A Palliative care Outcome Scale (POS) will be used to assess patient perceptions of care received.

Results: A detailed report will be produced, assessing the impact of the pilot project and making recommendations for further implementation. A training programme and documented guideline on the provision of palliative care for older persons in care homes will be developed.

Conclusion: In a country with limited financial and professional resources, it is essential to develop a means of empowering existing staff with additional knowledge and skills. We believe that this pilot study will provide a model to guide the provision of palliative care for older persons in residential care in South Africa.

F36-176**The 'nursing oasis' – an approach to improve the quality of life of people with advanced dementia?**

Stemmer Renate, Kneib Christina, Schmid Martin

Catholic University of Applied Sciences, Mainz, Germany

Introduction: The 'nursing oasis' project lies in the field of residential care and examines the support needs of people with advanced dementia. Other groups of people involved in the study besides the residents of the 'oasis' are their relatives as well as the day-to-day nursing staff.

The concept of a 'nursing oasis' assumes that people with advanced dementia who live together in a smaller group will experience a feeling of community: thus the well-being of the affected persons can be increased. With the constant presence of nursing staff, the inclusion of relatives, as well as olfactory or acoustic stimulation, positive results are expected.

Methods and Materials: The concept of the 'nursing oasis' intends to create accommodation for up to eight people in a common room in which the group will stay during the day. In addition, four double rooms will exist so that patients can retire at any time. The residents will also spend their nights in the double rooms. Based on a tailor-made weekly plan, various daily activities such as occupational therapy, mobilization, music therapy and basal stimulation will be carried out.

The study includes a control group of people with advanced dementia who are living in a traditional residential home. The descriptive research design includes qualitative and quantitative methods, for example observations, semi-structured interviews and document analysis.

Results: The main objective of the study is the evaluation of the concept of a 'nursing oasis'. Above all, questions concerning the effects on the well-being of the residents will be addressed. Aspects such as staff day-to-day workload and equipment required will also be examined and the relatives will be asked for their opinion.

Conclusion: Based on the results, a conceptual program will be developed which could serve as an aid and support for interested institutions.

F37-267**The development, implementation and evaluation of an outpatient palliative radiotherapy programme**

Vahedi Nikbakht - van de Sande Monique¹, Braat Cora², Staa AnneLoes van der¹

¹*Rotterdam University, Rotterdam, the Netherlands*

²*Erasmus Medical Center-Daniel den Hoed Cancer Center, Rotterdam, the Netherlands*

Introduction: Oncology patients receiving palliative radiotherapy experience major transitions. These patients are currently offered

shortened outpatient treatment. In 2004–2005, research by RU students demonstrated a lack of information, deficiencies in the continuity of care, and gaps in the communication between health care providers. To improve integrated care and cooperation between various care levels, multidisciplinary teams of professionals have designed a protocol and checklist called 'Transmural Programme Palliative Radiotherapy' (TZPR).

Methods and Materials: The RU Centre of Expertise Transitions in Care evaluated the process of regional implementation and the value of TZPR at patient and organizational levels. Themes were needs, logistic processes, symptom control, psychosocial support and after-care. A mixed methods design was used: focusgroup discussions and semi-structured interviews with professionals; a questionnaire and semi-structured interviews among patients.

Results: Health professionals are positive about the content and implementation of TZPR. They experienced an improvement in the quality of integrated care and support to patients. From the perspective of the patients these results are confirmed. Cooperation between various care levels remains the focus.

Conclusion: The participatory approach guarantees the desired integrated care for both professionals and patients.

F38-275

The development, implementation and evaluation of the 'Program for Palliative Primary Healthcare'

Vahedi Nikbakht - van de Sande Monique¹, Boogaard Renske², Voorham Toon³

¹Rotterdam University, Rotterdam, the Netherlands

²Regional Network Palliative Care Rotterdam & Environment, Rotterdam, the Netherlands

³Rotterdam University – School of Health Care Studies, Rotterdam, the Netherlands

Introduction: General Practitioners (GP's) in Rotterdam raised their voices about the discontinuity in integrated palliative primary healthcare. They experienced insufficient insight in the tasks and the expertise of other providers, fragmentation in the offered palliative care, varying expertise, unclear leadership and problems in the communication with primary healthcare nurses.

Methods and Materials: In 2008 the Regional Network Palliative Care Rotterdam & Environment (NPZR&co) started a project, based on, among other things, the Liverpool Care Pathway for the dying (LCP), on the system of preventive home visits by primary healthcare nurses, on in-service training, on the work of a consultation team and on the National Agreement for the Cooperation in Primary Healthcare (LESA). Subsequently the implementation of the 'Program for Palliative Primary Healthcare' has started. In 2010 the study will be completed by applying a multi-method design: document analyses, interviews, focus group discussions and a questionnaire study among all involved patients.

Results: Twenty GP's, six primary care providers and a home for the elderly work together in the National Agreement for Cooperation in Primary Healthcare (LESA). In 2009 all of the involved GP's joined in an in-service training in palliative care. In the meanwhile half of the primary healthcare providers have implemented the Liverpool Care Pathway for the dying (LCP) and offer preventive home visits due to primary healthcare nurses. The consultation team published and distributed flyers. The first results of the interviews with patients show a reasonable satisfaction with the care offered, however, also gaps in the communication between the various levels are apparent.

Conclusion: Patients with a life-threatening disease, like cancer, experience major transitions. Gaps between care levels should be prevented. Caregivers should be able to cooperate, to create optimal support for the patients and their relatives during their transitions. The participatory approach of the 'Program for Palliative Primary Healthcare' (ZPE) guarantees the contribution of caregivers in

improving their cooperation and the continuity of integral palliative care in the primary healthcare system.

F39-302

Palliative care for older people in Spain

Zabalegui Adelaida¹, Cabrera Esther²

¹Hospital Clinic de Barcelona, Barcelona, Spain

²Universitat Internacional de Catalunya, Barcelona, Spain

Purpose: To present palliative care system in Catalunya (Spain) and to examine the relationships among coping mechanisms (seeking and using social support, distancing, cognitive avoidance, behavioral avoidance, and focusing on the positive) and adjustment in older cancer patients under palliative care.

Methodology:

Design: Descriptive-correlational study.

Setting: Public hospitals of Catalunya (Barcelona, Lleida and Tarragona).

Sample: Convenience sample of 405 voluntary over 60 years old patients with cancer under palliative care who have signed informed consent.

Instruments: Survey research using the following instruments: MAC is the Spanish version of Ways of Coping Inventory-Cancer Version [(WCI-CV)] used to measure the coping strategies (independent variables) and the Profile of Mood States (POMS) used to measure adjustment (dependent variable). Both instruments have shown satisfactory validity and reliability scores ($\alpha=0.88$ and $\alpha=0.92$). The participants answer the MAC and POMS (Spanish versions) and also fill out a demographic information sheet that include a checklist of 17 physical symptoms that measures the degree of distress experienced by each symptom. Besides, the researchers filled out the medical data form from the participant hospital chart.

Measurements: The data was analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, factor analysis, Pearson product moment correlation, and multiple regression analysis were used to test the research questions.

Results: The sample included 50.5% men and 49.5% women, married and with a variety of cancer types (mainly colorectal, breast and lung cancer) under treatment with palliative purpose. The results will be presented in terms of: (1) Description of Palliative care system and (2) Descriptive and correlational results between coping mechanisms and adjustment.

Conclusions: The researchers recommend nurses to evaluate the coping strategies used by older cancer patient and potentiate those strategies related to adjustment in older cancer patients.

F40-317

An exploration of palliative care services in a nursing home in the Eastern Netherlands

Geerink Inge

Saxion, Enschede, the Netherlands

Introduction: This study was designed to explore, with care staff in one nursing home, their perceptions of the palliative care services they now provide, the extent to which they felt they met the clients needs, and the impact of this type of nursing care on themselves and their colleagues. Although there is a small purpose built hospice attached to the care institution in which the research took place, most long term residents are not transferred to this unit. Instead they remain in their existing care setting.

Methods and Materials: This was an exploratory, descriptive study, and therefore a qualitative approach was used, with data collected through focus groups, with one semi-structured interview with management. Focus groups were used as in addition to individual responses these enabled participants to discuss key issues with each

other and to reflect on specific instances and shared experiences (Patton 2002).

Results: The most striking outcome of the study was the recognition by participants that with the move to palliative care nearly all residents ultimately die on the ward. However, providing the additional care needed entails changes in care planning for a workforce with limited knowledge and experience of the principles that underpin palliative care. Much of the care is provided by carers with limited nursing knowledge and experience, who found the expectations from management, residents and families extremely difficult to cope with.

Conclusions: Compared with the definition of palliative terminal care given the WHO (year) the care givers use a narrow definition of palliative care, with an emphasis on relief and increasing sleep comfort, rather than implementing the principles of palliative care. Links need to be made to the adjacent hospice and education and training focused on palliative care needs to be implemented. Finally caring for those who are dying is emotionally demanding and support mechanisms need to be developed for staff.

F41-346

Nurses' perceptions of the signs and symptoms that mark start of the dying phase of cancer patients

Werff Gertruud van der¹, Nieweg Roos², Berendsen Anita²

¹Martini Hospital, Paterswolde, the Netherlands

²Hanze University of Applied Science, Groningen, the Netherlands

Introduction: A care pathway can facilitate good quality care for dying patients in the last days of life. The Liverpool Care Pathway for the dying patient (LCP), developed in the UK, is a multi-professional document that provides an evidence-based framework for all the different care aspects required in the dying phase of a patient (Elsershaw 2007). Studies have shown that the use of the LCP resulted in less symptom burden, less undesirable interventions, more comprehensive documentation of care and that the use of LCP contributes to lower levels of bereavement in relatives (Veerbeek 2008a, 2008b, 2008c). Nationwide implementation of this pathway is now ongoing.

Both literature and practise give little evidence about the signs and symptoms that mark the start of the dying phase. The LCP gives some criteria that can be helpful, however these criteria are not based on research. Adequate care in the dying phase requires early recognition of the dying phase. When not recognized, anticipation to the required comfort care is impeded. This may result in a range of problems like patients and relatives unprepared to death and undesirable transfers of dying patients. The purpose of this study is to gain insight in the signs and symptoms, of which hospital nurses think that they mark the initiation of the dying phase. Identifying these signs and symptoms should facilitate the implementation of a care pathway for the dying patient.

Methods: Focus groups were organized to gain insight in the experiences and opinions of hospital nurses regarding the signs and symptoms that they feel mark the start of the dying phase of oncology patients. All nurses have recent experience in caring for dying cancer patients. A topic guide, based on the holistic view of patients was developed. Several group discussions are planned. Data will be analysed using Grounded Theory.

Results/Conclusion: At the conference the results and conclusion will be presented.

F42-365

Detection of delirium in palliative patients: psychometric properties of the DOS scale

Detroyer Elke¹, Baeten Nele¹, Decruyenaere Marleen², Nuffelen Rita van², Vandenbergh Joris², Clement Paul², Milisen Koen¹

¹Katholieke Universiteit Leuven, Leuven, Belgium

²University Hospitals Leuven, Leuven, Belgium

Introduction: Delirium is a common complication among hospitalized palliative patients. Nevertheless, it remains frequently unrecognized or misdiagnosed. Efforts for early recognition are essential. The Delirium Observation Screening (DOS) scale has been developed to improve the early detection of delirium by nurses' observations during clinical care. This study determined the internal consistency and the diagnostic validity of the DOS scale in the palliative population.

Methods and Materials: Thirty-one patients (median age=72) admitted to a palliative ward of a university hospital were included, and underwent 68 paired delirium observations by bedside and research nurses. The psychometric validity of the DOS scale was tested by comparing the scoring results of the DOS, as scored by bedside nurses, to the results of the Confusion Assessment Method for the ICU (CAM-ICU) and by calculating the correlations with the Delirium Index (DI). The CAM-ICU and the DI were collected on three measurement points (repeated measures) by research nurses and were considered as gold standard. The internal consistency was assessed using the Cronbach's alpha.

Results: Delirium occurred in 9 of the 31 patients (29%) or in 9 of the 68 paired observations (13.2%) during the first 10 days of residence at the palliative care unit. The diagnostic accuracy of the DOS scale with the CAM-ICU as gold standard was high (94.1%), with 77.8% sensitivity, 96.6% specificity, 77.8% positive and 96.6% negative predictive value. A positive correlation was found between the DOS and DI scores ($\rho=0.58$, $P=0.001$). The internal consistency of the DOS scale varied from 0.77 to 0.92.

Conclusion: The DOS scale showed good psychometric properties in the palliative hospital setting which are comparable with previous results in other hospital settings. This instrument can make a valuable contribution to the early detection of delirium by nurses in palliative patients. Early recognition is the key component of delirium management and will decrease the negative outcomes associated with delirium.

F43-399

Hydration of the dying elderly: a literature overview

Bartoszek Gabriele¹, Lassen Britta¹, Schneider Iris², Meyer Gabriele¹

¹University of Witten/Herdecke, Witten, Germany

²University of Applied Sciences Jena, Jena, Germany

Introduction: Management of fluid balance at the end of a patient's life is controversial. Health professionals and relatives often struggle with the idea of hydration abatement during the terminal phase of life. We aimed to systematically review the impact of ongoing hydration versus hydration abatement on the dying elderly.

Methods: A systematic literature search was performed covering the relevant databases (PubMed, CINAHL and Cochrane Library). All settings of elderly end of life nursing care were included, i.e. home care, hospital or residential long-term care. Search was limited to references published after 1985 in English and German language. We excluded publications handling with coma patients, euthanasia and assisted suicide patients, and patients with long-standing nutritional problems (e.g. swallowing disorder in dementia). Two reviewers independently assessed retrieved articles for inclusion. Disagreements were resolved by discussion or, if necessary, with a third reviewer. Titles and abstracts of references were examined by two independent authors. Data extraction sheets have been developed for

systematic analysis of the content of the publications. For methodological quality assessment validated critical appraisal tools addressing the different study designs are used.

Preliminary Results: Initially, 84 publications were screened for eligibility. A total of 34 publications were finally included covering different types of research literature, i.e. reviews, guidelines, position statements, case studies, randomised-controlled trials, document analysis, and qualitative studies. Quality assessment, content data extraction and interpretation are still in progress. Analysis will at the latest be finished in summer and final results will be presented at the conference.

Conclusion: This systematic review is expected to significantly contribute to the body of knowledge summarising international evidence on the impact and adverse effects of hydration in dying elderly. It will also highlight the quality and quantity of research evidence available and will set an agenda for future research.

F44-435

A framework in CanMEDS competencies for nurse education in palliative care in the Netherlands

Wit Angelique de¹, Guldemon Anja², Vissers MC², Jansen A², Olden T²

¹V&VN Palliatieve Verpleegkunde, Roosendaal, the Netherlands

²V&VN Palliatieve Verpleegkunde, Utrecht, the Netherlands

Introduction: In the Netherlands, of variety of palliative nursing programs and courses are offered for nurses working in palliative care. To evaluate and audit these programs, the Dutch Nurses Association for palliative nursing has developed an outcome-based framework of nurse competencies for palliative care nursing. In 2010 this extensive framework is converted into CanMEDS competencies to simplify the use for educational institutes. CanMEDS means: 'Canadian Medical Education Directions for Specialists'.

Methods: From The guide to the Development of Nurse Education in Europe, the Professional Profile of Nurses working in Palliative Care and the Professional Nursing Educational Act, competencies were reduced to core competencies. The model of Benner: 'from novice to expert' is used to explain and stress the excellence of palliative nursing care. Subsequently, the core competencies of advanced and specialized nurses are subdivided in the seven key roles of the CanMEDS model, which encompassed all four the domains of knowledge, judgment, technique and professionalism of palliative care nurses.

Results: A useful and manageable document on competencies in palliative care nursing is developed and will be used to: evaluate educational programs and courses on palliative nursing in the Netherlands; support educational institutions in the development of nursing education in palliative care; communication with other professionals (e.g. physicians, social workers) in palliative care about multidisciplinary teamwork; encourage international exchange and collaboration with foreign nurses associations on palliative care to improve and develop nursing knowledge and skills in palliative care.

Conclusion: Education programs can use these new competences, described in CanMEDS competencies and the model of Benner, to develop curricula and to make sure that the quality of these programs are guaranteed. The CanMEDS competencies is a useful document to improve the transparency and the quality of palliative care on national and international level.

F45-453

Palliative terminal care for people in a clinical mental health care setting

Verkruijssen- Horjus Sarah

Trimbos-instituut, Utrecht, the Netherlands

Introduction: There is high attention for palliative terminal care (PTC) in the field of mental health care (MHC); guidelines and protocols are being developed to improve and structure the PTC. However, there is hardly any information on the care that is provided in clinical MHC setting at the moment when clients are in the terminal stage of a disease. Besides there is less knowledge about the quality and complexity of the care that is provided.

Methods and Materials: In this qualitative retrospective cohort study, we explored the availability of PTC in clinical MHC setting and identified the bottlenecks of providing PTC care, based on 31 cases from 16 different institutes. These were all clients who died in a Dutch MHC institute.

Results: We found three essential categories that highlight the palliative terminal care in the clinical mental health care setting. There is a wide variation in deathbed, which can be divided on two levels; social embeddedness and level of suffering in the terminal stage. Furthermore, communication has an essential role in the palliative care and might have special attention due to the psychiatric background and its effect on the persons communication. We found variety in the organization of the PTC and the way it is imbedded in the units of MHC institutes. Some units assign the PTC as part of their care, while others consult the extra knowledge needed to provide this care from an external institute, unit or network.

Conclusion: The three categories that highlight the palliative terminal care in the clinical mental health care setting, deathbed, communication and organization, may be used for assessing the quality of the provided PTC and may be used for constructing guidelines and protocols to improve the quality of the PTC in MHC setting.

F46-459

Gaining insight in the suffering of terminally ill patients

Georges Jean-Jacques

Hogeschool Utrecht, Utrecht, the Netherlands

Introduction: Improvement of the quality of end-of life-care is a priority. A prospective study directed on describing the end of life of terminally ill cancer patients has been performed.

Methods and Material: The data originated from a representative sample of physicians participating in a study of end-of-life decision-making who were treating a patient with cancer, whose treatment was no longer aimed at cure, whose life expectancy was probably longer than 1 week but no longer than 3 months, and who would probably continue to be treated by the same physician until their death. Eighty-five physicians completed a monthly questionnaire until patient's death.

Results: Most patients were 60 years old and older, 66% died within 2 months after the initial interview. Patients were confronted with an increasing amount of symptoms during the final months of their life. Fatigue, loss of appetite, dependency and feeling unwell were the most prevalent symptoms. The prevalence of requests involving end-of-life decisions increased during the last 3 months of a patient's life. The evolution of a request was especially related to an increase in the number of severe symptoms and concerns. Requests to forgo treatment were related to general weakness, while loss of dignity was a major reason for requests to hasten death.

These results led to a literature study on the way nursing care can contribute to alleviate the suffering of terminally ill patients.

Conclusion: The results of the prospective study give insight in the nature of suffering of terminally ill patients and underscore the importance of elaborating interventions directed at enhancing the

psychosocial well-being, the feeling of dignity and caring for the concerns of terminally ill patients in order to alleviate their suffering and to contribute to the quality of life.

F47-16

Health status in older patients with chronic low back pain undergoing spinal surgery

Roopsawang Inthira¹, Aree-Ue Suparb²

¹*Bann Mee Hospital, Uthaitanee, Thailand*

²*School of Nursing, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

Introduction: Low back pain (LBP) is one of the most prevalent musculoskeletal conditions, and it is one of the most disabling and costly problems affecting adults and older adults. The objective of this prospective descriptive research was to compare health status in older patients with chronic low back pain before and after spinal surgery, at a 6-week follow-up.

Methods and Materials: A total of 40 patients 60 years of age and older, were diagnosed with LBP with degenerative spinal diseases, and received spinal surgery as the primary treatment was recruited in the study. Data were obtained from patients admitted to orthopaedic wards at a university hospital in Bangkok. The questionnaire measurements used in this study were: (1) demographic; (2) Short-Form Health Survey Thai version; and (3) Modified Oswestry Low Back Pain Disability Questionnaire Thai version. Statistical analysis was performed by using descriptive statistics and paired *t*-test. A *P* value <0.05 was considered statistically significant.

Results: The findings revealed that the means score of Short-Form Health Survey were 30.31 (SD=17.01) and 80.97 (SD=15.54), before and after surgery, respectively and Modified Oswestry Low Back Pain Disability Questionnaire scores were 66.10 (SD=26.96) and 13.10 (SD=11.16), before and after surgery, respectively. The scores were significantly improved postoperatively (*P*=0.000).

Conclusion: Results from this study suggest that subjective evaluation tools which provide the benefits of general health status and specific health status related to spinal problems may help identify patients who are likely to benefit from surgical treatment. In addition, although postoperative disability seems to be decreased, the provision of continual care to the older adult patients with chronic low back pain is needed in order to restore the functional ability and improve their health status, which has a major effect and influence on the patients' quality of life.

F48-130

Social support reduces loneliness among nursing home residents without cognitive impairment

Drageset Jorunn¹, Kirkevold Marit², Espehaug Birgitte³

¹*Faculty of Health and Social Sciences, Bergen, Norway*

²*University of Oslo, Oslo, Norway*

³*Bergen University College, Bergen, Norway*

Introduction: Little is known about the association between the frequency of contact with family and friends, social support and loneliness among nursing home residents. This study aimed to determine the relationship between the frequency of contact with family and friends, social support and loneliness.

Material and Methods: We obtained data through face-to-face interviews with 227 mentally intact nursing home residents (aged 65–102 years) from all nursing homes in Bergen, Norway (250 000 inhabitants) using the global question 'Do you sometimes feel lonely?', the Social Provisions Scale and the Family and Friendship Contacts Scale. We analyzed possible relationships between contact frequency with family, friends and spouse, social support subdimensions and loneliness using logistic regression while controlling for

sex, age group, marital status, education, having a primary nurse, telephone contact, having a hobby and interests and comorbid illness.

Results: The social support subdimension attachment affected loneliness (*P*=0.03) after adjustment for demographic variables and comorbid illness. The frequency of contact with family, friends and spouse was not associated with loneliness.

Conclusions: Social support from significant others appears to be important in reducing loneliness. Clinical nurses should be aware of this and pay attention to the importance of social support for the residents in their daily practice.

F49-140

Advance care planning: a healthy form of engagement?

Leuven Karen van

University of San Francisco, San Francisco, USA

Introduction: An anecdotal finding of a recently completed qualitative study examining the beliefs, values, lifestyles and health status of adults at least 75 years old who identified themselves as healthy was that participants who self-identified as healthy had in place advance directives which dictated their end-of-life wishes. In contrast, participants who self-identified as fair or poor health did not have advance directives. These 'healthy' older adults also differed substantially from their counterparts in the degree in which they were socially engaged in their community and family, but varied little related to their actual medical diagnoses or health problems. As a result, it is postulated that there is a relationship between expressed end-of-life wishes, self-identified health, and engagement. Furthermore, promoting health among older adults includes not only activities to facilitate healthy living but also activities that facilitate end-of-life care that is fitting with the person's wishes and beliefs.

This current study further explores end-of-life wishes as related to health status and engagement. Via chart review, the advance directive status of residents of three skilled nursing facilities (*N*=260) was ascertained. Those with advance directives were then evaluated with an 11-item residential care and assisted living social activity scale to evaluate social engagement. In addition, health status was assessed using the Groningen Frailty Index. In addition, several case studies of residents without advance directives were explored for comparison. Data collection is in process at the time of this submission and will be complete by March.

It is hypothesized that those residents with a history of social engagement and positive health status will have advance directives in place that can be used to fulfill their wishes as their health status declines.

F50-241

Promotion of health and ageing: education for self-care

Almeida Maria¹, Azeredo Zaida²

¹*Nursing School of Coimbra, Coimbra, Portugal*

²*University of Porto, Porto, Portugal*

Introduction: The adoption of self-care as a care strategy in old age situations is consistent with the activities suggested to implement health promotion in terms of the development of personal attitudes and acquisition of skills and knowledge to enable the adoption of health promotion behaviours.

Material and Methods: The methodological choice is based on qualitative assumptions aimed to identify and analyse the practices of primary health care nurses in the promotion of older people's health in the area of self-care.

The data collection method was the semi-structured interview. We used the theoretical sample. Our sample was composed of 26 nurses

from health care facilities in the city of Coimbra, Portugal, with professional experience ≥ 6 months at that institution.

Results: Data analysis indicates two analysis categories: practices at the Health Care Centre for health promotion in the area of self-care, with a special focus on health education aimed at older people with a disease and on the healing role; practices at Home for health promotion in the area of self-care in which Nursing is appreciated and valued by the older person and family receiving health care, underlining the integration of the family in the care process through support, information and education.

Conclusion: Health education is especially important as promoter of well-being and health gains for the older person, family and community. It may also help to improve health, reduce disease risk, deal with chronic diseases and improve well-being and self-sufficiency. Based on the results, we can conclude that nurses should create the necessary conditions for older people and their families to maintain and implement self-care and live with the limitations imposed by age, thus improving family and social life. In addition, nurses should also play the role of mediators in the process of health education and autonomy of older people.

F51-83

Preliminary results from the reliability and validity of the stroke impact scale in Italy

Vellone Ercole, Venturini Giulia, Caramia M, Alvaro Rosaria
University Tor Vergata, Rome, Italy

Introduction: Given the constant aging of the population more and more people will be affected by stroke in the next future with consequences on the quality of life (QOL) of patients and their caregivers. The Stroke Impact Scale 3-0 (SIS) is a valid and reliable instrument to measure QOL in stroke patients. The SIS has never been tested for its reliability and validity on Italian population.

The aim of this study was to establish the reliability and validity of the Italian version of the SIS.

Methods and Materials: Thirty-three stroke survivors and treated in three rehabilitation hospitals in Rome have been selected for the study. Exclusion criteria were the following: transient ischemic attack; severe disability; concomitant severe systemic illness; and severe aphasia or decreased level of consciousness.

Results: Patients were 17 males and 16 females with a mean age of 71.56 years. Twenty-three patients had ischemic stroke, ten patients hemorrhagic stroke. The internal consistency reliability of the SIS obtained satisfactory Cronbach's Alpha values from 0.78 to 0.96. The Emotional subscale had a lower Cronbach's Alpha (0.19) as already reported in other studies. The test-retest reliability reached a correlation coefficient between the first and the second administration from 0.50 to 0.77 ($P < 0.000$) among the several subscales. The convergent validity was adequate and statistically significant with all the scales used.

Conclusion: The preliminary results of the present study showed that the Italian version of the SIS has good properties of reliability and validity and could be used as a specific instrument to measure QOL in stroke survivors. Because research on the impact of stroke on patients and caregivers is still at a beginning stage in Italy, the SIS could have a significant usefulness for future study.

F52-94

Activity and participation in home rehabilitation – older people's and family members' perspectives

Björkman Randström Kerstin¹, Asplund Kenneth², Svedlund Marianne², Paulson Margareta¹

¹Mid Sweden University, Östersund, Sweden

²Mid Sweden University, Sundsvall, Sweden

Introduction: Too little attention has been paid to older people and their family member's views and needs concerning home rehabilitation.

The International Classification of Functioning, Disability, and Health (ICF), launched by the WHO 2001, provides a guiding framework for rehabilitation. The ICF consists of two parts covering (1) functioning and disability, and (2) contextual factors. Functioning and disability includes three components; body functions and structures, activities, and participation, while the contextual factors include environmental factors and personal factors. The aim of this study was to describe older people's and their family members' experiences of home rehabilitation with a focus on activity and participation.

Methods: Interviews were carried out with six older people, as well as six family members over time. Interviews were performed jointly or individually in their homes. Data were analysed using qualitative content analysis.

Results: The results showed that home rehabilitation was significant for the older people's vital life goals, and family members had a considerable impact. The subject of older people's and family members' activity and participation in home rehabilitation is multifaceted and is described in the following categories; living with a frail body, striving for balance in daily life, an ongoing process to mediate well-being, being close at hand, feeling dependent in daily life, struggling to carry on and striving to be at home.

Conclusions: This study reveals the need to develop an individual practice for older people's rehabilitation, and one which also takes into consideration the views of family members. Psychosocial support and alleviation of pain were identified as areas with room for improvement to facilitate activity and participation. This indicates that the provision of high quality home rehabilitation requires professional competence and collaboration skills among the members of multidisciplinary teams in their encounters with older people and family members.

F53-95

Multidisciplinary team's promoting a rehabilitative approach among older people in home care

Björkman Randström Kerstin¹, Wengler Yvonne¹, Asplund Kenneth², Svedlund Marianne²

¹Mid Sweden University, Östersund, Sweden

²Mid Sweden University, Sundsvall, Sweden

Introduction: The aim of this paper was to describe the multidisciplinary team's experiences of home rehabilitation for older people in a municipality in Sweden. A guiding concept in care is to encourage older people to remain in their homes as long as possible, to facilitate both an active ageing and their participation in society. There is also a current trend for the family to take an increasing responsibility in caring for older people. Structural changes in healthcare, shorter stays in hospitals and other economical aspects ensure that home rehabilitation has come into focus. It is essential to address the shift towards outpatient rehabilitation. Despite the importance to society of older people's rehabilitation services, knowledge addressing teamwork by home rehabilitation is still limited.

Methods: The study has a descriptive qualitative approach. Focus groups interviews with six teams were performed. The multidisciplinary teams consisted of physiotherapists, occupational therapists, district nurses, nurse assistants, home helpers, home help officers responsible for needs assessment, and home help officers in charge of home help. Data was analysed by qualitative content analysis

Results: Preliminary results indicate that informants illuminate home rehabilitation as positive, e.g., regarding collaborating as a team and learning skills from each other to meet older people's different rehabilitation needs. The results also show a complex picture of rehabilitation individually adapted to the older people's daily lives, as well as using the home environment as an arena for training. Informants described that the highest importance for all professionals was to have a rehabilitation approach and working without boundaries in the team. Rehabilitation was an intertwined process with nursing, home care and social services working with flexibility in the home.

Conclusion: This study is expected to give a picture of opportunities and problems regarding home rehabilitation and contribute to the development of rehabilitation services based on team experience.

F54-108

Geriatric rehabilitation in nursing home patients: results of the GRAMPS study

Buijck Bianca, Spruit Monica, Zuidema Sytse, Geurts Sander, Koopmans Raymond
Radboud University Nijmegen, Nijmegen, the Netherlands

Introduction: Yearly, 27 500 patients are admitted for rehabilitation in Dutch nursing homes. Standardized protocols are limited, because evidence about rehabilitation in frail elderly like nursing home patients is scarce. The aim of this study was to explore predictors and outcome of geriatric rehabilitation in nursing home patients with stroke.

Methods and Materials: This study is part of the Nijmegen Geriatric Rehabilitation in AMPutation and Stroke study (GRAMPS), a longitudinal, observational, multicenter study with two follow-up measurements. Data were collected between January 2008 and January 2010 in 15 specialized rehabilitation wards of Dutch nursing homes. Baseline data (T0) were collected within 2 weeks after admission and focused on patient and disease characteristics, functional status, cognition, behavior and caregiver information. The first follow-up took place at discharge from the nursing home rehabilitation ward or 1 year after inclusion and focused on functional status and behavior. The second follow-up, where functional status, behavior, and quality of life were recorded, was 3 months after discharge in patients rehabilitating successfully.

Results: Data were collected from 186 stroke patients, 54.3% of them were female. With 20 points being the maximum score of the Barthel Index (BI), patients reached an average pre-stroke score of 18 points, with an average post-stroke drop of 7.3 points. After the stroke rehabilitation process BI again increased to 18. Functional abilities were stable 3 months after discharge.

Cognitive disability was measured in more than 25% of the patients before stroke occurred, and in more than half of the patients after stroke.

Conclusion: Geriatric stroke rehabilitation patients are characterized by unstable physical and psychological conditions. For this reason they need specific care. This specific care can be delivered at specialized wards with trained multidisciplinary teams in nursing homes. Consequently, a significant part of the study population is successfully rehabilitated.

F55-110

Self-efficacy and its influence on recovery of patients with stroke

Korpershoek Corrie
University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: There is growing evidence for the importance of self-efficacy in the care of patients with chronic illness. In the context of evidence based stroke care it was decided to describe the association of self-efficacy and patient outcomes after stroke and to investigate the evidence for the effects of self-efficacy interventions for stroke patients. Therefore, a systematic review of the literature was done, exploring the influence of self-efficacy and self-efficacy enhancing interventions on relevant patient outcomes as mobility, ADL, depression and health-related quality of life (HRQL) in stroke patients.

Methods and Materials: Search of CINAHL, Medline, PsycINFO and Embase was conducted for published studies for the period of

January 1996 to March 2009, focusing on stroke, the influence of self-efficacy and self-efficacy enhancing interventions. Nineteen articles were included in the review.

Results: Self-efficacy was positively associated with mobility, ADL and HRQ and negatively associated with depression. It is found that patients with high self-efficacy are functioning better in daily activities than patients with low self-efficacy. Four self-efficacy enhancing programs for stroke patients were identified, and two of these, a task oriented walking group exercise program and group education, were found to be effective. However, the overall evidence for the effects of these self-efficacy enhancing interventions was inconclusive.

Conclusions: The findings of this review provide evidence for the importance of self-efficacy during daily care for patients with stroke. A high sense of self-efficacy enhances functionality and HRQL whereby depression decreased. Although no convincing evidence was found regarding the effects of self-efficacy enhancing interventions, the qualitative results showed that nurses need to develop specific self-efficacy promoting interventions, tailored to the needs of stroke patients and their daily care. Nurses need to include self-efficacy in nursing care programs of patients with stroke. The nursing curriculum needs to pay more attention to the role of self-efficacy in the care for patients with stroke.

F56-159

Time use of stroke patients on rehabilitation units in nursing homes

Vermeulen Chantal¹, Buijck Bianca², Spruit- van Eijk Monica³, Derksen Els⁴, Hafsteinsdóttir Thóra⁵

¹*Vitalis Behandel Groep, Eindhoven, the Netherlands*

²*De Zorgboog, Bakel, the Netherlands*

³*SVRZ, Middelburg, the Netherlands*

⁴*Department of Primary and Community Care, Centre for Family Medicine, Geriatric, Nijmegen, the Netherlands*

⁵*Rudolf Magnus Institute, Utrecht, the Netherlands*

Introduction: Various studies have shown that task-oriented and purposeful training in daily activities is effective for the functional recovery of stroke patients and that more training is important for patients outcomes. Studies on time use have shown that stroke patients in hospitals generally spent little time on therapeutic activities. In this study, the time use of stroke patients in five rehabilitation units in nursing homes is examined from a nursing perspective. Because nurses play an important role in the rehabilitation process, and in coordinating care and bridging the gap between disciplines.

Methods and Materials: This study is a descriptive study conducted in rehabilitation units in five nursing homes in the Netherlands. The study is part of the Gramps-study. Patients with a diagnosis of stroke and staying in one of the rehabilitation units were eligible for participation. Demographic, illness-related an organization data were collected. The functional status is measured with the Barthel Index. Time use of patients is measured using Behavioural Mapping which is a time sampling technique that provides registration of systematic and accurate observations of therapeutic and non-therapeutic activities, interactions with others and location where activities take place. Observation of patients take place at 10-min intervals on weekdays (8:00–16:30).

Results: The data will be collected in the period January 2010 – March 2010, results are expected in July 2010. The results will be presented.

Conclusion: To improve care for patients with stroke, nurses and other health care professionals need to pay more attention to increase the therapeutic time use of patients and involve them in rehabilitation and exercise activities during the daily care activities. Nurses need to acknowledge their role in the multidisciplinary rehabilitation care.

F57-188

Multiprofessional collaboration in supporting older persons' physical functionality of in home careHupli Maija¹, Kuusela Marja²¹University of Turku, Turku, Finland²Municipal Health Care and Social Services Department, Turku, Finland

Introduction: Multiprofessional collaboration and collaborative competence are important in enhancing the physical functionality of older persons in home care. The purpose of this study was describe multiprofessional collaboration and collaborative competence in supporting the physical functionality of older persons in home care from the point of view of home care professionals.

Methods and Materials: The data were collected among home care professionals ($n=25$) in a South-Western city of Finland using focus group interviews. The social services department was represented by 12 and the health care department was represented by 13 professionals. Deductive content analysis was used for data analysis.

Results: Multiprofessional collaboration and collaborative competence consisted of interprofessional collaboration and skills and knowledge of supporting the physical functionality. The study revealed weaknesses in multiprofessional collaboration. Activities were not based on multiprofessional geriatric assessment and goal-setting together with older persons or assessing the outcomes. Supporting the physical functionality of older persons was based on professionals' basic education, experience and tacit knowledge. Principles of activities based on rehabilitative nursing. The staff had a wide range of methods to promote independence in daily living, but lack of attitudes and time impeded these. Knowledge and expertise were shared during the team meetings and consultations. Sharing knowledge and expertise with other actors was scarce.

Conclusion: The results of this study support the previous studies of multiprofessional collaboration in home care. The study revealed the need for education in teamwork and collaboration. The results can be utilised in enhancing the physical functionality of older persons in home care.

F58-194

Educational needs of patients and caregivers after stroke: a systematic review

Vergunst Martine, Hafsteinsdóttir Thora, Lindeman Eline, Schuurmans Marieke

University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: Providing patients with stroke and their caregivers with good education and information concerning the stroke recovery support people in the understanding of their illness, in decision making and reduce anxiety and uncertainty. It is important to tailor the patient education to the patients' or caregivers' needs. Therefore, a literature review was conducted to provide an overview of the patients' and caregivers' educational needs in different phases after stroke.

Methods and Materials: A systematic review was conducted based on the Cochrane method. Studies were selected according to predefined inclusion criteria by two reviewers (MV and TBH). Fourteen Studies were found that met all inclusion criteria and that were of sufficient methodological quality.

Results: Three studies focused on the needs of patients, seven on the needs of caregivers and four on the needs of both patients and caregivers. Educational needs of patients mainly concern the knowledge of stroke, such as clinical aspects, prevention, treatment and recovery, whereas the most described needs of caregivers focus on knowledge of stroke, consequences, care facilities for support and prevention. The results showed also that educational needs vary over the different phases after stroke. In the acute phase there is a need for information about the clinical aspects of stroke. Later on patients

and caregivers need information on psychosocial aspects and long term consequences too.

Conclusion: Educational needs were experienced as important by stroke patients and caregivers, but often not met. Educational needs change over time and patients and caregivers need information that is tailored to their own situation. The results of the review suggest that patients and caregivers will benefit greater extent if they receive specific types of interventions at the moment when they are "ready" for it. Patient and caregivers wanted information verbal and in writing. It was found important that health care professionals take time to answer questions and answer them honestly.

F59-208

The evaluation of a care model for elderly on a rehabilitation unit in a Dutch nursing homeBours Gerrie¹, Hupperetz Annie², Gastel Magda van¹, Bosch Paul van de², Bodecker Roger², Peeters Judith², Teuns Nina², Rossum Erik van¹¹University Zuyd, Heerlen, the Netherlands²Sevagram, Heerlen, the Netherlands

Introduction: The number of admissions of elderly people to a rehabilitation unit in a nursing home is high and still increasing (Peerenboom et al, 2008). It is of utmost importance to optimize the patient flow to prevent waiting lists. We developed a multidisciplinary model to improve the patient flow on a rehabilitation unit. In a pilot study, this model was implemented and evaluated on its feasibility in a large Dutch nursing home.

Methods and Materials: Patients files were studied, interviews with several stake-holders were conducted and a literature study was performed. From October to December 2009 this model was implemented on four rehabilitation units. Qualitative and quantitative methods were used for data analyses.

Results: The new model included systematic assessment of patient characteristics before admission, such as cognition, behavioural problems, functional status and caregivers strain. In addition, at least every month patients were scheduled for multidisciplinary discussion during their stay. The model was applied to 43 patients. Support was substantial during implementation, although not all professionals involved were familiar with the purpose and procedure of the project. Especially paramedics stated a lack of information about the project. According to the professionals, the systematic assessment of patient characteristics gave more complete and more in depth information about the patients. The assessment of cognitive and behaviour problems, functional status and care givers strain were valued most. Patients were always evaluated multidisciplinary, however, monthly evaluation was not always feasible or found necessary. Professionals struggled how to use the patient information as basic data for care planning in the multidisciplinary team.

Conclusion: In general, this pilot study showed that the newly developed model could be applied on a rehabilitation unit in a nursing home, although there was a difference in adherence between primary nurses and paramedics. This pilot revealed important building blocks to further optimize the model.

F60-238

Hospital-based rehabilitation of post-acute stroke patients: a retrospective study

Rejante Josephine, Stack Lori, Nguyen Hoai, Myers Karen

St. Luke's Episcopal Hospital, Houston, TX, USA

Introduction: The Rehabilitation Center located within a major Medical Center Hospital has 24 beds dedicated for acute rehabilitation. It is significant to have a precise and accurate assessment of post-stroke patients' ability to perform activities of daily living

(ADL) to assist in provision of quality care and measurement of stroke treatment outcomes. The purpose of this study is to provide a comparison of findings from other institutions regionally and nationally utilizing a uniform functional assessment instrument in order to evaluate program effectiveness and practice.

Methods and Materials: During the calendar year of January 11, 2009 to January 10, 2010, a retrospective study of $n=78$ patients (34 male and 44 female) admitted to the rehabilitation unit were analyzed. The Functional Independence Measure (FIM) was the tool used to predict the need for functional support and classify the level of patient's disability. FIM consists of 13 motor items and 8 cognitive items.

Results: The results indicated that a combination of an organized rehabilitation team and unit specializing in rehab situated within an acute hospital can facilitate early transfer of stroke patients. This allows patients to receive immediate intensive rehabilitation. Although the overall FIM change score, motor FIM change, discharge and discharge motor FIM scores did not show significant difference in improvement as compared to regional and national scores, our length of stay (LOS) and LOS efficiency showed lower values.

Conclusion: The utilization of a uniform assessment tool such as FIM can provide clinicians with valuable information relating to stroke patients level of disability and certain predictable patient outcomes such as duration of rehabilitation stay, level of function at time of discharge and potential discharge destination. It is a reliable instrument that can be used as a database to improve effectiveness and efficiency of a rehabilitation unit management and practice outcomes.

F61-255

Early detection of post stroke depression: a clinimetric evaluation of the PHQ-9

Man-van Ginkel Janneke de¹, Gooskens Floor², Schuurmans Marieke³, Lindeman Eline⁴, Hafsteinsdóttir Thóra²

¹UMC Utrecht/Rudolf Magnus Institute, Utrecht, the Netherlands

²Rudolf Magnus Institute/UMC Utrecht, Utrecht, the Netherlands

³Rudolf Magnus Institute/UMC Utrecht/University of Applied Sciences Utrecht, Utrecht, the Netherlands

⁴Rudolf Magnus Institute/UMC Utrecht/Rehabilitation Centre 'De Hoogstraat', Utrecht, the Netherlands

Introduction: Detection of post stroke depression is inefficient. Nurses consider observation and assessment as part of their role, but they hardly use screening instruments. The Patient Health Questionnaire (PHQ-9) is a short instrument, which does not require an intensive training. However, nothing was known about the clinimetric properties of the PHQ-9 in the daily care of patients with stroke. The aim of this study was to test the reliability, validity and clinical utility of the PHQ-9 administered by nurses in the daily care of stroke patients in hospitals and rehabilitation clinics.

Methods and Materials: A study with a descriptive comparative design was conducted in two hospitals and a rehabilitation centre. Stroke patients admitted with an intracerebral hemorrhage or ischemic infarction, and able to communicate adequately, were approached for participation. Also nurses, responsible for the care of the participating patients at the time of the study, were asked to participate. Depression was measured with the PHQ-9.

Results: The reliability of the PHQ-9 is good as is shown by an almost excellent interrater reliability (ICC of 0.98), a good test-retest reliability (Spearman's rang correlation=0.75) and a good internal consistency (Cronbach's alpha=0.79). The concurrent validity with the GDS-15 on severity scores was good (Pearsons correlation=0.7). The diagnostic accuracy of the PHQ-9 compared with the GDS was good with for major depression as well as for any depression with sensitivity of 80% respectively 100% and specificity of 85%

respectively 86%. The clinical feasibility of the PHQ-9 for nurses is judged as good.

Conclusion: The clinimetric properties of the PHQ-9 were found to be good to excellent and it was found to be feasible in the daily care of patients with stroke. Therefore, it was concluded that the PHQ-9 is suitable for use by nurses in the regular daily care of patients with stroke.

F62-287

ALSOVA, an intervention study with family caregivers and persons with mild Alzheimer's disease

Välimäki Tarja, Karttunen K, Vehviläinen-Julkunen K,

Pietilä A-M, Pirttilä T

University of Eastern Finland, Kuopio, Finland

Introduction: Alzheimer's disease (AD) imposes a heavy and rapidly increasing burden to families as well as on the health care systems in European countries. Current policy emphasizes families' role as principal care provider at least in the early and moderate phase of AD. It is important to recognize the factors that contribute to the capacity of persons with AD to live at home with minimal health deficits to family caregiver. Our objective was to examine and compare the factors that are related to quality of life, general health and well-being both family caregivers and persons with AD.

Methods and Materials: Recently diagnosed AD patient-spouse caregiver pairs ($n=240$) were randomized to one of two groups: (1) Intervention group will get intensive psycho educational courses during first 2 years after diagnosis+traditional care, and (2) traditional care. Data collected included general information of the family caregivers and persons with AD including age, sex, education, physical health, medication, household composition, living arrangements, subjective well-being, depression, and health related quality of life (HRQoL) and recourse utilization. Data of cognitive and daily functioning, severity of disease, presence of behavioural symptoms were also collected yearly.

Results: At the baseline family caregivers were most frequently spouses, in 70% of families. A child served as primary caregiver in 23% of families. Duration of symptoms was 39.1 months until diagnosis. Mean MMSE was 21.5 ± 3.4 . Female caregivers reported lower overall well-being, GHQ score, $P=0.041$. Women also reported more depressive symptoms. In the total scoring of HRQoL was no significant difference between men and women, but women reported problems in sleeping, distress and speech.

Conclusion: We will follow up this cohort for 5 years and analyze possible intervention effects on family caregiver related outcomes as well as duration of homecare.

F63-17

Development of an electronic care plan: better care thanks to better information technology

Dijkstra Ate

NHL Hogeschool, Leeuwarden, the Netherlands

Introduction: In the Netherlands the funding of institutional long term care is developing from a supply-led to a demand-led scenario. Together with the demand-led care system, the government in 2009 introduced the so-called Care Level Packages (CLP), which describe the care a person needs 'in hours a week'. These developments constitute an important change in the existing nursing workflow: carers must learn to negotiate with the patient about his needs. In order to make transparent which care activities will be delivered to the patient, a large care provider in the Netherlands wanted to create greater efficiency of care and less bureaucracy in writing a patients care plan by means of information technology.

Methods and Materials: Co-design has been used as method. Co-design is a development of systems thinking, which starts from viewing the world through the eyes of another. To assess the needs of the patient, the Care Dependency Scale (CDS) became an essential part of the workflow of the web application. The CDS has its origin in the 'basic human needs theory' with representatives like: Maslov, Abdellah, Henderson and Orem.

Results: Based on talks with carers about the face and content validity of the information on the web application an electronic care plan has been developed. In co-creation with the carers, the basic needs and descriptions coming from the CDS and corresponding care activities have been made suitable for use in an electronic care plan. The final result is a web application, which carers can use to draw a care plan.

Conclusion: The web application based on the principle of simplicity and quality (best practice) on the one hand and individual-trailing funding and demand-led care on the other hand is now available for use in practice. A short demonstration will be given during the oral presentation.

F64-61

Early detection of dementia: signs from daily practice

Wouters Eveline, Nieboer Marianne, Cock Diana de, Veeger Monica, Peeraer Louis

Fontys University of Applied Sciences, Eindhoven, the Netherlands

Introduction: If early signs of potential dementia could be effectively registered and interpreted, undesirable emergency situations might be prevented and proper care could be given long before things get out of hand. Individual signs often do not elicit a call to action. The possibility to combine signals from several sources into a central (digital) system, would generate a much more complete view. The ultimate aim of this project is to develop a system and a procedure that would facilitate just that. For this, we need to answer the following research questions: (1) Who are the important social contacts (of elderly persons) who might detect early signs of problems? (2) How do these people deal with possible signs of early dementia, and how do they experience the current situation? (3) How do elderly persons and their important social contacts perceive a solution like the one we are envisioning (a kind of 'central signalling system')?

Outline of Methods: (1) Literature review on early signs of dementia. (2) Analysis of social contacts of elderly persons in a selected suburban/rural area in the Netherlands. Method: non-directive interviews with a selection of elderly persons within different social contexts. (3) Qualitative research. Method: in-depth interviews with persons providing volunteer aid to partners, parents, relatives, neighbours or friends with dementia. (4) Qualitative research. Method: in-depth interviews with experienced persons providing informal care (e.g., from meals on wheels, housing associations) to elderly clients. (5) Qualitative research. Method: in-depth interviews with health care workers providing formal care to elderly patients.

Results: The results will enable us to provide the necessary background information and input from a user point of view to develop a system for the combination of signs of dementia in an early stage.

F65-118

Assistive technology as an alternative to physical restraints in psychogeriatric nursing homes

Zwijnsen Sandra¹, Boekhorst Selma te¹, Hertogh Cees¹, Francke Anneke²

¹*VU medical centre-EMGO institute, Amsterdam, the Netherlands*

²*Nivel, Utrecht, the Netherlands*

Introduction: Assistive technology is proposed as an alternative to physical restraints in nursing home care for people with dementia.

The number of nursing homes implementing assistive technology is steadily rising. However, research on usability is lacking.

Objectives: This mixed methods study explored the usability of assistive technology as an alternative to traditional restraint use in nursing home care for people with dementia.

Methods: Residents, proxies and professional caregivers of seven nursing homes were involved in the study. Three of these nursing homes had a policy to promote assistive technology use in their care for people with dementia and already used much assistive technology. The other four nursing homes did not have such a policy, but often used some form of assistive technology.

Interviews and focus group discussions were held to examine respondents' view on assistive technology. Nine of those interviews were held with key figures in the organisation, seven interviews were with proxies of nursing home residents. Eight focus group discussions with nursing home staff were conducted.

Professional caregivers also completed a questionnaire assessing their own view on assistive technology, job satisfaction and moral distress.

Results: The term restraint is ambiguous to caregivers; their view on the restraining qualities of a method or intervention differs from the legal definition. This discrepancy creates difficulties when implementing policy to reduce physical restraint use. Also, assistive technology seems to be used supplementary to existing measures rather than as an alternative. Technical shortcomings and organisational difficulties are other impeding factors when aiming at substituting physical restraints with assistive technology.

Conclusion: Assistive technology wasn't used as an alternative to restraints. A better supported and more usable description of restraints and a better considered policy on the use of assistive technology could lead to the use of assistive technology as an alternative to restraints instead of just supplementary to existing measures.

F66-204

Ambient Assisted Shared Living for the elderly (AMASL) evaluating the user perspective

Lilgenau Anneliese, Mayer Hanna
University of Vienna, Wien, Austria

Introduction: The interdisciplinary project 'Ambient Assisted Shared Living (AMASL)' is carried out to include elderly people into the lives of their Family and Friends and to support every day activities. AMASL offers homes sensors and audio-visual components that allow disconnected Family and Friends to interact or communicate with one another, allowing disconnected elderly people to engage in social activities like playing cards or have an interactive dinner with family or friends. The main research questions of the interdisciplinary project are: How does the AMASL influence the social life of the elderly and their family? Is it possible to support social integration of elderly people in the family and include them in daily life activities using AMASL with particular attention to the multimedia communication services?

Methods: To evaluate the technical solutions of AMASL an extended field study will be carried out over a few months to derive in depth results about user acceptance and the effects of the technical solution on the well being, social integration and communication of the elderly. For the field study, a case study design is chosen. Due to the small sample size (seven test users including their family or friends) and the openness of the questions, the focus is set on qualitative methods.

Sampling Process and Results: One of the challenges of this project was to find a suitable set of persons willing to participate in the study. Up to this point, we have completed the selection process of the test users. The selection of elderly people involved in this practical research project shows important findings about methodological aspects, ethical dimensions and applied research procedures. An evaluation period of 2 months is planned for each household to use the

equipment at which time, the results of the planned field study will be ready to present at the end of September.

F67-206

Using technology in the care of older people: development of a eHealth research laboratory

Dale Jan Gunnar, Dale Bjørg

University of Agder, Arendal, Norway

Introduction: New knowledge of how eHealth solutions can be integrated into everyday life for patients and older home-dwelling people can contribute to maintain quality of life and independent living. This growing industry is ripe for exploration by nurses who can empower the patient and caregiver to gain self-care and coping skills. Health care personnel, and particularly home nurses, need to be engaged in the development and research of eHealth technologies to enable the patient's home to be the point of care. The aim of this poster presentation is to demonstrate how a new and modern eHealth laboratory may work for simulating real patient situation.

Actual Project: An eHealth research laboratory is to be established at the University of Agder in Norway in 2010. The laboratory provides a lot of opportunities to explore integrated technological solutions for hospital wards, nursing homes, and for patients living in own home, i.e. 'smart house' solutions which can be used to support older and disabled people, providing safe and empowering environments. Integrated solutions for older people and their family caregivers can be simulated in close collaboration between different sectors and levels of health care. User guidelines can be developed based on experiences from research projects carried out. There will be a wireless infrastructure designed as a copy of a wireless hospital network. A dedicated room will be furnished as a private home for a home care patient, with integration of 'smart-house' technologies like sensors, detectors and alarms installed to prevent dangerous situations.

Conclusion: The presented laboratory will be unique in Scandinavia, and probably exceptional in an international perspective. It provides a lot of opportunities for simulating complex patient scenarios and advanced health care services, and to evaluate technological and electronic equipment planned to be implemented in real patient situations.

F68-219

Assessing needs among people with mild dementia in user-driven development of assistive technology

Sävenstedt Stefan, Karlsson Eva

Luleå University of Technology, Luleå, Sweden

Introduction: A major challenge in involving people with dementia is to determine what methodology can be used in order to optimally understand, measure, and interpret their needs and wants. The aim of this presentation was to reflect on experiences of assessing needs and wants among people with mild dementia in two user-driven development projects of assistive technology services, the MemoryLane and COGKNOW projects.

Methods and Materials: The user-driven design process in the ongoing MemoryLane project and the finished COGKNOW project followed a sequence of three steps. The first step was to acquire concrete user needs as a base for development, the second step was the development process of prototypes, and the final step the testing and evaluation of final prototypes. In both projects dyads of people with dementia and their informal carers were involved in the assessments. The assessment of concrete needs and wants was based on rigorously developed research questions. In the analysis the different type of data were first analyzed separately for both perspectives, and thereafter integrated to a comprehensive understanding.

Results: General abstract questions seemed more difficult to answer for persons with dementia than more detailed and concrete questions. Despite these problems, their answers on general open questions provided valuable additional information to the structured

questions. Carers could provide more elaborative information. However, there were more similarities than differences between the answers of the people with dementia and their carers, and few contradictory answers were given.

Conclusions: Persons with dementia provide special challenges in user-driven development processes of assistive technology services due to their cognitive impairments. The use of a combination of data collections methods, combining open and structured questions in interviewing persons with dementia and their carers with observations by researchers can provide a comprehensive understanding that addresses some of these challenges.

F69-232

The user perspective in technology research projects to enhance the quality of life of elderly

Mayer Hanna, Lilgenau Anneliese

University of Vienna, Vienna, Austria

The aim of this paper is, due to a current study (Ambient Assisted Shared Living for the elderly), to analyze the possibilities and barriers of an active integration of the elderly people (the users) in the development and conversion of new technical products. Following questions will lead the discussion:

What means 'user perspective' definitely and how could elderly people get active involved in research? How can they take part in the developing process of a new technology and what is the consequence for research methods, research practise and for ethical considerations? What kind of possibilities and barriers will arise, when taking the idea of 'user perspective' seriously?

Discussion and Vorsequences: To involve users in the development of technical innovations presumes to carry out extensive pilot Studies with prototypes, rather than Evaluation research. The consequence of this is a small sample size and furthermore a limitation in choosing methodological approaches and methods of data collection. A case study, for example, is an appropriate design. To get broad information and to involve the participants view in the process, the use of multiple methods (such as Interviews, observations, diaries, etc) are necessary.

Sample Characteristics and Recruiting Strategies: The participants have to use a prototype – a product that is often in it's infancy. This fact causes special recruiting strategies. On the one hand you should involve real users (that means people in the age of the target group of this product), on the other hand they must be open-minded and curious and not afraid of unexpected situations (characteristics that are often not in a high gear in the target group).

Ethical Aspects: An ethical clearing is not easy, because in the development process of a product many open questions due to functional or some times safety aspects cannot be answered in advanced.

F70-247

Monitoring of physical frailty in older people to support selfmanagement and care

Neyens Jacques¹, Vermeulen Joan², Spreeuwenberg Marieke², Rossum Erik van², Hewson David³, Witte Luc de⁴

¹*Maastricht University, Faculty HMLS, Maastricht, the Netherlands*

²*South University, Heerlen, the Netherlands*

³*Université de Technologie Troyes, Troyes, France*

⁴*Maastricht University, Maastricht, the Netherlands*

Introduction: The aim of this project is to develop and evaluate an innovative system for monitoring physical frailty indicators (weight, balance, gait, muscle strength, endurance and physical activity) in community-dwelling older people. The system gives feedback to the user about his/her functional status and warns the user and/or

caregivers if a change in the indicators occurs. With this feedback the system supports the user in his/her selfmanagement regarding physical functioning. It also enables monitoring of the development over time. In this way, the negative consequences of frailty can be postponed or prevented and care can be tuned to the needs related to changes in functional status (reactive care).

Methods and Materials: The project consists of three parts. Part one concerns the development of the monitoring system, consisting of a bathroom scale measuring weight and balance, a gripball measuring strength in the hand, and an activity monitor measuring physical activity and gait. Part two regards the development of the feedback- and advisory programme, that gives advice regarding physical activity, related to personal goals. Elderly people will be intensively involved in the development process. The results will be tested in small scale pilot studies. Part three is an evaluation study in 50 older persons with early stage frailty symptoms.

Results: The study started in January 2010. In the presentation, the technology and the study approach will be presented, and preliminary results will be shown.

Conclusion: The study is ongoing. The evaluation will be directed to technical performance of the system, functionality and usability for the target group, and the added value of the system for the care process as perceived by the users, their informal caregivers and professional caregivers. Also, the relation of the data provided by the system and outcome measures of functional status will be studied.

F71-257

The importance of human meetings in health care at home with mobile distance-spanning technology

Wälivaara Britt-Marie, Andersson Staffan, Axelsson Karin
The Luleå University of Technology, Luleå, Sweden

Introduction: New solutions could be a challenge for both the persons in need of health care at home and the health care professions when the person's individual needs in health care at home have to be met. The mobile distances-spanning technology (MDST) could come into use to support the health care at home. Before implementing the MDST the voices of persons in need of health care at home need to be heard about the use of MDST.

Methods and Materials: The aim was to describe views and experiences about the use of MDST in health care at home from the perspectives of persons in need of health care at home. The persons were living in ordinary homes and all had experiences of MDST when district nurses were caring for them at home. Persons in need of health care at home ($n=9$) participated in individual qualitative research interviews for data collection. Qualitative content analysis was used for data analysis.

Results: Participants put health care at home in the first place and the MDST was put in the second place. The importance of human meetings was put forwards. The results indicate in different ways opportunities, possibilities and risks with using MDSTs. When the MDST was used, it was important to have established a relationship and trust to the district nurses and the general practitioners, and to know them and to be known by them. The participants expressed that the health care professionals need to see the person behind the technology.

Conclusion: Human meetings can never be excluded in health care at home even when a virtual meeting for some issues is relevant. The MDST can never capture or replace the human meetings but human meetings and virtual meetings can be used as complement to each other.

F72-285

How to accept the use of technology in care for people with dementia? Designing with care!

Schikhof Yvonne

Rotterdam University, Rotterdam, the Netherlands

Introduction: The potential of assistive technology for the planning of new residential care facilities can hardly be ignored. The main

question in a Rotterdam project, involving Rotterdam University, a health care institute, and a company, was: Is acceptance of an integrated system including sensors, microphones and cameras, feasible, especially by care professionals and family members of residents? Recently an integrated system was developed elsewhere, still using standard infrared sensors in bedrooms. No cameras were used as it was assumed that this would violate privacy issues.

Methods: We designed and developed a humane integrated monitoring system with PDAs for the nursing staff, using value sensitive design within a human centered design process. Prior to the performance test in a real life nursing home context, we investigated the acceptance of the designed system. A survey was carried out before and after informational meetings. Both tests included identical questions and statements about the acceptance of camera surveillance in the bedrooms of residents with dementia. In focus groups we further explored important values in small scale housing projects before implementing the system.

Results: In the post test all staff members and family members found the use of cameras acceptable or highly acceptable. The performance test resulted in a positive advice on implementing this monitoring system in a new small-scale housing project. The system has now successfully been implemented.

Conclusion: There was no resistance of users during the test or implementation of this new system. In our study the nursing staff even protested because the system was removed after the test phase. Incorporating values into the design is different from discussing ethics when introducing innovative technology in geriatric care. Innovative technology can be seen as a promoter of both humane and inhumane care. We learned that aiming at humane care is promoted by using a human centered approach: designing with care.

F73-349

Older people & technological innovations-lifelong learning and applications for health and wellbeing

Tetley Josephine¹, Holland Caroline¹, Nederland Trudi², Toorn Jessica van den², Reichert Monika³, Lis Katharina³, Mason Anne⁴, Kokol Peter⁵, Blazun Helena⁵, Hughes Jonathan¹, Waights Verina¹, Holland Simon¹

¹*The Open University, Milton Keynes, UK*

²*Verwey-Jonker Institute, Utrecht, the Netherlands*

³*Technical University of Dortmund, Dortmund, Germany*

⁴*University of Stirling, Inverness, UK*

⁵*University of Maribor, Maribor, Slovenia*

Introduction: This pan-European project, involving England, Scotland, Germany, the Netherlands and Slovenia, has questioned whether current approaches to introducing new technologies are the best way of enabling older people to learn about and use technology in their everyday lives. The project team are therefore exploring whether learning based on self-directed interaction and supported engagement can enhance the opportunities for older people to engage with new technologies, generate new insights and applications of technologies and identify potential future applications for new technologies that can enhance the health and wellbeing of older people.

Methods and Materials: In each of the partner countries older people are engaging in workshops where play is used as the main method of enabling people to engage with new and existing technologies. The facilitated technological play will include the use of touch screens, haptic technologies, gaming stations, mobile telephones, traditional computers or equipment designed for use in health and social care situations. The data collection methods used to capture and evaluate the older people's experiences will include: video recordings of interactive play workshops, participant observation, focus groups and interviews.

Findings: This poster will focus on preliminary findings from country specific workshops and the first pan European learner exchange in the Netherlands, where older people and their support-

ers will have shared individual and group experiences. The poster will also present any preliminary findings related to older people's views on the ways in which ICT might positively influence their health and wellbeing.

Conclusion: This poster aims to demonstrate how we have worked to facilitate older people's use of new technologies. The work presented will also consider the ways in which older people feel that new and emerging technologies can be used to enhance individual and collective health, wellbeing and social connectedness.

F74-391

The mobile distance-spanning technology in health care at home

Wälivaara Britt-Marie, Andersson Staffan, Axelsson Karin
The Luleå University of Technology, Luleå, Sweden

Introduction: Health care at home could be a challenge for both the persons in need of health care at home and the health care professions when the person's individual needs in health care at home have to be met. There is a need for different technical solutions in order to create opportunities for persons in need of health care to stay in their own homes and get health care. The mobile distances-spanning technology (MDST) could come into use to support the health care at home for the future.

Methods and Materials: The aim of this presentation is to describe the usefulness of MDST in health care at home. During a project MDST have been tested as an addition in health care at home. The district nurses used 11 different mobile equipments in home care. During the home visits they filled out a form ($n=154$) about which equipment they used when caring for persons in home care.

Results: The district nurses did totally 184 home visits and in 154 cases they used the equipments during the test period. The most frequently used equipment was the mobile computer with access to the patient record (73%) and the access to the patient record was reported as useful at home. The district nurses noted importance to use the bladder scanner even if it was not used so often (11%). The digital camera was used (8%) and was reported as complicated but useful when documenting the healing process of wounds. When the electronic stethoscope was used (7%) some reported a disturbing sound that hampered the assessment.

Conclusion: There are several equipments that could be useful and it is important to test and identify the equipments that are most suitable for use in home care.

F75-404

EU projects – opportunities for older people

Blazun Helena¹, Kokol Peter¹, Horton Khim², Collins Rita³

¹*University of Maribor, Maribor, Slovenia*

²*University of Surrey, Surrey, UK*

³*University College Dublin, Dublin, Ireland*

Introduction: In 2007, the European commission published an action plan entitled 'Information communication technology and aging' (Initiative 2010), which supports information communication technology (ICT) in connection with older people as a way of keeping older people connected to society.

Methods and Materials: The Faculty of Health Sciences in partnership with other European universities has engaged in developing study programmes according to new trends in health care and EU strategies. The main focus is on educating health care workers engaged with the general population but especially with older people and to prepare them to execute the highest quality of health care possible.

Results: The work of the above team in EU Projects involved a preparation of a State of the art literature review which clearly demonstrates that older people are not familiar with ICT and therefore they are not in a position to exploit the full advantages of ICT. To advance state of the art review we decided to educate carers for older people in manner to help them dealing with ICT. On the other hand we also implemented the idea that we have to educate older people in the ICT employment. We decided that we will explore this topic further in a network of EU projects consisting of two already finished, but sustainable EU projects (Health ProElderly and POP-PIE) and three running projects (GEROM, Primer – ICT and OPT – IN) with the aim to empower the use of ICT techniques among older people.

Conclusion: Our experiences showed that EU projects related to use of ICT and especially their participatory implementation and execution is a great opportunity for older people as it has the potential to improve their well being, to enable reemployment of their wisdom and knowledge back into society and to significantly impact on healthcare costs.

Parallel Session G

G1-S4 Symposium

Clinical nursing rehabilitation guideline stroke: evidence based stroke care

Goal: To provide nurses with an overview of the most recent evidence based nursing care for patients with stroke.

Overview: Clinical Nursing Rehabilitation Guideline Stroke: The development of the guideline.

1 Clinical Nursing Rehabilitation Guideline Stroke: A feasibility study.

2 Patients with aphasia after stroke and the role of nurses: A systematic review.

3 Task oriented training in nursing care of patients with stroke: A systematic review

4 Post stroke depression: therapeutic interventions and the role of nurses: A systematic review.

Clinical nursing rehabilitation guideline stroke: the development of the guideline

Hafsteinsdóttir Thóra, Lindeman Eline, Schuurmans Marieke
University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: Most stroke patients experience a wide variety of neurological impairments which influence the patient's ability to recover after the stroke. Nurses need to pay more attention to the early recognition of this broad range of health care problems, to enable an initiation of specialized treatment, thereby improving the stroke patients' ability for rehabilitation and recovery after the stroke. Therefore, we set out an international collaboration project with the aim to develop evidence based clinical nursing rehabilitation guideline (CNRG) for stroke patients that nurses may use in their daily care.

Methods and Materials: The Scottish Intercollegiate Guidelines Network and The Dutch Institute for Healthcare Improvement design was followed.

Results: First the theme's were selected: (1) Theoretical background of rehabilitation, (2) Mobility and activities of daily living, (3) Falls, (4) Nutrition and malnutrition, (5) Swallowing impairments, (6) Dehydration, (7) Cognitive impairments, (8) Communication impairments, (9) Depression, (10) Sexual impairments and (11) Education of patient and partner. Then, systematic reviews were conducted. The first draft CNRG was written, and judged by a group of 32 experts, which included nurses and other professionals in stroke care. Then a feasibility study was conducted in health care facilities. The nurses followed training in how to use the guideline and started using CNRG in the daily care of patients. At last the various parts of the CNRG were adapted and the final version of the guideline written.

Conclusion: Using the CNRG, nurses will be able to detect symptoms of health care problems and provide evidence based nursing interventions and patients will timely be referred to specialised health care professionals if needed. We suppose this will result in improved nursing care and management of patients with stroke and result in improved efficiency and quality of care of these patients.

Clinical nursing rehabilitation guideline stroke: a feasibility study

Hafsteinsdóttir Thóra¹, Varekamp Rudi¹, Lindeman Eline¹, Schuurmans Marieke¹, Rensink Marijke²

¹University Medical Center Utrecht, Utrecht, the Netherlands

²Research Centre for Innovations in Health-care, University of Applied Sciences, Utrecht, the Netherlands

Introduction: As a final step in the development of an evidence-based Clinical Nursing Rehabilitation Stroke Guideline (CNRS-guideline), this study set out to evaluate: the feasibility of the draft version of the CNRS-guideline; how the nurses experienced using the guideline; how often the recommendations were used and if the nurses used those recommendations relevant to patient problems.

Methods and Materials: Using prospective, descriptive design stroke patients (N=105) and nurses (N=30) from four health care facilities were included.

Results: Forty-four percent of the patients were female. The mean age was 71 years. Eighty-one percent of the patients needed assistance or could not walk, and with a median BI score of 9.0. Of the nurses 90% were female, with the mean age of 38 years. Fifty-three percent of the nurses had >6 years experience in stroke care. The nurses' general impression of the recommendations scored a median of 6.0 (on a scale of 0–10). Ninety-four percent of the nurses found the aims of the guideline clear; 56% of the nurses found the guideline provided new insights into stroke care and 63% found the recommendations practical. Among the challenges experienced were lack of knowledge (62%) and skills (54%), and organisational difficulties (71%). There was a wide variation in how often the recommendations were used. Of the 243 recommendations, 32 recommendations were eliminated and a number of recommendations were adapted, leaving the final guideline with 211 recommendations.

Conclusion: Although the CNRS-guideline was generally found feasible various challenges were experienced. Based on the findings, the draft version of the CNRS-guideline was adapted to the needs of patients and nurses. The findings of the study provide important information for future implementation of the CNRS-guideline. The CNRS-guideline contains evidence-based knowledge that is important for future nursing education and research and may be an important means of providing evidence-based care for patients with stroke.

Patients with aphasia after stroke and the role of nurses

Poslowsky Irina, Hafsteinsdóttir Thóra, Schuurmans Marieke, Lindeman Eline

University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: The most frequent cognitive disorder after stroke is aphasia. Of these aphasic patients, 60% recovers incomplete after 1 year. Aphasia reduces patient's ability to communicate by language expression and comprehension. In daily nursing care of stroke patients, communication is very important to meet patient's needs and wishes. When communication is limited, what are evidence-based nursing interventions focusing on the aphasia of patients with stroke?

Methods and Materials: The study design was a systematic review, based on the Cochrane method. The key words included: cerebrovascular accident, stroke, communication, aphasia, nursing, assessment, intervention and rehabilitation.

All identified articles were assessed by two, independent, reviewers (IU, TBH) on the basis of title and abstract. The methodological quality of the studies was judged.

Results: Of 356 abstracts, a total of 24 studies met the inclusion criteria. Seven systematic reviews and 17 studies of various design and methodological quality were included in the review. The results showed the importance of early detection of aphasia and revealed two valid and useful screening instruments for nurses. Intensive speech-language therapy during the acute stage of stroke showed better rehabilitation outcome than a less frequent therapy or a delayed start. Besides speech-language therapists, trained persons provided effective speech-language interventions.

Conclusion: The role of nurses is important to the rehabilitation of stroke patients with aphasia. Early detection of aphasia is the first stage before initiating speech-language therapy in the acute stage of stroke. More collaboration between nurses and speech-language therapists can enhance the intensity and functionality of speech-language interventions in order to improve the therapeutic impact and the quality of treatment. Recommendations to integrate speech-language interventions in clinical nursing care are discussed.

Task oriented training in nursing care of patients with stroke: a systematic review

Hafsteinsdóttir Thóra¹, Rensink Marijke², Lindeman Eline¹, Schuurmans Marieke¹

¹University Medical Center Utrecht, Utrecht, the Netherlands

²Research Centre for Innovations in Health-care, University of Applied Sciences, Utrecht, the Netherlands

Introduction: Stroke is one of the leading causes of adult disability in the Western world. The use of neurodevelopmental treatment in the daily nursing care of stroke survivors does not improve the functional outcome. Nurses therefore need to explore other forms of rehabilitation interventions. During the past two decades major progress in neuroscience has resulted in novel concepts for rehabilitation after stroke. Various studies support the choice of task-oriented training. Movement and experience-dependent reorganization patterns have been observed in the damaged brain. Functional recovery is the result of restoration and adaptation as well.

Aim: The aim of the systematic review was to provide an overview of the evidence in the literature on task-oriented training of stroke survivors and its relevance in daily nursing practice.

Methods and Materials: A range of databases was searched to identify studies addressing task-oriented training in stroke rehabilitation. Forty-two studies and nine systematic reviews were included in the final dataset. The selected randomized controlled trials and systematic reviews were assessed for quality. Important characteristics and outcomes were extracted and summarized.

Results: Studies of task-oriented training showed benefits for functional outcome compared with traditional therapies. Active use of task-oriented training with stroke survivors will lead to improvements in functional outcomes and overall health related quality of life. Effective interventions relevant for nursing were: balance exercise including reaching towards objects, sit to stand, ambulation exercise, exercise promotion, arm-training and mental imagery practice.

Conclusion: Generally, task-oriented rehabilitation proved to be more effective than other rehabilitation approaches. Many effective interventions were found to be usable in daily nursing practice, such as walking on the ground, moving from sitting to standing from different chairs. Nurses can play an important role in creating opportunities to practice meaningful functional tasks outside the regular therapy sessions, in good collaboration with other healthcare professionals.

Post stroke depression: therapeutic interventions and the role of nurses; a systematic review

Man-van Ginkel Janneke de¹, Gooskens Floor¹, Schuurmans Marieke², Lindeman Eline³, Hafsteinsdóttir Thóra¹

¹Rudolf Magnus Institute/UMC Utrecht, Utrecht, the Netherlands

²Rudolf Magnus Institute/UMC Utrecht/University of Applied Sciences Utrecht, Utrecht, the Netherlands

³Rudolf Magnus Institute/UMC Utrecht/Rehabilitation Centre 'De Hoogstraat', Utrecht, the Netherlands

Introduction: Detection and diagnosis of post stroke depression (PSD) is inefficient and many depressed patients are under treated. Although nurses recognize observation and assessment as a part of their role in rehabilitation care, little is known about their role in assessing depression or therapeutic interventions that they can use. The purpose of this systematic review was to explore and describe the nursing role in assessing post stroke depression and therapeutic non-pharmacological interventions that can be used in the daily nursing care of patients with PSD.

Methods and Materials: A systematic review was conducted based on the Cochrane method. Literature was searched in the electronic databases of CINAHL, Medline (PubMed), Nursing Journals (PubMed) and PsycINFO for the period 1994–2005.

Results: Fifteen articles and one systematic review fulfilled the inclusion criteria. Nurses considered PSD to be an important problem that needs more attention in the daily nursing care of stroke patients. However, the multidisciplinary team generally focused more on physical functioning, and lack of time and limited knowledge hindered them from giving these patients adequate care for PSD. There was strong evidence that active information provision reduces the severity of depression. Other interventions with positive effects on the occurrence or severity of post stroke depression were: life review therapy, motivational interviewing, a specific nursing support program and physical exercise.

Conclusion: Nurses need to focus more on observing the symptoms of depression and structural assessment of PSD. Various therapeutic interventions were found to be effective: active information provision, life review therapy, motivational interviewing, a specific nursing support program and physical exercise. The interventions described can be implemented in nursing care of post stroke depression patients. The findings of this review enable nurses to intervene effectively to reduce the occurrence and severity of depression in stroke patients.

G2-S12 Symposium

Health technology education in curricula for Bachelor of nursing

Goal: The use of technology in health care is becoming increasingly common. Developments in health technology offer possibilities to improve both quantity and quality of health care, for instance by supporting the organisational change in care and cure networks and in assisting self management of clients.

The use of technology will become an essential part of professional activities of nurses. The incorporation of educational activities to support competence development will be an important issue in curriculum design. The exchange of experiences in this symposium will stimulate the development of better curricula.

Overview: The use of technology is becoming an essential part of the professional activities in every day nursing practice. Both in acute as well as in longitudinal care and in care for older persons. As a consequence, educational programs have to be developed and implemented to introduce nursing students in the use of technology as a tool for care delivery. The technological developments will enable new approaches of care delivery and care support. Essentially there are several possibilities to introduce knowledge on the use of technology in the initial training of nurses. It can be developed as an integral part of the bachelor training, as a so called 'minor' or being part of a honours program. The choice of the educational route has consequences as to what number of students will be introduced in the use of technology in care. At present a 'best practice' is not clear.

Need for changes in health technology education: development of a new professional education

Holkers-Veltkamp BA, van de Dijk M, Willems Charles
Saxion University of Applied Sciences, Enschede, the Netherlands

Introduction: The rapid growth of health technology requests new competencies from health professionals. Therefore, Saxion University of Applied Sciences starts a bachelor study 'Health care and technology', within nursing education. This workshop is about the development of a new health technology competency profile. Which competencies are important for this new professional? How should a course program look like?

Methods and Materials: A new health technology competency profile is developed in collaboration with professionals of fields of both health care and technology. Feedback groups are organised, to collect information from professionals in all ranges of relevant domains, e.g. managers and caregivers, students and teachers. A course curriculum is developed using the Four components and Instructional Design Model. Field research is carried out on the competence profile and on the course curriculum. In this phase, exploratory qualitative research is carried out in interviews with key figures in the fields of health care and technology.

Results: The new health technology competency profile focuses on four main competencies: (1) caregiving, (2) innovation, (3) coaching and (4) coordination. The professional is trained as an expert user of technology in the care process and is competent in the use of advanced (medical) technology, assistive technology and applications for telehealth/telecare. This professional can advise other (informal) caregivers or patients. Sixty percent of the curriculum is about nursing, 40 percent is reserved for applied technology. Students will be qualified for a bachelor of Nursing and for BIG-registration. (In the Netherlands, BIG, the Professions in Individual Healthcare Act, regulates the quality of care of healthcare professionals).

Conclusion: It is feasible to develop a new competency profile and course curriculum together with health care professionals already active in the field. First results show a need for a new professional,

in health care and technology, with new competencies in both domains.

Learn how to use an Electronic Nursing Record (ENR)

Verwey R

Centre of Research in Technology and Care, University of Applied Sciences Zuyd, the Netherlands

Introduction: The article describes the training program as part of the implementation of an Electronic Nursing Record (ENR) in Maasland Hospital (Orbis Medical and Healthcare group) in Sittard, the Netherlands. The implementation process was carried out by several nurses in different roles (project management, project group members, key-users and teachers). How did nurses evaluate the ENR training program?

Method: Questionnaires were used with answering options on a Likert scale and open text. The results ($N=372$) were analyzed in SPSS with descriptive statistics and the open questions were analyzed using qualitative methods. The basic training consisted of four meetings during which aspects of the methodical work and navigation in the system were raised alternately and were applied to ward-specific cases. A few months after the introduction, the follow-up for the key users took place. 'Bedside learning' a custom learning process, started at the moment the ENR was being used in the entire hospital.

Result: More than 75% of the participants were satisfied or very satisfied with the overall training services. Eighty-seven percent of the participants valued the clear explanation of the system and 53% considered themselves able to work with the system directly after the training. The majority of the participants answered positively about the achievement of the learning goals and the duration of the training, but in the end they valued training on the job better. Key-users were given extra time to coach their colleagues on the ward. Key-users were positive about the follow-up training because it gave them the opportunity to share experiences and learn from each other. There were big differences between participants in information technology competencies. In the development of the program this should have been taken more into account. Further customization of the program and using e-learning facilities could have improved the learning results of participants.

The implementation of technology as part of a bachelor of nursing curriculum

Willems Charles¹, Claassen Rene¹, Holkers-Veldkamp BA², Dijk M van de², Verwey R¹

¹Hogeschool Zuyd, Heerlen, the Netherlands

²Saxion university, Enschede, the Netherlands

Introduction: The use of technology is becoming an essential part of the professional activities in every day nursing practice. Both in acute as well as in longitudinal care and in care for older persons. As a consequence, educational programs have to be developed and implemented to introduce nursing students in the use of technology as a tool for care delivery. The technological developments will enable new approaches of care delivery and care support. As yet it is unclear what competences have to be developed during the bachelor training of nurses.

Methods and Materials: In the present symposium two different approaches will be presented. HsZuyd, as presented in the abstract of Claassen and Verwey will present results obtained by the development of a minor 'ICT and healthcare' given to nursery students. Also a Honours programme was developed, that will lead not only to a qualification of a registered nurse but also a recognized qualification for a surgical or anaesthesia nurse. Saxion as presented in the

abstract of Holkers, van de Dijk and Willems has developed bachelor study 'Health care and technology', within nursing education, starting September 2010.

Results: Both presentations will be followed by a structured discussion directed to the following questions: What competencies are important for this nursery professionals? How should course programmes be structured to fulfil this requirement?

Conclusion: The use of technology will become an essential part of professional activities of nurses. The incorporation of educational activities to support competence development will be an important issue in curriculum design. The exchange of experiences in this symposium will stimulate the development of better curricula.

Education is all about making choices and innovation!

Willems Charles, Claassen Rene, Verwey R
Hogeschool Zuyd, Heerlen, the Netherlands

Introduction: Until recently the Bachelor of Nursing curriculum gave little attention to technology in healthcare, in spite of the fact that technology has an important role in supporting evidence-based practice supporting the autonomy of the patient and in the improvement of quality of care.

Materials and Methods: As an answer to this shortcoming a minor and a honours program were developed in which students learn to develop knowledge, skills and attitudes in the use of technology.

Results: The minor ICT and Healthcare which has a broadening function to the existing curriculum of the Bachelor of Nursing. The second example is an honours program HBOV Technological Learning Route (HBOVT) of the Bachelor of Nursing. This route includes all the usual contents of the curriculum, plus an extra part focused on technology. This honours program gives students not only the qualification of a registered nurse but also a recognized qualification for a surgical or anaesthesia nurse as well. This program uses the main overlap of the competencies of various professional groups. This gives the program the possibility to study the specific competencies of the operating room- or anaesthesia assistant. The competency-based training model of HBOVT is leading in the region nowadays. This has great impact on the approach of out-coaching and assessment of these students in practice.

Conclusion: As for the design and implementation of the minor ICT and healthcare a more accurate discussion should be taking place about the position of the content. In addition, the enthusiasm of students for this minor, which present education program has a lack of technology subjects in the major, is not hardly overwhelming. The main question about the HBOVT program is if there is a good study program learn ability and whether the ultimate professional can show its benefits in the field as well.

G3-S32 Symposium

From research program to practice: search, select, empower and succeed!

Goal: At this symposium ZonMw, The Netherlands Organization for Health Research and Development and LEVV (Netherlands Centre of Excellence in Nursing) will present theory and practice of successful implementation of innovations.

Overview:

- 1 Dutch Nursing research program 'Between knowledge and practice' (Tussen Weten en Doen).
- 2 Implementation-Impulse: support strategies.
- 3 Training in essential competencies for opinion leader: a workshop.

Dutch Nursing research program 'Between knowledge and practice' (Tussen Weten en Doen)

Slijper Maarten

ZonMw, Den Haag, the Netherlands

Introduction: The Netherlands Organization for Health Research and Development (ZonMw) is a national organization that promotes quality and innovation in the field of health research and health care, initiating and fostering new developments. ZonMw also actively promotes knowledge transfer and implementation, ensuring knowledge is exchanged between all relevant stakeholders (health researchers, health professionals, patients/consumers and the general public). This in turn facilitates the structured implementation of newly developed knowledge in the health care system and guarantees emerging health care issues a place on the research agenda. From 2001 to 2009 ZonMw subsidized the nursing research program 'Tussen Weten en Doen'. ('Between Knowledge and Practice'). Its aim was: to describe the state of the art in nursing science in the Netherlands; to develop, evaluate and implement research methods; to increase the body of knowledge through guideline development and implementation, and to promote dissemination and implementation of knowledge. We evaluated the program in answering the question whether the goals were achieved.

Method: Two integrated programs with a total duration of 7 years were analysed using analysis of final reports, interviews, log-books and focus group meetings. The knowledge cycle was used as reference framework.

Results: The programs resulted in 23 state of the art studies, 12 research projects, nine follow-up studies and five implementation studies. Thirteen nursing guidelines were developed and seven students achieved a PhD. Scientific foundation of the studies was found inadequate. A side effect of the program was a national and international network of nursing scientists.

Conclusion: A national program boosted nursing research in the Netherlands by building capacity and capability in nursing science and scientific evidence. However, attention should be paid on systematically embedding nursing research in the care policy, and on stimulating research projects on nursing topics.

Implementation-impulse: support strategies

Holleman Gerda

Landelijk Expertisecentrum Verpleging & Verzorging, Utrecht, the Netherlands

Introduction: Opinion leader interventions appear to reduce non-compliance with desired practice. We facilitated and empowered potential opinion leaders through improving implementation skills and competencies. The training program is based on the train-the-trainer concept. Fifteen 'implementation coaches' were supported to implement five guidelines.

We evaluated the support methods used by answering the following questions: (1) Is Community of Practice a successful strategy to facilitate knowledge sharing and learning? (2) Does the context analysis in terms of barriers and facilitating factors facilitate the implementation of the guidelines? (3) What kind of support do 'implementation coaches' need in choosing and implementing a strategy? (4) What were considered the essential competencies for an implementation coach?

Method: Projects with a high potential for successful implementation were selected from the ZonMw research program 'Tussen Weten en Doen'. The selected five projects were financially supported for 1 year by ZonMw, supervised and evaluated by representatives of three universities. Process evaluation was conducted using: (1) log-books, self-assessments and competence profiles; (2) video- and sound recordings of the Community of Practices were taped; (3) in-depth interviews and a focus-group discussion with the participants.

Results: Joining community of practices means tightening your own context. The use of a stepwise implementation approach and the application and analysis of the context analysis were considered the most essential instruments gaining implementation skills. One-to-one coaching was considered an essential support instrument. By far the most cited essential competencies are: giving and receiving feedback, delegation, cooperation, information analysis, helicopter view and network skills.

Discussion: Theories on social networks and opinion leaders may be helpful in designing programs to support nursing implementers. Besides implementation skills, support may also focus on the personal effectiveness of the potential opinion leaders to awaken slumbering competencies.

Training in essential competencies for opinion leader: a workshop

Tol Marjo van

Landelijk Expertisecentrum Verpleging & Verzorging, Utrecht, the Netherlands

Introduction: Opinion leaders are considered important instruments in various stages of the innovation cycle. They can bridge the gap between research and practice through: identifying new knowledge and assess the relevance of the knowledge for the organization. In addition they help the caregivers to apply and evaluate the knowledge in their practical use. They may function as a rolemodel for colleagues. Essential competencies needed to become an active opinion leader are: giving and receiving feedback on professional attitude and performance, delegation of tasks, cooperation with other health-care professionals, collection, analysis and feedback of information, developing a helicopter view and networking skills.

Methods: The participants will receive knowledge from the results of the Implementation-Impulse project and will do exercises with instruments used in the Implementation-Impulse project like 'mind mapping', 'interviewing', 'collaboration', 'system awareness'.

Results: Participants will be familiar with the use of these instruments and know in which situations to apply them in order to improve competencies for opinion leader.

Conclusion: The workshop supports learning by doing.

G4-397

How to interest young students in the care for older persons

Lange Jacomine de, Finnema Evelyn, Goumans Marleen, Kuiper Chris

Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

Nursing students often prefer acute hospital care or caring for children to caring for older people. Only 10–15% of the students choose

a course in geriatric care. Their choice is partly based on the prejudice that older people are dull and that working with them is not very exciting. However, there will be a tremendous need for qualified nurses in elderly care in the years to come.

In order to interest students for working with older people, the Institute of Health Care of Rotterdam University offers a course in which students discuss with older people topics of mutual interest, such as falling in love, my first job, et cetera. One of the students acts as discussion leader. Both students and older persons enjoy the sessions and mutual prejudices decrease.

This course is successful, but just a drop in the ocean. We need far more successful strategies to meet the forthcoming shortage of nurses in elderly care.

In this round table conference we will exchange experiences from different countries and discuss best practices and strategies to motivate young students to choose a career in geriatric care.

G5-L26

Going global; high educated professionals in the care for older people

V&VN Studenten & V&VN Opleiders
Utrecht, the Netherlands

The care for older people has been a much discussed topic during the last several years. In the Netherlands the obsolescence rate is growing, that means that there are even more older people who need (special) healthcare. A nursing home is a specialized department for these older people. The government has high desires towards its health care agencies. High educated nurses are trained to handle complex situations and are capable to observe bottlenecks in care policy. They are experts in primary healthcare and quality of healthcare. But at this moment there are only a few high educated nurses working in the care for older people. This brings up the question; 'Why is working in the care for older people not attractive for high educated nurses?'

The workshop will provide more information about recent developments in the Netherlands. This workshop will be a opportunity for the visitors to discuss about the developments in the care for older people in their countries. Do these problems also occur in their countries? This question will bring up an interesting conversation in which different countries provide possible solutions to improve the current problems.

This workshop is organised by the Dutch Nurse Association V&VN (Verpleegkundigen & Verzorgenden Nederland).

G6-178

'Thuis Voelen', a practical guide written for family and nursing home; companions in worthy care

Willemse Hetti¹, Klinkenberg Tineke van den²

¹Publicarea, Amsterdam, the Netherlands

²Advise, Amsterdam, the Netherlands

Introduction: An important question is how to keep the care for elder people of good quality according to their needs, while still fundable. 'Thuis Wezen' and 'Thuis Voelen' by Hetti Willemse and Tineke van den Klinkenberg are two books on nursing home care and the role of family. Family, nurses and organization all acknowledge that nursing home care will benefit when these three parties unite their forces as partners in care. 'Thuis Voelen' is a guide filled with practical suggestions to accomplish this. Family should be seen as a valuable care partner and as a possible relieve for manpower.

Method and Materials: Loosely structured conversations lead to a number of incentives, which concern family as well as employees and range from the moment of intake until the phase of saying

goodbye. Advises in the area of architecture, furnishing, public space, human resources and ICT are also represented.

Results: A 'worthy care agenda' is set up by family, nurses and organization, resulting in: a changing (physical) environment; family enjoys visiting the nursing home and stays longer, nurses enjoy their work environment more and feel relieved; more mutual complicity and responsibility in wanting to improve the quality of life of elderly.

Conclusion: 'Thuis Voelen' is an example of how several small scale innovations, new ideas and simple things that matter can establish an improvement in nursing homes. Within an open-minded organization there will be a shift from a bureaucratic to a more 'profession based' way of work. Which means more fun and satisfaction on the job and a decrease in workload. Any moment an inhabitant is satisfied and happy, labour is saved and time and money will be spared. Surplus value of this guide; it can be used as training material for students as well.

G7-180

Lived experience and information needs of adolescents whose grandparent has dementia

Steeman Els, Defloor Tom, Grypdonck Mieke
Ghent University, Ghent, Belgium

Introduction: Information about dementia tailored to adolescents who are confronted with a grandparent with dementia is scarce, even though this could help them to better understand and deal with the dementia of their grandparent. This study aimed to explore the lived experience and information needs of adolescents in confrontation with their grandparent with dementia and to develop a specific information tool.

Methods and Materials: We conducted a short survey among 746 high school students, and had in-depth interviews with 29 adolescents, aged 12–18 years, whose grandparent had dementia. The interviews were transcribed, coded and analysed according to the method of constant comparison. Based on the results of the interview, a specific information booklet was developed and validated by adolescents, parents and caregivers.

Results: Eleven percent of the questioned high school students had a grandparent with dementia. These adolescent experience difficulty in dealing with their grandparent with dementia, especially when they want to treat their grandparent in a respectful way. Somewhat surprisingly, only a minority of the adolescents indicated a need for information. However, the interviews revealed that many questions are present, yet for which no answers are obtained or sought. The adolescents preferred information in a brochure and not on internet. Information should be touching and recognizable. It should be not too theoretical nor too serious, and appealing e.g. with cartoons.

Conclusion: Adolescents hardly make a problem of dementia. This provides a unique opportunity to bond positively with the grandparent with dementia. Although these adolescents do not always explicitly ask questions, adolescent do need information in dealing with their grandparent with dementia. Information should be practical, supporting the adolescent in an enjoyable contact with their grandparent. Parents should be closely involved in informing and supporting these adolescents. It's advisable to prepare adolescents for their first visit to their grandparent with dementia in a nursing home.

G8-202

Informal care, social networks and support for older home nursing patients

Dale Bjørg, Dale Jan Gunnar
University of Agder, Arendal, Norway

Introduction: Research reflecting older people's physical health and functioning is often found in studies of formal care receipt, while

studies focusing emotional and social support seem to be more prevalent regarding informal networks and care. This study aims to describe perceived social provisions and support in a group of older home-dwelling care-dependent persons, and to explore the relationship between perceived social provisions, physical functioning, mental state and reception of informal care.

Methods and Materials: The sample consisted of 242 persons aged 75+ years from seven municipalities in Norway, all receiving home nursing. A cross-sectional design was used, and data were collected by means of structured interviews in the persons own homes.

Results: In general, the level of perceived social provisions and togetherness in the study group was high, especially among women and the married individuals. Decreased physical functioning and declined mental state were related to lower level of social provisions. The majority of the individuals had frequently contacts with several types of social networks. Contact with these informal networks was found to be closely related to perceived social support and togetherness. The individuals in the study group received a considerable amount of informal care, and family members were the main informal caregiver recourse. The amount of family care was positively related to perceived social provisions.

Conclusions: Although the older individuals in this study group perceived themselves as having high levels of social provisions and togetherness, this experience was clearly associated with frequency of contact with various social networks. The importance of regular telephone use and attendance of leisure activities was also demonstrated. Nurses have an important role to play in facilitating social support. This result also highlights the importance of nurses in assessing, encouraging and cooperating closely with the informal networks of older home-dwellers to avoid loneliness and social isolation.

G9-327

The life as family caregiver-utilization of respite care in the community

Johansson Inger¹, Berglund Anna-Lena²

¹Gjøvik University College and Karlstad University, Gjøvik And Karlstad Sweden, Norway

²Akershus University College, Lillestrøm, Norway

Introduction: The role as family caregiver is stressful and comes with a daily heavy workload. This has been underestimated in society when planning support and home help. One form of support is the residential respite care for the spouse. The purpose of the study was to describe caregivers' experiences of their life situation and living conditions when caring for their spouse at home with support and relief from community.

Method: A qualitative design was chosen. Eighteen caregivers >65 years old who cared for their spouse with diagnosed neurological disorders for at least 6 months were interviewed in their home during the spring of 2007. Both manifest and latent content analysis was used.

Results: Two main themes emerged: To develop qualifications for a role as caregiver and be prepared for unexpected events (with four categories) and To be prepared to trust and hand over the care for the spouse to other caregivers (with three categories). The new role as caregiver involved participation in the basic needs of the spouse. They need both support and adequate equipment for security in the care situation, and their opportunities for receiving relief from the caring role were unsatisfied. When the family caregiver utilized respite care, it was important to them to have information and communication with the staff. They felt remaining responsibility for their spouse during this time and it was sometimes difficult to get relief from the caring role when the spouse was in residential respite care.

Conclusion: The study confirmed that being a caregiver requires training before the spouse leaves the hospital, and when the spouse is in residential respite care, the caregivers want to be acknowledged

in their role as a caregiver, while also maintaining contact and receiving information about the health status of their spouse.

G10-187

Maintaining everyday practical and cognitive competencies in dementia sufferers in a home setting

Quack Eva¹, Eichenseer Birgit², Gräßel Elmar², Schmid Martin¹, Stemmer Renate¹

¹Catholic University of Applied Sciences, Mainz, Germany

²Erlangen University Hospital, Erlangen, Germany

Introduction: The research project is based on the assumption that regular activation of everyday practical and cognitive competencies will result in dementia patients being able to lead at least part of their lives mainly independently, with a better quality of life. The primary aim of the research is to analyse the effect everyday practical and cognitive training at home can have on the activities of daily living and cognitive abilities of dementia sufferers.

Methods and Materials: Six days a week, practical activation (each lasting 60 min) is done by the relatives based on an individual, tailor-made activation plan. Cognitive activation takes place once a week (each session lasting 30 min) and is done by an externally trained person. At the same time, the relatives receive continuous training and are fully counselled by nurses from cooperating social services. The aim is to form a network of competencies between the professional carers and the relatives.

The effect will be evaluated in the framework of a multicentric, randomised controlled trial.

Results: It is expected that everyday practical and cognitive abilities in the intervention group will remain the same on average, whereas they will continue to deteriorate in a control group that is not being specifically activated. In addition, it is assumed that those patients who receive activation will require less care than those who do not. This has a concrete effect on the quality of life of dementia sufferers in a home setting since, in retaining their ability to do everyday things themselves, they can maintain a higher degree of autonomy in their daily life.

Conclusion: If a positive effect can be proven, then such programmes should be offered and paid for alongside full counselling as a service to outpatients.

G11-218

Nutritional status and health outcomes for people with dementia living in shared housing arrangements

Wolf-Ostermann Karin¹, Gräse Johannes¹, Fischer Thomas², Worch Andreas¹, Nordheim Johanna³, Wulff Ines³, Pannasch Andrea³, Meyer Sandra¹, Meyer Saskia¹

¹Alice Salomon University, Berlin, Germany

²Technopolis Deutschland GmbH, Frankfurt Am Main, Germany

³Charité – Universitätsmedizin Berlin, Berlin, Germany

Introduction: A new form of small-scale living facility evolved in Germany: shared housing arrangements (SHA) for older, care depended people, frequently suffering from dementia. SHAs are being served by community care services and are completely disconnected from traditional residential facilities. Weight loss in dementia is a multifactorial phenomenon, including causes like self-feeding difficulties and increased energy expenditure. There is a lack on findings concerning nutritional status and health outcomes of people living in SHAs.

Method and Materials: In a longitudinal design (DeWeGE study) all new residents of SHAs in Berlin suffering from dementia (MMSE<24) in Berlin were surveyed from 2008 to 2009. In a further cross-sectional study (WGQual) all residents (with and without

dementia) of 30 SHAs in Berlin were investigated. We examined the nutritional, cognitive and functional status.

Results: The average age of persons included in both studies is approximately 80 years, most residents were female. Predominantly residents are able to feed themselves with little support by staff or relatives required. According to the WHO classification, we identified normal ranged BMI values for about 60% of the residents. We identified underweight in 15% of people only. According to the information provided by nurses approximately 56% of the assessed residents of SHA lost weight within the last 6 months before baseline compared to 45% after 6 months follow-up and 15% after 1 year follow-up.

Discussion: We analysed nutritional status depending on functional and cognitive capacity. Compared with findings in other publications, residents living in SHAs are not as underweight as people in SCUs. An explanation could be that people living in SHAs are less limited in their physical functional abilities than people living in SCUs. Further research comparing nutritional status, health outcomes and influencing factors in different kinds of living facilities in elderly care is necessary.

G12-258

Exploring issues and solutions in promoting continence with people with dementia living at home

Drennan Vari, Cole Laura

Kingston University & St. George's University of London, London, UK

Background: Toileting difficulties and incontinence problems are embarrassing, stressful and significant in the decision to the move to a care home. Current UK evidence based guidance for supporting people with dementia does not include incontinence and conversely national guidance on aspects of incontinence excludes people with dementia. Consequently, there is little to inform practitioners when supporting people, with dementia and these problems, living at home, and their family and carers. Recent UK strategies for dementia emphasis the need for person centred care and support of family carers. This presentation reports on one phase of the EVIDEM-C study. EVIDEM-C is a nested study with in the National Institute of Health Research EVIDEM funded programme of research. Our aim was to explore the range of toileting and incontinence problems and solutions as perceived from the perspectives of the person with dementia and their family carers.

Method: This a qualitative study within the interpretative tradition, using semi-structured interviews. Participants are people with dementia living in their own homes and family carers recruited through voluntary organisations, Admiral Nurses, multi-disciplinary community mental health teams and general practice. Interviews have been transcribed and thematically analysed.

Results: A wide range of problems and solutions were identified. These included managing distress and preserving dignity while trying to find acceptable and appropriate solutions, environmental challenges (outside and inside the home) in locating and using toilets, accessing local sources of information and expertise, financial consequences for the individual and carers, access to publicly funded appropriate containment products and the threat to maintaining continence when the person was admitted to hospital or care home.

Conclusion: The presentation concludes with a discussion of the relevance of the findings for the nursing practice in the community and specialist continence services and who this study links into the next stages of the research.

G13-270

Poetry and dementia: enhancing quality of life

Mooney Sharon

Regis University, Denver, CO, Coshocton OH, USA

Introduction: It is believed that poetry can serve as a catalyst and evoke feelings that contribute to increased psychological health and well-being. Less explored has been the intentional use of poetry for people with dementia as a medium for enhanced quality of life, improved orientation, and mediation of associated behaviors such as agitation.

Methods and Materials: This presentation includes excerpts from a video-tape the presenter made of an eighty-6 year old woman with Alzheimer's who lived at home with her husband and adult daughter who were her primary caregivers. The presenter is currently doing survey and observational research on the response of older persons with dementia to the reciting of poetry as well as responses of family caregivers to poetry related to Alzheimer's disease that the presenter writes and reads at various venues in Ohio; material is being incorporated into a North American revision of the presenter's book, *Alzheimer's – Caring for Your Loved One, Caring for Yourself*.

Results: The use of poetry will be discussed as an important ritual to stimulate memory, particularly poetry with a specific rhyme and meter scheme, for example sonnets and blank verse. A brief overview of the use of poetry as therapy historically will be presented and an overview of some contemporary poetry initiatives such as the Alzheimer's Poetry Project (APP) currently underway in the United States. In 2006 The National Endowment for the Arts (NEA) listed the APP as a best practice for the NEA Arts and Aging Initiative.

Conclusion: Preliminary research also indicates there may be physiological responses to certain types of poetry in the human brain, including increased synaptic activity. This and other studies may have implications for further research for people with dementia and the intentional use of poetry as a complimentary therapy by both family and professional caregivers.

G14-5

Home telecare for older persons: experiences and perceived effects

Peeters Jose, Francke Anneke

NIVEL, Utrecht, the Netherlands

Introduction: Western countries have to face a strongly increasing health care demand, related to ageing of population and an increasing number of chronically ill. At the same time, a growing nursing shortage exists. Home telecare provides opportunities in this regard. Up till now, home telecare in the Netherlands mainly consists of an audio-visual connection between the client and nurses of the front office of the home care organization.

Methods and Materials: In 2007, (1) all the clients with a connection to a home telecare system, (2) their primary informal caregivers and (3) nurses of the front offices of home care organizations in the Netherlands that deliver home telecare, received a postal questionnaire. A total of 254 clients (response 54%), 136 informal caregivers (response 29%) and 38 home care nurses working at the front office (response 67%) filled out the questionnaire. The questionnaire addressed the use of the home telecare system, experiences with home telecare and the perceived effects.

Results: Four out of ten clients (44%) use the system (also) at a fixed time a day for a short moment – the so called good-morning-good night service – to be sure everything is all right. One third of the clients used the system for social contact (33%). Most of the clients report they feel safer due to home telecare (71%), three out of ten clients report they are able to do things more independently (32%) and six out of ten clients (61%) suspect they can stay at home longer thanks to home telecare.

Conclusions: Home telecare is expected to be beneficial to clients with chronic diseases and elderly clients. Our study showed that clients feel safer, due to home telecare and that they experience an increased independency. This study also demonstrated that home telecare may have benefits for informal caregivers and nurses working at the front office.

G15-223

Activity monitoring as part of care delivery to independently living seniors

Willems Charles, Spreeuwenberg Marieke, Claassen Rene
Hogeschool Zuyd, Heerlen, the Netherlands

Introduction: With the Quiet Care system the activities of elderly living at home are automatically monitored. The monitoring is done by placing infrared sensors in their home. Clearly interpreted information about the general daily living (ADL) of elderly living at home is shown on a secure web site. Based on this information providers have a better view on what's happening at home and, when necessary, they can provide care in a more reactive way. In the province of Limburg a transition project has started aimed to apply the Quiet Care system to enable older people to live longer independently at home in a responsible and safe manner.

Methods and Materials: A pilot study is conducted with 19 frail elderly clients of home care organization Proteion. After this pilot, protocols for implementation and educational material have been developed. Successively, all teams of Proteion will be educated to work with the system and about 100 clients of Proteion will be supported with Quiet Care in the coming year.

Results: In the pilot study 11 out of 19 clients indicate that their feeling of security has increased by the system. Caregivers indicated that the system had a clear added value and feel that they have a better view on the daily functioning of the clients. At this moment two teams of Proteion are educated to work with the system and 44 clients are supported with Quiet Care. This year four other home care providers will implement Quiet Care in their organization. Both the process evaluation of the implementation and the effect study will be completed this year.

Conclusion: Innovative technologies may help to overcome the increasing demand of care for the elderly. The effects of QuietCare seem promising. Steps have been taken to support the health care to implement the system into their organization and to support transition.

G16-360

Ageing-in-place by use of smart home technology

Hoof Joost van¹, Kort Helianthe¹, Rutten Paul², Duijnste Mia¹
¹Hogeschool Utrecht, University of applied sciences, Utrecht, the Netherlands

²Eindhoven University of Technology, Eindhoven, the Netherlands

Introduction: Smart home technology and e-health are becoming a tool to support and monitor older adults as a means to support ageing-in-place (AiP). One such technology is the Unattended Autonomous Surveillance (UAS) system. The UAS-system aims to support AiP and delay the demand for expensive institutional care, by increasing the clients' and family carers' sense of safety and security (SSS) through unobtrusive monitoring at home.

Methods and Materials: The first part included 18 subjects. Interviews were carried out prior to or directly after installing the technology systems, within a range of 3 weeks. The second part included 12 respondents.

Results: All respondents want to stay in their current dwelling. Nine respondents moved to the current home keeping in mind a

worsening health status. Eight of twelve respondents are satisfied with the smart home technology in relation to SSS. Only one of the respondents had had the new technologies removed upon her personal request. Three of the respondents are not very content with the technologies, but two want to keep them out of health concerns. The third receives intensive professional care at home which compensates for the technologies. Against initial beliefs, only one of the respondents was worried about her privacy.

Conclusion: Results showed a mix of positive and critical attitudes of the respondents and relatives towards the systems. The respondents are well aware of the safety/security-related functionalities the technologies offer. They are not aware which technologies were installed exactly. New technologies may contribute to the distinction between acute (real) alarm situations and non-acute alarms. The provision of care is a combination of 'head, hand and heart tasks' and technologies should be designed accordingly.

G17-28

Signs and symptoms of infection in nursing-home residents: perceptions of nursing assistants

Sund-Levander Märtha¹, Tingström Pia², Milberg Anna³,
Sund-Levander Märtha¹

¹Hoegland Hospital, Eksjö, Sweden

²Health University, Linköping, Sweden

³Vrinnevi Hospital, Norrköping, Sweden

Introduction: The study is the first part of a prospective, longitudinal project with the aim to study early signs of infections among institutionalized elderly persons with serum proteins predicting or verifying infection, as well as generating an instrument used by nursing assistants for early detection of infection in this setting. In Sweden nursing assistants provide most of the daily care and therefore have many opportunities to observe subtle changes that may be early signs of infection. Their possible contribution to early detection of infections has not been studied, nor are there any standardized assessment criteria validated for this staff category, to use in their everyday work with institutionalized elderly persons to detect early signs and symptoms of infection.

Purpose: To explore early nonspecific signs and symptoms of infection in elderly institutionalized individuals as described by nursing assistants.

Context: Community cares organization including nonprofit nursing homes and individuals in need of daily care living in their own apartment.

Method: Data were collected in 2006 from focus interviews with 21 female nursing assistants. The interviews were verbatim transcribed and analyzed with qualitative content analysis.

Results: Nursing assistants' descriptions comprised two exclusive categories. 'Is not as usual' described general signs and symptoms of discomfort related to possible infection, such as discomfort, unrestrained behavior, aggressiveness, restlessness, confusion, tiredness and feebleness, and decreased eating. 'Seems to be ill' was more distinctly related to signs and symptoms of established infection in general terms of fever and pain or more specifically related to pneumonia, urinary tract infection, skin infection, cold, and eye infection.

Conclusion: Identification of early signs of infection can be improved by involving assistant nurses in the clinical decision making process. These findings may be useful and generalized to other organizations, irrespective if nurses or nursing assistants perform the daily care.

G18-185**Effectiveness of quality systems to improve continence care in the homecare setting**

Du Moulin Monique, Chenault Mickey, Tan Frans, Hamers JPH Jan, Halfens RJG

Maastricht University, Maastricht, the Netherlands

Introduction: Research shows that the management of Urinary incontinence (UI) often is inconsistent with what is considered optimal care. In this study insight is gained into the use of quality systems to improve UI care in older people receiving homecare and to assess the associations between these quality systems and UI-related process and patient outcomes.

Method: Data from 2006 were used from the Dutch National Prevalence Measurement of Health Care Problems. At the patient level the homecare nurses had to register the following data: the frequency of UI loss, the amount of UI loss (UI-related patient outcomes), and whether or not a diagnosis had been made regarding type of UI (UI-related process outcome).

Results: A total of 19 homecare agencies participated in the prevalence measurement. These agencies consisted of 155 homecare teams caring for 3480 patients (65 years or older) who were screened for UI. Of the 19 homecare agencies, a total of 10 (53%) used one or more quality systems: 3 (16%) used a UI protocol; 7 (37%) employed a continence nurse; 4 (21%) used UI education; and 4 (21%) updated their protocols. Of the 155 teams, 79 (51%) appointed a nurse with a special UI focus, 29 (18%) checked whether the UI protocol was used, 121 (78%) documented UI-related actions in the patient's record, and 10 (7%) used brochures on UI. Mixed model analyses revealed no associations between the quality systems and the UI process or patient outcomes.

Conclusion: Most homecare agencies and homecare teams state to adopt quality systems to improve UI care for older adults. However, no associations were found between these quality systems and the UI process or patient outcomes. More research is therefore needed to gain insight into the content of the quality systems and their applicability to the homecare setting.

G19-239**Evaluation study of the falls prevention project in the Quality Collaborative 'Care for Better'**

Stoopendaal Annemiek, Strating Mathilde

Erasmus University Rotterdam, Rotterdam, the Netherlands

Introduction: The Dutch health program 'Care for Better' aims at improving quality of care on different domains of patient safety and client autonomy in long term care. Teams from care organizations from all over the country visit working conferences where experts show best practices and hand out change methods. In the evaluation of this project we are interested in the effects, but also in the processes of improvement that take place on the work floor.

Methods and Materials: In 2006 we started a mixed method evaluation study analyzing the Care for Better collaborative, combining quantitative and qualitative research approaches on different levels: the client, the project, and the organizations/program. The research consisted of surveys to collect outcome data on the three levels. Furthermore we carried out participant observations of working conferences, interviewed project leaders, and visited organizations that participated in the Falls prevention collaborative.

Results: The improvement teams learned to place post-it stickers on a large sheet of paper each time a fall incident occurred, describing the time, the degree of physical harm and information on what caused the incident. During the conferences team members were taught to better understand the complexity of the causalities of falling. At baseline, the average prevalence of fall incidents was 23% and significantly decreased to 8%, which corresponds with relative improvement of almost 60%. Furthermore, the results showed that

19 teams were able to realize the improvement target of 30% decrease in prevalence of fall incidents.

Conclusion: Project leaders report an increase in risk evaluation forms and an increase in signalling risk factors, which partly contributes to a decrease in fall incidents. The success can also be found in the improvement of skills for a more structured and creative reflection based on the latest knowledge sources for this specific problem in long term care.

G20-272**Public perceptions and attitudes towards elder abuse in society**

Lafferty Attracta¹, Treacy Margaret Pearl¹, Drennan Jonathan¹, Lyons Imogen¹, Fealy Gerard¹, Phelan Amanda¹, Quin Suzanne¹, O'Loughlin Ann², Connolly Michael¹, McNamara Martin¹, Butler Michelle¹, Delaney Liam¹, Bury Gerard¹, Kelleher Cecily¹, Harmon Colm¹

¹*University College Dublin, Dublin, Ireland*

²*Health Service Executive, Dublin, Ireland*

Introduction: As the population is ageing, the problem of elder abuse is receiving growing attention. Thus, there is a growing urgency to tackle elder abuse which is frequently underestimated and remains an area of social taboo. In order to develop effective strategic approaches, it is important to examine how the public perceive the mistreatment of older people and what behaviours are perceived to constitute elder abuse. It is these perceptions and attitudes which determine what is deemed acceptable and unacceptable treatment towards older people in society. The aim of this paper is to bring together and synthesise the existing knowledge base on public perceptions of elder abuse.

Method: A systematic search of published works was conducted using several academic databases (CINAHL, PubMed, and Social Science Index). The search period was confined to January 2000–September 2009 and included only journals published in the English language. The search yielded an initial 180 peer-reviewed journal articles.

Results: Findings revealed that elder abuse is complex, multidimensional and frequently culturally determined. A review of the literature highlighted gaps in knowledge and awareness around elder abuse and revealed some disparity relating to how elder abuse is defined and understood by different groups in society. General consensus was found on how different types of elder abuse are perceived, with neglect, psychological and physical abuse being the most commonly known forms of elder abuse. Sexual and financial abuse were among the least mentioned forms of abuse.

Conclusion: This review highlights the need to increase public knowledge around elder abuse, especially among older people themselves, whilst paying particular attention to the cultural values and norms in which elder abuse occurs. Gaining an insight and understanding into factors which frequently underpin societal perceptions of older people is beneficial to the planning and development of tailored interventions to tackle the problem of elder abuse.

G21-284**Baccalaureate nursing students' attitudes towards old people**

Matarese Maria¹, Ivziku Dhurata¹, Di Mambro Federica²

¹*Campus BioMedico University, Rome, Italy*

²*Azienda ospedaliera S.Giovanni-Addolorata, Rome, Italy*

Introduction: The lack of interest of nurses towards geriatric care is an international matter and many researchers connect this disinterest with the attitudes towards elderly created and/or strengthened by nursing education. In order to find out if this phenomenon is present

also in Italy, a country with growing aged population, we carried out a study to evaluate the attitudes towards elderly of Italian baccalaureate nursing students; moreover we investigated if the student attitudes towards elderly could be influenced by clinical experiences, years of course, age, gender, and clinical area of practice preferred by students for their career after graduation.

Methods and Materials: A Cross sectional design was chosen and a convenience sample was selected from two Nursing Schools in Rome. The affective component of attitudes were measured through Kogan's Old People scale.

Results: Two hundred and twenty-four undergraduate nursing students participated in the study. All 3 year nursing students showed positive attitudes towards elderly. The nursing students' attitudes didn't change significantly during the 3 years of the course. Older nursing students showed more positive attitudes towards elderly than

younger students. No correlation was found between attitudes and choice to work with elderly: even though students had positive attitudes they didn't desire to work in geriatrics fields after graduation. Most nursing students ranked as first choices for their career paediatrics unit, operating room, ICU and as last one working with elderly.

Conclusion: Our results confirm that nursing education itself does not cause ageism. Nevertheless the students do not desire to work with elderly. Therefore a positive attitude towards elderly is necessary but not sufficient condition to address the nurses towards the geriatric areas of practice. Evidently other relevant factors influence the career choices for geriatric care. Further research is necessary to know the reasons of this phenomenon.

Parallel Session H

H1-S16 Symposium

Laboursaving innovations in long term care: lessons learnt in NL

Goal: To inform the audience on lessons learnt in the Netherlands on laboursaving innovations in long term care. And to discuss the potential strategies that can achieve projected savings.

Overview:

1 Balancing quality and productivity in the perspective of the future of nursing in health care.

2 Laboursaving innovations in long term care: lessons learnt in the Netherlands.

Balancing quality and productivity in the perspective of the future of nursing in health care

Knibbe Hanneke JJ, Knibbe Nico E

LOCOmotion Health Research, Bennekom, the Netherlands

Seventeen innovations in basic care processes have been studied by health care organizations themselves, as part of the ZonMw initiative to collect and test successful innovations. Several of them indeed show clear gains in productivity without loss of quality of care or work. In fact, an increase in quality of care and quality of working conditions is often found. The direct and positive influence of these innovations on basic care processes like washing, dressing, continence care, toileting, wound care, medication, transfers, makes them 'high impact innovations', because of the huge volume of this type basic care provided on a day to day basis in health care. In view of the enormous challenges health care is facing in the near future, these kinds of seemingly simple innovations have a big impact.

The findings from the 17 projects have been collected, reinforced with research findings from other sources, evidence based studies in the literature and practical experience with implementation (costs, time, barriers and chances), and transformed into interactive businesscases. These businesscases were developed in close cooperation with nurses and nurse managers and are now available on the internet, updated regularly. They are often used by nurse managers in the CARE. These businesscases simulate the potential gain for their own facility in different scenario's and therefore give insight in the effects and barriers for implementation. Nurse managers can realistically

balance the costs and benefits. These results and the businesscases are also successfully used in two national break through projects from ZonMw.

In the presentation an overview will be given of all 17 projects and their chances and drawbacks when it comes to quality of care and productivity. Furthermore insight will be given in the businesscases and the results of the break through projects.

Laboursaving innovations in long term care: lessons learnt in NL

Linden Barbara van der

ZonMw, Den Haag, the Netherlands

In order to be able to keep providing adequate care for the growing number of elderly in the context of a diminishing available workforce labour saving interventions are becoming more and more necessary across Europe. In 2005 ZonMw, the Dutch health research and development organization started programming activities to increase evidence on which interventions actually work in saving labour in long term care. We developed measuring instruments for assessing labour saving potential and actual effects and we commissioned 110 small projects to test effectiveness. We now have a database of 57 projects that have proven effectiveness in saving labour in nursing homes and in home care. Most concern transformation of basic work processes like bathing and transferring patients, meal provision and medication dispensing. Other examples include using electronic records and new personnel planning and patient routing procedures. Patient selfmanagement programmes and simple home based domotica also have been proven to save personnel time and thus costs. We found potential savings ranging from €7 to €16 000 per patient per year and relevant target groups ranging from 2100 to 500 000 patients nationwide. A number of these innovations are now being implemented through a national breakthrough programme Care for Better and others are incorporated in practice guidelines and training programmes. We conclude that millions of euros and thousands of FTE personnel can be saved without quality loss and this can be done without using spectacular high tech solutions as yet. The next step is to develop and implement scaling-up strategies that can achieve the projected savings.

H2-S17 Symposium

Care for Better: the world's largest improvement program in long term elderly care: results and effectiveness

Goal: Presentation of results and effectiveness of Care for Better.

Overview:

1 Results and effectiveness: the world largest improvement program in long term elderly care: results and effectiveness.

2 A firm reduction of fall accident is achievable.

3 How to reduce the numbers of medicine incidents and patients with problem-behaviour.

Results Care for Better

Dongen van Emma¹, Minkman Mirella Vilans², Dekker Erlinde¹

¹ZonMw, Den Haag, the Netherlands

²National Center of Excellence in long term care, Utrecht, the Netherlands

Introduction: In 2005 the national Care for Better program started to improve the care for older persons. Now, in 2010, over 800 organizations (nursing homes, home care) are participating, over 30 Breakthrough collaboratives have been executed on multiple safety and quality topics.

Method: Phase I was based on the break through method. Collaboratives bring together multidisciplinary team from different health care institutions that want to improve certain aspects of their care provision within a set time-frame. Each organisation composes an improvement team which participates in national conferences. In these conferences teams develop a set of PDSA cycles that guides the implementation of activities during the following action period. Phase II is based on a method that aims a mixed method of implementation strategies by spreading and securing the results of completed projects from phase I.

Results and Conclusions: We will present results in outcomes (reductions of errors, falls; increases- in prevention etc.). We will address six lessons. We will include the latest results in the session:

1 When offered properly, a structured method with clear aims will lead to improved quality results on quality issues whether it is a nursing home, mental health care organization or organization for handicapped people.

2 If the starting conditions are sufficient, improvements can be reached on any quality issue). This is possible with less qualified staff. There is much room for improvement in long term elderly care.

3 Collaboratives are not quite suitable for home care professionals/organizations. External pressure and system transitions directly effect the attention for participation.

4 Sustainability is a critical issue, but we have more insight in how to sustain improvements now. Improvements are only cost effective if improvements are sustained.

5 Evaluating large scale programs is complex and asks for multiple methods at the same time.

A firm reduction of fall accident is achievable

Winder T

Director skilled nursing facility Magnushof, Schagen, the Netherlands

Introduction: In some accidents at Magnushof we did not know how to act, after having tried everything. This resulted in a dangerous and hopeless situation for the resident, desperate nurses and a dead-end situation.

Methods and Materials: We joined 'Together', an improvement program to reduce falls. Specialists in the field of methodology, safety management and fall reduction informed the participants. Best

of all: colleague organizations inspired each other in practical tips, methods and materials helping to reduce falls.

'Together' started a pilot at a 20 residents dementia community, and fanned out at all other communities. The focus of the fall reduction was on: (1) All 'fall' residents are seen by a physician, medical reasons are treated or ruled out. (2) Awareness of all staff members of resident at risk of fall: keep a close eye on the resident. (3) Multi-disciplinary exploration of the reasons of the falls. At meetings all 'fall' residents are discussed. (4) Use of methodology in investigating frequent falls, identifying patterns, creativity in finding solutions and involving relatives. (5) Improvement of environmental circumstances. **Results:** At the end of the program, half a year falls and injury was measured. Twenty-five percent reduction in falls was achieved. Expertise in reduction of falls, nurses are designated as consultants. Other members of the 'Together' organization, having learnt the results, have turned to us or help.

Conclusion: Despite the complexity of falls in dementia care and at cognitive disorders, a firm reduction in falls and injury caused by falls is achievable.

Method of the workshop: PWP supporting the speech, interaction with the workshop participants by means of questions and discussion: optional time permitting: a casuistry discussion of a complex dementia resident at risk of fall.

How to reduce medicine incidents and problem-behaviour

Pels N

Opella, Ede-Wageningen, the Netherlands

Introduction: Opella is a Dutch nursing home organisation that provides long term care and residential care for 2000 older people, and joined the Care for Better program because we experienced many medication incidents and much problem-behaviour. To improve the quality of our services a project was started to reduce medication incidents and to reduce problem-behaviour.

Methods and Materials:

Medicine incidents: We started with a zero measurement during 2 weeks. Seventy incidents were reported, the most common one being the nurse forgetting to administer the medication. It was not clear whether patients could manage their own medicine box. There was no objective method to screen this. Together with the pharmacist, nurses, patients and the manager we explored ways for reduction of medication incidents. A new method was first tested and then introduced.

Problem-behaviour: First problem-behaviour was defined and registered. The most frequent kinds were: yelling, aggression and apathy. Together with the nursing-home doctor, psychologist, nurses and the manager we explored ways to reduce problem-behaviour. We found the way patients are approached is very important.

Results:

Medicine incidents: The medication incidents were reduced by 50%. The procedures have been checked and made up to date. Nurses are given extra time to distribute the medication to the patients, wearing a yellow shirt to notify colleagues that they should not be disturbed.

Problem-behaviour: After the project there were no patients left with problem-behaviour. The nurses are trained to have contact with people with problem-behaviour. The methods to have contact with the patient are written down in procedures so everyone knows what to do.

Conclusions: Quality improvement projects work.

H3-S5 Symposium

Collaborative Practice Development at the Rotterdam University of Applied Sciences

Rotterdam University of Applied Sciences

Goal: Within the Institute for Health Care studies of the Rotterdam University for Applied Sciences researchers, educators, nursing students and allied health professional students work together in innovative projects focused on older persons. We will show how we bridge the gap between our university and the field of care for older persons in order to develop knowledge and innovative concepts, implement innovative care and support concepts of proven value and disseminate knowledge.

This requires that the old walls between higher education and the city be torn down. The Institute for Health Care studies and students must transcend the inside/outside dichotomies, which isolate them from others.

Overview: We will show how we combine research, developing knowledge and disseminating knowledge in practice by zooming in on three different projects all about care for older persons.

1 Healthy and active ageing; a preventive program for independent living well elderly – action research.

2 Choose your care! empowerment of older persons living in a residential home combined with an evaluative study.

3 Collaborative practice development; a project focusing on developing new methods in home care for persons with dementia in a specific cooperation between researchers, educators, students and home care professionals.

In all projects the focus is on the older person. We always try to involve the older persons in our projects as much as possible. Therefore they do not become subjects under study but involved project participants. In the symposium we will interact with the participants to let them experience our working methods and to disseminate information and knowledge.

Collaborative practice development at the Rotterdam University – But is it research...

Kuiper Chris, Houweling Loes

Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

Introduction and Method: 'Healthy and active ageing' is a preventive program for independently living elderly – an action research where students, educators, researchers, practitioners and elderly cooperate, based on the successful American Lifestyle Redesign and British Life Style Matters Program. However, these results can not be easily translated to another culture, because of (cultural) differences. Is it possible to perform a 'bottom-up' study on the implementation of the preventive intervention for elderly living at home, in specific contexts, aimed at preserving health and well-being, using the experiences already gained? The research project explores the implementation in seven various contexts for different groups of elderly.

Results and Conclusion: When the undergraduate students collected experiences and reported them to the researchers involved, tensions became apparent between formal and informal organization, espoused-beliefs and theory-in-use, and perspectives of researchers and researched. The students discovered that there is no 'one right way' to be a practitioner and that practice involves pluralities of interests, awareness and capabilities. But can this be viewed as research? The answer depends on how one assesses: (1) practice-based learning, (2) research as participation (in a community) and (3) the role of normativity. And since our positions as researchers and as faculty supervisors is changing, our habitus of practice-based learning is evidently being redefined (Bourdieu, 1992). The ethics of the (re-)definition I believe are crucial to the success or failure of our

(research) enterprise. In this presentation we will focus on the value of 'mode 3'-research based on the daily practice of the above mentioned practice-based research.

Choose your care!

Finnema Evelyn¹, Martijn Rens¹, Goumans Marleen¹, Morée van Cappellen Geertje², Lende Bert van der³

¹*Rotterdam university of Applied Sciences, Rotterdam, the Netherlands*

²*Netwerkbureau Morée van Cappellen, Rotterdam, the Netherlands*

³*Laurens, Rotterdam, the Netherlands*

Introduction: When people are admitted in a 24 h institutional setting they have to adapt to the rules and rhythm of the organisation which may cause them to drop their own habits. The management of Laurens De Schutse, a 24 h setting for older persons wants to increase the involvement of their residents in their own care and service arrangements, by giving the residents the possibility of choosing their own care and services.

Methods and Materials: In 'Choose your Care' residents of Laurens De Schutse can choose to do things like cleaning and cooking by themselves, instead of using De Schutse facilities. De Schutse pays them the budget attached to it. Likewise, resident can choose to buy extra services, like a daily shower instead of weekly. Nursing staff was trained in negotiating with residents and treating them like a client. The Rotterdam University of applied sciences evaluated the project on the level of both residents and nursing staff.

Results and Conclusion: Nursing staff and residents were not used to talk with each other about choices in care. Most residents are easy to satisfy and nursing staff is focused on helping the older person who partly depends on their caregiving without regarding the specific appointments made with the residents about the care arrangement. It proved difficult to integrate the arrangements in the care plan. The care plans hardly did change. Most changes appeared in the field of cleaning the apartment. The residents preferred their informal caregivers or others to clean their apartment in stead using De Schutse services.

Changing ways of working is difficult, even when everyone is convinced of the of the new concept.

Collaborative practice development in dementia care

Lange Jacomine de¹, Voorham Toon¹, Schepper Jolanda de², Klingeman Connie¹, Troost Rosemarie van³

¹*Rotterdam University of Applied Sciences, Rotterdam, the Netherlands*

²*Home Care De Zellingen, Cappelle Aan Den IJssel, the Netherlands*

³*Van Kleef Institute, Schiedam, the Netherlands*

Introduction: Rotterdam University, Home Care De Zellingen, and Van Kleef Institute have a unique form of collaboration in the Collaborative Practice Development in dementia care: home care nurses, educators, students, professors and innovators working together to improve the local dementia care. The purpose of the project is to develop integrated care for people with dementia and their carers in the community and to exchange experiences and knowledge between university and practice. The aim is to let both care practice and the curriculum of the nursing students profit from the project.

Methods: We developed a screening trajectory for nurses to spot the first signs of dementia and support the patient and his or her carer in transitions in care. Home care nurses and teachers together developed a course for home care nursing assistants in screening dementia and in communication with people with dementia and their carers. Students made an overview of care facilities for people with

dementia in the community. Students and educators conducted a study in the care relationship between people with dementia, their carers and nurses with 15 case studies. The problems of people with dementia and the problems and burden of their carers were monitored at the beginning, after 6 and 12 months by students.

Results: In the presentation we will focus on the benefits and difficulties of this collaboration in the view of the different participants of the project, how we succeeded in delivering integrated dementia care and how the project influenced the curriculum of nursing and allied health professional students.

H4-S23 Symposium

Excellent care in the Netherlands

Introduction: Just at the time that the demand for health care is increasing, large numbers of nurses are leaving their profession. The shortage of nurses causes a threat for the quality of care. On the other hand, patient care has become more and more aimed at efficiency. Increasingly, nurses and carers in the Netherlands feel they are losing influence on their profession. V&VN Dutch Nurses' Association and the Federation of Patient and Consumer Organizations in the Netherlands (NPCF) aim to stop this flow by initiating cultural change in health care institutions, in order to achieve excellent, patient-oriented nursing. Therefore, a pilot study was launched in the Netherlands in 2009, funded by the Ministry of Health, Welfare and Sport.

The pilot has three stages:

- 1 To develop a diagnostic instrument based on three components: the institution, the nurses and the patient.
- 2 To do a test by means of a baseline measurement.
- 3 To report on the pilot study.

The symposium will show both the development of a diagnostic instrument and several tests to show the effects of the organization of health care, nurses' job satisfaction and patient satisfaction on the professional environment and quality of care.

This pilot study is the start of a long term development process aimed at providing high quality of patient care according to the patient perspective and at the same time making the nursing profession attractive again. The instrument will have to be further adjusted. Participating institutions have already started improvement programmes.

Excellent care from an organizational perspective

Lambrechts Johan

Bureau Lambrechts, Rotterdam, the Netherlands

Introduction: To achieve excellent care, health care institutions need to provide nurses and carers with an optimum of facilities regarding their professional practice. In the pilot study we will investigate how successful these institutions are in doing so. The research question for this part of the pilot is: what conditions do institutions create in order to allow nurses and carers to carry out their jobs well and professionally, enabling them to provide excellent care.

Methods and Materials: The eight essentials of the EOM II: (1) to work with competent colleagues, (2) good relationships with the doctors, (3) autonomy, (4) support of immediate supervisors, (5) to have a say in professional practice, (6) educational opportunities, (7) sufficient personnel, (8) patient-oriented care culture.

These essentials were operationalized in an open questionnaire. This questionnaire was used for self evaluation by the health care institutions.

Results: Twelve health care institutions collaborated in the pilot study. They all wrote a self evaluation on their organization, based on the eight essentials of Magnetism. The self evaluation offers a lot of information on subjects such as staffing, registration of quality, reallocation of tasks, use of care models and use of evidence based practice (EBP), consultation situations, career paths, educational opportunities, educational budget, recruitment of new nurses, retention of personnel, work pressure, use of norms and values. The self evaluation serves as a mirror for the institution's internal organisation.

Conclusion: This component of the instrument offers a lot of qualitative information. However, up to now the baseline measurement provides no standards concerning the desirable level of care. In the future, the baseline measurement will serve as a starting point for consensus regarding the details of the self evaluation.

Experiences with the essentials of magnetism: attraction and retention of nurses

Brouwer de Brigitte

V&VN Dutch Nurses' Association, Utrecht, the Netherlands

Introduction: In order to attract and retain nurses, health care institutions need to create a productive and satisfying work environment for nurses. The work environment should enable nurses to provide high quality patient care and fulfill their personal needs. The Essentials of Magnetism (EOM) instrument can be used to measure the extent to which an improved work environment helps to realize these goals.

Methods and Materials: The diagnostic instrument consists of three components: the organisation of health care in an institution, nurse outcomes and patient outcomes. Nurse outcomes are measured with the EOM, which reflects nurses' perceptions of the work environment and the quality of care. The EOM is a questionnaire that consists of 58 items and measures the effects of work environment on productivity and job satisfaction. Furthermore, the EOM contains two single-item indicators that measure job satisfaction and quality of patient care by means of a visual analogue scale. During the pilot, the validity and reliability of the EOM will be tested.

Results: Twelve health care institutions cooperated with the pilot. Over 250 units participated, with a total of over 4020 respondents. These respondents considered all subscales of the instrument to be important and clear. Furthermore, the EOMII discriminates in nurses' perceptions on work environment in health care institutions with different organisational structures. Dutch nurses showed better scores on the subscales 'Nurse-physician relationships and 'Autonomy', compared to nurses in Magnet Hospitals in the USA. Remarkably, 'Job satisfaction within health care institutions' received a score that was comparable to the American Magnet Hospitals, whereas 'Nurse-assessed quality of care' consistently received a considerably lower score.

Conclusion: Results are encouraging. The EOM II can be used in the Netherlands. We can already see that the EOM discriminates nursing outcomes based on the differences between health care institutions regarding organisational structure.

Essential requirements for patient care

Smit Mariska

Federation of Patient and Consumer Organizations in the Netherlands (NPCF), Utrecht, the Netherlands

Introduction: The patient component of Excellent Care is aimed at promoting excellent care in health care institutions by using a patient perspective. In this pilot attention is focused on high-quality patient care, delivered according to the patient's perspective.

Methods and Materials: We investigated the essential requirements for excellent care by nurses and carers, from the patient's perspective. Delnoij (2009) identified nine demands of quality. The patient component of the research instrument was based on eight of these: (1) Accessible care. (2) Good communication and information. (3) Respectful behaviour. (4) The patient is in control. (5) Skilled nurses and carers. (6) The organisation of care fits the desires and needs of the patient. (7) Continuity of care. (8) Efficient and safe care.

Excellent care is improved patient care, provided by nurses and carers. To operationalize this, the eight demands of quality from the patient's perspective were concretized in 16 aspects. These aspects are derived from nursing care, and are based on nurse sensitive indicators. This means they depend on the nature (quality) and size (quantity) of nursing care. Included in the patient component of the research instrument were the results of the patient questionnaires (CQ- indexes) and the indicators of care. Complementary data regarding workload were collected and taken into account during analysis. The Excellent Care pilot study was carried out in 12 health care institutions.

Results: The most recent data will be used for this pilot. When these have been collected from the 12 institutions, a database will be created presenting information on patient experiences, nurse sensitive indicators and other issues.

Conclusion: Not all demands of quality are fully supported by the data. This means that further research is needed to add more data to the database regarding the patient component.

H5-456

Does the education tool cancer in the elderly have international potential?

Vries Maruscha de

Comprehensive Cancer Centre South, Eindhoven, the Netherlands

Background: In the Netherlands the population is aging rapidly, more than 40% of all cancer patients are 70 years or older. To prepare the oncology nurse to deal with the specific and complex problems with cancer in the elderly the Dutch Nurses Association Oncology (V&VN Oncology) rolled out an assignment to develop an education program. This program will enhance the competence of (oncology) nurses to deal with cancer in senior adults. The tool was based on the Core Curriculum Cancer in the Elderly from the European Oncology Nursing Society (EONS) and the Dutch competence profile. The tool is a CD box, containing five CD's with different themes and internet application. (www.leermenu.nl) The tool was finished at the end of 2007 and the distribution was done by the V&VN Oncology. The education tool can be used as self-tuition, clinical education or in post basic training. The education tool will be evaluated beginning 2010. At ECCO 14 in Barcelona the project won the best nursing poster prize.

Purpose: Presenting the education tool Cancer in the elderly. Discuss with foreign colleague's if there is a international need for the education tool Cancer in the elderly and does the Dutch education tool have enough international potential for translation into English.

Method: To hold an interactive round table session for a multidisciplinary group of experts in the field of oncology, geriatrics and education. The outcome of the recent evaluation of the Dutch education tool is part of the presentation.

Result: To set up an international network Cancer in senior adults.

To get answers at the following questions: is there a need for developing a international education tool Cancer in the elderly? Is translation of the Dutch education tool appropriate?

H6-63

Taking a positive journey to excellence in geriatric care

Long Kathy

Wake Forest University Baptist Medical Center, Winston Salem, USA

Introduction: Nurses on the Acute Care for the Elderly Unit (ACE) and nurses on 36 units are trained as Geriatric Resource Nurses (GRN). The GRN program is designed to increase the knowledge and clinical competencies of nurses to meet the needs of older adults. This research shows how the NICHE model and the GRN program have improved care in the elderly population in this university hospital. The NICHE principles include: cognitive function assessment, including delirium; depression screening; fall prevention and mobility; urinary incontinence; and medication management.

Methods and Materials: The target group for the GRN courses was direct care nurses caring for patients 65 years and older. One hundred and twenty nurses have completed the GRN course at our hospital. These nurses serve as resources in the care of older adult patients on their units. This mixed method research was designed to help validate the achievements of these hospital leaders in geriatric care.

Results: The Geriatric Resource Nurse survey revealed had statistically significant results in the area of care for the elderly with decreased medication usage using Beers criteria, changes in urinary catheter usage, and management of delirium/dementia. Stories elicited from the nurses illustrated these changes. The nurses, through

the Geriatric Resource Nurse course, have learned innovative practices to meet the needs of this aging population. They also shared through these stories how these innovative practices have been shared with physicians and other nurses to encourage further changes in line with the principles taught in class.

Conclusions: The Geriatric Resource Nurse course has made a positive difference in the GRN's satisfaction in their nursing practice and also in their care of older adults. The increased comfort and confidence in dealing with the complex geriatric issues that this course has instilled in the nurses has helped them develop closer interactions with their older patients.

H7-343

Client- participation: communication between nurses and people with aphasia in the acute phase

Dalemans Ruth

Zuyd University, Heerlen, the Netherlands

Background: Each year 41 000 people suffer a stroke. Twenty-five to Thirty percent of those people have aphasia as a consequence of stroke. Nurses play an important role in caring and consoling the stroke survivor. However, communicating with someone who has lost his ability to communicate is very difficult.

Aim: To gain insight into the communication between nurses and people with aphasia in the acute phase (0–6 weeks) the following research questions were investigated: How do nurses communicate with people with aphasia in the acute phase? How do nurses perceive their competence to communicate with people with aphasia? What do nurses know about aphasia?

Method: We conducted a quantitative blinded study in 34 nurses from seven different hospitals using three measurements: a blinded observation of the communication between nurses and stroke survivors, a self-evaluation assessment by the nurses of the observed communication and an assessment of knowledge concerning stroke, aphasia and communication with a person with aphasia.

Results: The assessment of the observation revealed that nurses estimated their competence higher than the observers. Nurses forget to take care of adjusted light in the environment, further their competence as a listener lacks the ability of supporting communication, making clear to the patient that they did or did not understand the person with aphasia, naming non-verbal signs. Positive skills of the nurses are: taking care of a painless position of the person with aphasia, adjusting the voice loudness and the use of short sentence length. The knowledge about aphasia is rather small.

Conclusion: The participation of people with aphasia must be facilitated during the communication with nurses. It is important that nurses reflect their ability to communicate with people with aphasia and that their know-how concerning communication with this population will be enlarged.

H8-357

A geriatric liaison team caring for elderly hip-fractured patients: a randomized controlled trialDeschodt Mieke¹, Braes Tom², Broos Paul³, Boonen Steven³, Flamaing Johan³, Milisen Koen²¹*Centre for Health Services and Nursing Research, K.U.Leuven, Leuven, Belgium*²*K.U.Leuven, Leuven, Belgium*³*University Hospitals Leuven, Leuven, Belgium*

Introduction: The aim of the current study was to evaluate the effects of consulting by a multidisciplinary geriatric liaison team on clinical endpoints of interest in hip-fracture patients: length of hospital stay, functional status, mortality, new admissions to a nursing home, and hospital readmission.

Methods and Materials: A cluster-randomized controlled trial was conducted in the Leuven University hospital setting in Leuven, Belgium. Unselected patients aged 65 years or older and admitted to the emergency ward with a low-trauma hip fracture were randomly allocated to one of two traumatology wards (one intervention and one control ward, respectively). Control patients received usual care. In active patients, a multidisciplinary geriatric liaison team provided continuous input and advice during hospitalization, on top of usual care and based on a number of components.

Results: A total of 171 patients (mean age 80.8 ± 7.1 years; 73.8% female) were consecutively enrolled: 94 in the intervention and 77 in the control arm, respectively. At baseline, both groups were statistically similar with regard to gender, age, pre-fracture setting, Charlson comorbidity index, ADL, and mental status. Postoperative length of hospital stay was not different between groups. Although patients in the intervention group were significantly less dependent at day 8 postoperatively compared to controls, ADL status was similar for both groups at subsequent time points.

Conclusion: Except for functional status at day 8 postoperatively, consulting by a multidisciplinary geriatric liaison team on traumatology wards did not improve length of hospital stay, functional status, mortality, new admissions to a nursing home or hospital readmission in older patients admitted with a hip fracture. These findings are likely to reflect a lack of compliance on traumatology wards with measures proposed by the geriatric liaison team. Further research is needed to investigate whether a more intensive approach (i.e., a shift from a 'consultational' model to an 'implementational' model) would be more effective.

H9-162

Distress and work related exposure through challenging behaviour of residents in nursing homes

Schmidt Sascha Gerd¹, Dichter Martin², Palm Rebecca², Müller Bernd H², Hasselhorn Hans Martin³

¹University of Wuppertal FB D – IST – Nursing Research Group, Wuppertal, Germany

²University of Wuppertal FB D – IST, Wuppertal, Germany

³Federal Institute of Occupational Health Department, Berlin, Germany

Introduction: One main stressor for caring staff of older people – and especially people with dementia – is the residents' challenging behaviour (RCB). However, the degree of nurses' distress attributed to residents' challenging behaviour remains unknown. Therefore, the aim of this research is to investigate the intensity of RCB-related distress for nursing staff in German NH and the association with further work related mental health outcomes.

Method: Self report questionnaire data of 860 registered nurses and nursing aids in 56 NH of the German 3Q-Study (www.3Q.uni-wuppertal.de) was used. The nurses' RCB – related distress was assessed with a newly developed scale consisting of nine questions concerning degree of perceived distress due to specific caring situations with challenging behaviour patterns.

Results: The mean of the RCB-Distress-Index was 41.2 ($SD = \pm 21.3$). Twenty-six percent of all nurses had a RCB-Distress-Index higher than 50. Nurses older than 45 years had a significantly higher RCB-Distress-Index (44.2 vs. 38.7 , $P < 0.001$). No significant differences were found for qualification level (registered nurses vs. nursing aids) or occupational position. The most stressful challenging resident behaviour was aggressiveness, followed by depressive behaviour. All work related outcomes were significantly correlated with the RCB-Distress-Index: Burnout $r = 0.35$; General Health $r = 0.30$ and WAI $r = 0.34$ (all $P < 0.001$). All correlations are substantially higher among older nurses (45+ years).

Conclusion: Our findings indicate: RCB related distress is a significant work place stressor for nurses in NH; RCB related distress has a clear impact on work related mental health outcomes; Older nurses are at special risk. Considering this, our findings implicate that RCB

needs more scientific and practical attention from the nurses' working conditions point of view. Further assessments are necessary as well as the development of preventive measures considering both the residents' and the nurses' needs.

H10-290

Potential of task substitution in medical care in nursing homes

Bloemendaal Ineke, Albers Daphne, Kroon Sandra de, Dekker Alice

Kiwa Prismant, Utrecht, the Netherlands

Introduction: The main goal of the underlying research is to determine the potential of task substitution in medical care in nursing homes and its effect on the future need for nursing home physicians. In order to achieve this goal more insight is needed into the present substitution of tasks and its conditions.

Methods and Materials: The organisation of medical care and task substitution was assessed in a qualitative study in 38 nursing homes. The selective sample of 38 nursing homes consisted of 13 nursing homes with NP's, 13 with (senior) nurses participating in medical care, nine with other supporting professionals and 10 nursing homes in which medical care was performed exclusively by the (specialized) physicians. Interviews were held with the physicians, (executive) managers, and supporting professionals.

Results: Nurse Practitioners and senior nurses do perform medical tasks. NP's carry out most tasks in the diagnostic and treatment process, supervised by physicians. Senior nurses take care of decubitus and diabetes and are involved in the development of procedures and protocols. Both professionals spend part of their time training and coaching other nurses and care-takers. Work of the NP's and senior nurses reduces the work of the physician by half. Respondents agree upon the positive effect of task substitution on the quality of care.

Conclusion: NP's and senior nurses do carry out medical tasks successfully. As an effect the physician gains time (50%) and the quality of care increases at the same time. Therefore employment of these professionals should be encouraged.

Only NP's are considered as part of the medical staff and lead to a lesser need for physicians. Depending on the ability to employ enough NP's (as one of the measurements) the need for physicians will or will not grow in the future. Various scenario's are elaborated.

H11-333

Determinants of job related stress experienced by nursing staff

Veer Anke de, Francke Anneke

NIVEL, Utrecht, the Netherlands

Introduction: Stress levels of Dutch nurses have been found to increase since 2005. There is evidence that personal resources such as coping style and social support influence job related stress. However when formulating policy to reduce such stress, specific job-related factors must also be considered. The aim of the study was to gain insight into such job-related factors determining job related stress.

Methods and Materials: The study population was made up of members from a nationally representative research sample referred to as the Nursing Staff Panel. Candidates for the Nursing Staff Panel were recruited from a random sample of employees. The Panel consists of Certified Nursing Assistants (CNAs) and Registered Nurses (RNs). In 2009, 628 respondents completed a postal structured questionnaire about their work (response rate 66%). First, all bivariate relationships between job related stress and possible predictors were examined. Then we included stepwise blocks of variables into

regression analyses, starting with job related variables, then individual (background) characteristics and finally adding health care sector. Changes in explained variance were used to determine the unique additional contribution of each block.

Results: The tested model explained about half of the variance within job related stress. Job related factors played a major role. Job related stress was mainly associated with four factors: the perceived quality of nursing care within the ward, the autonomy, workload and the perceived appreciation of the nursing staff by others within the organization. Individual determinants explained only 1% of the variance. Nursing staff members working 20–30 h per week experienced less stress than those working <20 or more than 30 h per week.

Conclusion: Attempts to reduce job related stress is not only a matter of reducing workload. Enhancing the quality of patient care directly reduces stress levels, as well as giving nurses more autonomy and appreciation.

H12-109

Compassion in nursing practice, the significance for older persons with a chronic disease

Cingel Margreet van der

Windesheim University, Zwolle, the Netherlands

Introduction: This study focuses on the phenomenon of compassion as perceived within the relationship of nurses and older persons with a chronic disease. It elaborates on compassion from the perspective of this dependency. Its aim is to understand and elucidate the benefit of compassion and eventually integrate compassion into a theory of nursing care.

Methods and Materials: The study presented is a qualitative study performed in three different care settings: a center for chronic diseases, an organisation for home care and outpatient nurse-consulting hours. In-depth interviews (61) with nurses ($n=30$) and older persons ($n=31$) were conducted and subsequently analysed in Atlas –Ti. Previously, a literature review, aimed to explore compassion in the domain of care, was performed and published in 2008.

Results: The nature of compassion is described by participants of the study as a process in which attentiveness, presence and involvement of the nurse are important, as well as room for story-telling, confronting older persons with specific loss, helping attitudes and understanding. Results on the questions raised by literature show, among other things, that older persons as well as nurses think suffering is the most important trigger for compassion. Nurses also describe in what way compassion is being triggered in a kind of mirroring process, this being consistent with the latest insights in neuroscience. All in all, the study shows that compassion is about 'setting aside' one's own perspective in order to really see what is salient for the person taken care of.

Conclusion: Compassion helps setting and achieving patient goals because it helps to reveal relevant information in order to give proper care. Compassion motivates older persons as well as nurses to work together in emotionally difficult times of suffering, loss and adaptation to limitations as a consequence of chronic disease.

H13-142

The care conundrum: changing the culture of gerontic nursing

Winbolt Margaret, Nay R, Koch S

Australian Centre for Evidence Based Aged Care, Bundoora, Australia

Introduction: It is now expected that gerontic nursing practice be person-centred and informed by research evidence (Sidani, Epstein & Miranda, 2006). However, the general culture of gerontic nursing remains that of task-focused and routinised practice (McCormack,

2001). This paper presents a study aimed at gaining insight into what influences gerontic nurses to retain a traditional approach to their work and appear to resist attempts to bring about change.

Methods and Materials: In-depth interviews were conducted with 21 nurses. Interviews were transcribed verbatim and analysed using a Grounded Theory approach.

Results: Analysis elucidated participants' thoughts on the role of the gerontic nurse, the meaning of 'care' in gerontic nursing and the complex health care environment in which they work. Participants' strongly held opinions were shown to guide how they organise and prioritise nursing work. 'The care conundrum' or disparity regarding the meaning of care and the role of the gerontic nurse was identified as the core influence on participants' retention of a traditional approach to their work. Several other factors which inhibit change were also identified. This insight into these influencing factors informed the development of a model for change.

Conclusion: The paper presents a model for change, the components of which it is postulated, will inform the development of gerontic nursing environments which support skilled, knowledgeable evidence-based gerontic nursing practice, at the heart of which is the relationship with the patient/resident as a unique person.

H14-307

Nurse practitioners role in obtaining optimal adherence and patient satisfaction in Parkinson's disease care

Stienstra Sjoukje¹, Rundervoort Rob¹, Otoide Marleen², Ong Rob³

¹*Medisch Centrum Haaglanden, Den Haag, the Netherlands*

²*Landsteiner instituut, Den Haag*

³*Hogeschool Leiden, Leiden*

Background: Poor adherence with the medication regime in Parkinson can cause higher morbidity, lower quality of life and consequently higher healthcare costs. Medication adherence is now managed by the treating physician. Participation of a nurse practitioner (np) in care for Parkinson patients may deliver a promising contribution in managing medication adherence. In this study treatment adherence was compared between patients seen by a neurologist only and patients seen by a neurologist and np.

Method: Parkinson patients who visited the neurology outpatient department of the Medical Centre Haaglanden (MCH) – Westeinde between October 2007 and October 2008, were asked to participate in this prospective cohort study and complete a questionnaire. Data were collected on: medication adherence (measured by the Medication Adherence Report Scale; MARS), the complexity of medication schedule, experienced effect of medication, patient-perceived quality of pharmaceutical care, the disease stage (measured by the Hoehn & Yahr score), duration of Parkinson's disease, age, gender and education.

Results: Of 145 eligible patients 98 (68%) agreed and were included. Adherence of patients treated by neurologist and np was not significantly different (23 SD 2.1 vs. 22.9 SD 2.1). Patients with np participation in the treatment had a significantly more complex medication schedule, a longer duration of Parkinson's disease and a higher degree of severity of the disease than patients without np participation.

Discussion & Conclusion: Medication adherence of Parkinson's patients under treatment in the MCH was fairly good and similar to adherence of Parkinson's patients and chronically sick in other studies. There still is much room for improvement however. Medication adherence did not differ between treatment by a neurologist only and treatment by a neurologist and np. Since more complex patients were treated by a np, there may be a beneficial effect of treatment by a np, but this needs further investigation.

H15-48**Strategies to ensure successful community-based research with persons over 80 years old**

Naef Rahel, Mahrer-Imhof Romy, Keller-Senn Anita, Imhof Lorenz

Zurich University of Applied Sciences, Winterthur, Switzerland

Introduction: Research with oldest-old persons poses multiple challenges for researchers, related to recruitment and retention as well as completeness and quality of data due to population vulnerability, and standardization of intervention despite diverse health issues. Thus, sharing results from a successful study may encourage research with oldest-old persons, which is urgently needed for health care planning.

Methods: Experiences gained during data collection of a 15-month intervention study with persons 80 years or older to evaluate an advanced nursing practice home visiting program were analysed. Useful strategies in researching oldest-old were described.

Results: Four strategies emerged as vital to achieve a sample size of 440 persons. First, a networking effort with local service providers known and trusted by elder persons was needed. Second, personal relationships with the intervention or data collection nurses and the provision of help was vital. Third, about 15% of persons received phone support to fill out questionnaires, and in about one third, missing data had to be completed by phone. Fourth, a protocol was developed to handle ethically sensitive situations. To determine the ability for participation, contact with professionals and family members was sought or assessed in a first personal contact. Ongoing study team support and regular reflective practice sessions were strategies to ensure quality and ethical conduct within the study protocol.

Conclusions: Conducting a high quality research study with frail oldest-old living at home holds particular challenges that require a locally well connected research team with considerable time and financial resources to ensure successful recruitment, retention and completeness of data. A careful study conception that balances study standardization and individual needs, as well as continued discussions are necessary to ensure the safety and well-being of elder research participants and study success.

H16-203**Autonomy in nursing homes – Examination of self-determination and capacity to act among the elderly**

Wulff Ines, Dräger Dagmar, Kopke Kirsten, Ellert Sebastian, Kölzsch Marita, Kalinowski Sonja, Kreutz Reinhold

Charité-Universitätsmedizin Berlin, Berlin, Germany

Introduction: Nearly 70% of the nursing home population suffers from Alzheimer's disease or other forms of dementia that often result in increasing loss of independence in daily activities. Examinations of maintenance and promotion of autonomy of residents in long-term care play a key factor when considering quality of resident-oriented care. Therefore, one core aim of the research project PAiN (Pain and Autonomy in the Nursing Home) is to analyze autonomy of nursing home residents and the correlation between various influencing factors such as multi-morbidity, need for care, therapeutic and nursing interventions, and pain management and perception.

Methods and Materials: Data on approximately 750 randomly selected residents in long-term care facilities were generated by face-to-face interviews, psychological and physical assessments, analysis of nursing records and documentation, and acquisition of institutional parameters.

Results: The results show that not only residents without cognitive incapacities (Mini Mental State Examination 24–30), but also residents with mild cognitive impairments (up to 18) are able to comment on their perceived autonomy. The perceived degree of autonomy does not correlate with physical frailty nor does autonomy

seem to depend on the occurrence of pain. While still having the ability to make decisions and to perform daily activities partly unaided, residents cannot live in a self-determined manner due to a lack of choices and opportunities offered by personnel or institutional structures.

Conclusion: For the first time, the PAiN study has considered the entire population in nursing homes, including individuals with cognitive impairments due to dementia, in order to analyze the autonomy of residents in terms of self-determination and capacity to act. The results imply a shift in cut-off points regarding the inclusion of individuals with mild dementia syndromes to a benefit of a fair quantity of their participation in research studies. The findings contribute to a thorough understanding of autonomy from the resident's perspective.

H17-353**Older hip fracture patients and their next of kin's experiences about dignity in hospital**

Koskenniemi Jaana, Suhonen Riitta

University of Turku, Turku, Finland

Introduction: The purpose of the study was to describe the implementation of dignity in the care of older patients with hip fracture and their next of kin. Dignity is an abstract concept and defined here as treatment with respect, helpfulness and fulfillment of the patient's hopes.

Methods and Material: Data were collected using interviews from ten patients with a hip fracture (mean age 84 years) and their next of kin ($n=10$). The purpose of the interviews was to discuss themes which were important for the interviewees. Data were analyzed using the inductive content analysis method, seeking to bring out the points of view of the patients and their next of kin as genuinely and honestly as possible. The phenomenological approach was applied in the analysis, along with the narrativist formation and analysis of individual stories.

Results: The patients and their next of kin felt that appreciative patient-centered interaction was the most important factor in the realization of dignity. They viewed appreciative patient-centered interaction as objective, open, and unhurried care given by qualified staff, in order to create a safe and caring atmosphere. Nurses' friendliness, sympathy, patience and mercifulness assured the patients and their next of kin about their work motivation and willingness to help older people. Nurses' initiative in telling about care without asking was also valued.

Conclusion: The patient's recognition of the absence of a social network and the attitude of the relatives and friends towards taking the place of the next of kin are likely to be among the challenges of the future in the care of older people. Based on the data the hypothetical model of appreciative patient-centred interaction was developed. The model needs to be tested in different nursing environments in the future.

H18-341**Skilled for the future: 'Trends in geriatrics education'**

Woning Rene van der, Boonstra Jeroen, Dieren Sandra van Saxon, Enschede, the Netherlands

WHO: 'Our World is Aging Fast'. A triumph (ageing is a privilege and a social achievement) and a challenge. 'Measures to help elderly people remain healthy and active are a necessity, not a luxury'. Do the trends in care of elderly people require a new professional? Which challenges do professionals and educators face? Should we adapt or keep up with trends?

In this interactive workshop we will show you how we teach students to become a professional in the elderly care. We would like to share our ideas about care for elderly people with you and are looking forward to hear about the development in your country, health

care institution and university concerning care for elderly people. We will present to you the rightful place which care for elderly people has in the bachelor program in nursing at Saxion School of Health.

In this workshop we want to explore your opinions about trends and education in care for the elderly, from an international perspective. Global ageing, culture, gender, technology, economics of an ageing population, rights and responsibilities of elderly people, active ageing and providing elderly care... 'What is the aim? '

We will introduce our international intensive programme in elderly care to you. An intensive programme, based on Erasmus procedures, with international partners to exchange knowledge about geriatrics and gerontology between students and lecturers. We hope to make contact with new (international) partners & healthcare institutions and enlarge the opportunities of the intensive programme.

Join our workshop and become a Skilled partner for the future!

Parallel Session I

I 1-S2 Symposium

Care improvement programs and higher education

Goal: To present new methods of care innovation using professional education (colleges, teachers and students) as a means of obtaining enduring innovation results. The new care innovation trajectory focuses on care innovation professionals (nurses), their role in the care innovation team and their competencies.

Overview: The first presentation Regional improvement programs and universities of applied sciences: towards lasting care improvement describes the development of the new care innovation trajectory and presents the first results of the process evaluation.

Secondly, we highlight the elements of the care innovation role of nurses as project leaders; the context in which this role materializes, and how this role changes in the course of the care improvement trajectory. (Baccalaureate nurses as innovation professionals in care improvement teams)

Finally, in our presentation entitled Applying Practice Development to Care Improvement Programs we focus on the results of a literature review on Practice Development and how this methodology is empirically incorporated in our new care innovation trajectory.

Regional improvement programs and universities of applied sciences: towards lasting care improvement

Smits C¹, Jukema J¹, Harps-Timmerman A¹, Freriks B², Kamper A³, Ramakers L¹, Strating M⁴, Stoopendaal A⁴, Veen R van der⁵

¹Windesheim University of Applied Sciences, Zwolle, the Netherlands

²Regional Foundations of Care Organizations, Zwolle, the Netherlands

³Isala Hospital, Zwolle, the Netherlands

⁴IBMG, University of Rotterdam, Rotterdam, the Netherlands

⁵Vilans, Expertise Center on Long-term Care, Utrecht, the Netherlands

Introduction: A new care improvement format is currently being developed that builds on effective ingredients of traditional care improvement formats while adding three new elements in order to achieve prolonged innovation results. Its present focus is on falls prevention, but if successful, it may be applied to other themes: (1) support of improvement teams by teacher-coaches and students based at universities of applied sciences (in particular nursing education). (2) competencies of bachelor trained care professionals (usually nurses) as project leader of care improvement teams. (3) a regional expertise network on falls prevention that is built in the course of the project. This development project started in September 2009 and is accompanied by a process evaluation and a study that aims to demonstrate the added value of the new format in comparison to traditional care improvement programs with respect to number of falls, staff expertise and competency and sustainability of innovation results.

Methods and Materials: The new format is developed by a consortium consisting of the Windesheim University of Applied Sciences, Vilans (Expertise Centre for long term Care) and a regional network of care organizations. The format is tested in ten care innovation teams. The research is conducted by iBMG (Rotterdam University) and the Windesheim Research Group on Innovation of care for older adults, using teacher-coaches and students to collect the data (questionnaires, participant observations, interviews).

Results: The presentation focuses on the development of the new care care improvement program and how it has materialized in the

first 12 months. Furthermore, the first results of the process evaluation and effect study are presented.

Conclusion: A new care innovation format is currently tested in ten care improvement teams. At the time of abstract submission no conclusions can be drawn as to the results of the process evaluation and effect study. However the results of two measurement points are presented.

Baccalaureate nurses as innovation professionals in care improvement teams

Span Marijke, Smits Carolien, Harps-Timmerman Annelies, Jukema Jan

Windesheim University of Applied Sciences, Zwolle, the Netherlands

Introduction: Baccalaureate nurses play a central role in care improvement programs trajectories as they are usually installed as project leaders of a care improvement team. Care improvement programs have been shown to be effective in raising both enthusiasm and results. However, once (subsidized) trajectories have been completed, the enthusiasm and results appear to dwindle all too often. The improvement program 'Regional Care for Better' aims to support 10 participating care improvement teams in achieving and maintaining care improvement. A new care improvement program format is developed that builds on effective ingredients of traditional care improvement programs while adding new elements in order to achieve prolonged innovation results. A major new element concerns the competencies of bachelor trained care professionals as project leader of care innovation teams. The present study aims to provide insight in the way bachelor trained nurses fill in this innovation role and how a new care improvement program affects the way this role takes shape.

Methods and Materials: In this multi centre study data collection takes place at three measurement points over 12 months. Data are collected through semi-structured interviews with various staff members of the care improvement teams and their managers. The topic list is based on a literature review. Furthermore, data is provided through participant observation on the wards of two improvement teams during 10 days. Finally, the bachelor nurses involved are asked to complete weekly pre-structured logbooks. Method triangulation is thus guaranteed.

Results: Data collection is in process. The results of the first and second measurement cycle are presented highlighting the elements of the care innovation role of the nurses as project leaders; the context in which this role materializes, and how this role changes in the course of the care improvement program.

Conclusion: The results will be used to further develop the new care improvement program and the formal training of innovation competencies of bachelor nurses.

Applying practice development to care improvement programs

Jukema Jan, Smits Carolien, Harps-Timmerman Annelies, Span Marijke

Windesheim University of Applied Sciences, Zwolle, the Netherlands

Introduction: Currently a new care improvement program format is being developed that builds on effective ingredients of traditional

care improvement formats like Care for Better while adding a focus on professional care innovation competencies by applying Practice Development (PD). The new format entails the support of innovation teams within the care organizations by teacher-coaches and students based at universities of applied sciences (in particular nursing education). PD incorporates different aspects of evidence, such as research based and practice based knowledge. A core theme within PD is facilitation. Facilitation clarifies values and beliefs, while taking into account claims, concerns and issues. The facilitation of professionals is directed towards strengthening leadership. An important tool is a so called Action Learning Set, a method focusing at exploring and clarifying existing values, knowledge and skills and guiding ways of improvement. The present contribution focuses on the way Practice Development takes shape in the ten care organizations that participate in the development of the new improvement program: How is Practice Development materialized in care improvement programs? Which elements work within this context and how can this contribute to further development of theoretical Practice Development models?

Methods and Materials: The new care improvement program format is tested in ten care improvement teams. The research is conducted by iBMG (Rotterdam University) and the Windesheim Research Group of Innovation of Care for the Elderly, using teacher-coaches and students to collect the data (questionnaires, participant observations, interviews, logbooks).

A literature review focuses on Practice Development models and applications. A systematic comparison is made of the empirical data and the theoretical information focusing on the research questions.

Results: The project started in September 2009 and data collection is in progress. The presentation highlights the first results of the literature review and empirical data.

Conclusion: When Practice Development is successfully implemented in the presently developed Care Improvement Program format, it may be recommended as an essential element in nurses training. Furthermore, existing PD-models may be further refined.

I 2-S29 Symposium

The PROGRESS project: the development in a European framework for the quality of life and care in long term care homes in Europe

Goal: The world gets smaller and European boundaries seem to vanish. In most European countries there is a growing population of elderly people depending on long term care. In this symposium it is shown how a partnership between several European countries leads to a European framework for quality management in long term care homes. Besides an overview of the methods used in the PROGRESS project and the results of the Delphi study by Vilans, the Dutch partner in PROGRESS, two quality systems are being presented: the My Home Life Programme from the U.K. and the E-Qalin quality management system that is being used in Austria, Germany, Italy, Luxembourg and Slovenia. In a concluding panel discussion with the presenters of this symposium and with Jenneke van Veen, Chief Inspector of the Dutch Health Care Inspectorate and CNO and one of the initiators of the Norms for Responsible Care system the differences, similarities and challenges of national and international quality management in long term care are being discussed.

Overview:

- 1 Presentation of the Progress project
- 2 Presentation of My Home Life Programme
- 3 Presentation of E-Qalin
- 4 Panel discussion

PROGRESS: Development of an European quality framework in long term care homes in Europe

Pel-Littel Ruth¹, Meyer Julienne², Minkman Mirella¹, Mak Sabina¹

¹*Vilans, Utrecht, the Netherlands*

²*City University, London, UK*

Introduction: This study aimed to develop an international set of result-oriented indicators which can help to measure the quality of life long-term care homes. The indicators focus on the needs of residents, relatives and staff. This project is the first which compares indicator sets across seven different countries in long-term care and seeks to construct an international framework of standards including a conceptual analysis for quality of life and quality of care and a set of result-oriented indicators to define, measure and assess quality in residential care for older people. Particular emphasis is being placed on the perceived relevance and practical applicability of the indicators to the care-home sector.

Methods and Materials: National indicator-sets from the seven participating countries (Austria, Germany, UK, the Netherlands, Italy, Slovenia and Luxembourg) have been collected and compared by an international team of content experts resulting in a first (international) list of result-oriented key performance indicators for the quality of life and care in long-term care homes.

Results: This work is ongoing and in May 2010 the results of the validation and application test phases will be summarized and analyzed along with the cross-national differences that were observed. Further debates and improvements will lead to a final version of the framework and a related manual/guidebook in different languages. This manual will be designed for service providers and a briefing paper will also be produced for policymakers.

Conclusion: This presentation will focus on the results of the validated common set of indicators in order to stimulate an international debate on some of the issues raised; in particular, the feasibility of the framework in relation to different national and regional quality requirements in long term care, the applicability of the framework in different long term care contexts and its use in relation to different quality management approaches.

Quality of life in care homes for older people: reflections on international result-oriented indicators

Meyer J

School of Community & Health Sciences, City University, London, United Kingdom

This paper draws on findings from My Home Life (MHL) programme (www.myhomelife.org.uk), a UK-wide initiative to promote quality of life for those living, dying, visiting and working in care homes for older people. Founded by National Care Forum (represents not-for-profit care homes) and Help the Aged (with start up funds from BUPA Giving), it now has the support of all the national provider organisations representing care homes across the UK and is being delivered in partnership with Age UK (Age Concern & Help the Aged), City University London and Joseph Rowntree Foundation. This paper reflects on the difference between quality of life and quality of care indicators and the author (Director for MHL) argues that, internationally, result-oriented quality indicators in care homes for older people tend to have a number of flaws

Wider issues of measuring quality are then considered including the notion of relevance, measurability, attribution and association, aggregation, comprehensiveness and universality.

Drawing on on-going work in the UK, the paper concludes that research on result-oriented indicators for quality in care homes for older people is largely being undertaken in silos and is failing to build on previous work undertaken in the field of health and social care.

It is suggested that rather than focusing on result-oriented indicators derived for the collective good, attempts should be made to capture more individualistic, relationship-oriented indicators of quality. These indicators should be based on a conceptual framework that embraces what residents, relatives and staff 'want' and also 'what works'. Within this framework, the older person's voice should not be lost and the needs of those with dementia and frailty should be seen as paramount. Further, it is argued that providers of care should be engaged directly in the development of quality indicators so that what is produced is meaningful and helpful to them.

The E-Qalin[®] experience – Enabling Care Homes to work with result-oriented indicators

Leichsenring Kai

European Centre for Welfare Policy and Research, Vienna, Austria

This presentation is based on experiences of care homes that work with the E-Qalin[®] quality management system. It is based on training and self-assessment to map the reality in residential care facilities by inviting representatives of all stakeholders to assess and improve 66 enabling criteria (structures & processes) and 25 key-performance indicators (results) from five different perspectives (residents, staff, management, social environment, and 'learning organisation'). The assessment areas 'structures & processes' and 'results' are equally weighted (50+50%) to express the quantitative result of the self-assessment process in percentage points

Following this self-assessment process, a list of mutually agreed improvement projects should guarantee enhanced services and further involvement of stakeholders. A key-word and key-value of the model is 'involvement' because participation of relevant actors (management, staff, residents and relatives) in planning, implementing, monitoring and improving is considered an explicit asset and reflected in the result of the assessment. E-Qalin[®] seeks to enable relevant stakeholders, by means of specific training modules to enhance communication, social competence and systems-thinking within the organisation.

The E-Qalin[®] model does not prescribe specific key-performance indicators to be chosen but its manual supports applicants by providing examples used by other care homes for the various themes or

domains. In order to improve these examples, the E-Qalin® consortium joined the PROGRESS project on results-oriented indicators for care homes with a key-role to identify and validate enhanced results-oriented indicators for care homes with a special focus on quality of care and quality of life.

The presentation will focus on the assessment of results by means of results-oriented indicators in the context of an E-Qalin self-assessment, in particular with a view to controlling and steering in daily practice, i.e. how to apply such indicators within an organisation by involving all staff.

Panel discussion

Van der Veen R

Vilans, the Netherlands

Looking at the practice in Europe, it becomes obvious that the definition of legal minimum standards has been the key tool to regulate and ensure quality in long term care. These standards are mainly focused on structural characteristics of care provided such as room size, safety features, training and staff levels etc. However new kinds of standards, e.g. for process quality, targets for excellence (expert

standards, disease management standards or good practice) as well as benchmarking in terms of outcomes can increasingly be identified.

In a panel discussion we would like to share some experiences of care providers in several European countries working within quality frameworks. Looking at Progress, My Home Life, E-Qalin and QFRC the following questions can be considered:

How well has quality management improved transparency of care provision and given support to competition on quality between providers? Have frameworks enabled service users and commissioners to contract services based on quality and to monitor the quality of care? Can professionals be enhanced to share their experiences in meeting the standards? A care provider has to create conditions for the activities of professionals by ensuring a competent staff, appropriateness of devices, an adequate method for information and communication and should organize a cyclical secured care plan living system. How does a care provider monitor the effectiveness of these conditions on the quality indicator? Which results can be expected by investing in improvement actions?

Panelists: Leichsenring, Kai, European Centre for Social Welfare Policy and Research, Vienna; Meyer, Julianne, City University, London; Pel, Ruth, Vilans, Utrecht; Veen, Jenneke van, Health Care Inspectorate, Utrecht.

I 3-S30 Symposium

The challenge of international collaborative nursing research

The Workgroup of European Nurse Researchers (WENR)

Background: The Workgroup of European Nurse Researchers' (WENR) mission is to promote and strengthen the value of collaborative nursing research in Europe for the benefit of the people of Europe. In doing so WENR intends to enhance collaboration and solidarity among nurse researchers across Europe.

Aim: In line with WENR's mission statement, the aim of this symposium is to explore criteria for establishing effective and productive multinational collaborations.

Content: Four researchers from different parts of Europe will present and address the challenges of collaborative research from different perspectives. The first presentation will consider the current status of nursing research in Europe. The focus will be on the challenges European nurses have faced in building a scholarly culture, including the conduct of research that has been influential within and outside of nursing. The second presentation will describe and explore some of the important practical and ethical challenges to be faced when involving older people in research and will suggest how these might be overcome. The third presentation will examine factors influencing successful international research collaboration, drawing on experiences from the aged in home care project, a cross-sectional population-based study at 11 urban sites in Europe. Practical features of structure, process and outcome related to this work will be discussed. The fourth presentation will focus on the process and outcomes of collaboration in research and provide examples from studies on pain research in nursing home residents/care. The importance of multidisciplinary involvement in nursing research will be acknowledged and several ways to improve international and multidisciplinary collaboration discussed.

Nursing research in Europe: competence and capacity

Sveinsdóttir Herdís

Faculty of Nursing, University of Iceland

The landscape that nurse researchers work in today is very different from the late 1970s when WENR was established. A few important milestones have included the move of basic nurse education into universities in most European countries, the expansion of doctoral programs in nursing, greater access (on the table at least) to research funding comparable to other academic disciplines, the development of nursing research posts in clinical practice in many countries and increased publication by nurses in peer reviewed journals. 'Shrinking' of the world with the establishment of the World Wide Web and technology that makes communication fast and easy has also paved the way for instant reflection on study results and ideas between researchers located in Athens, Cambridge and Reykjavik.

In 1996 the Council of Europe published a report on nursing research where they provided five major recommendations on what was needed. These were structure and organisation; integration of research and practice; education for nursing research; funding for research and national and international cooperation¹. In 1999 twelve European states brought together novice and experienced nurses in order to address how the recommendation made by the Council of Europe report could be implemented². In 2005 a project funded by the European Union 6th framework program mapped the state of nursing research in Europe³. A 'snapshot' of the findings show that: academic infrastructure remains relatively underdeveloped in most countries; nursing for the most part lacks research career pathways; funding sources and influence at government level vary markedly between countries; and that research on nursing issues and the development of nurse researchers is the domain of few European countries.

The presentation will address these landmark reports, as well as analysis of WENR 2009 country reports on the status of nursing research. In order to gain more insight into information presented in the country reports individuals will be contacted and databases searched. The context of nursing research in three European countries will be analysed and compared.

Involving older people in research: the practical and ethical challenges

Gelling Leslie

Anglia Ruskin University, Cambridge, UK

Older people are often keen to participate in research for multiple reasons, including an altruistic desire to help others, personal satisfaction at being involved in knowledge development and because they will often be offered earlier access to promising new treatments. An additional perceived consequence of being involved in clinical research, although yet to be proven, are better health outcomes as a direct result of more frequent health checks where signs of illness or deteriorating health might be identified earlier and the cause treated sooner. Despite this, there are still barriers in place to the more frequent participation of older people in health and social care research.

Researchers can be reluctant to include older people in their research. Co-morbidity might be a legitimate reason to exclude some older potential participants but researchers also have a tendency to use arbitrary age restrictions. This is unfortunate because it has also been demonstrated that when they are approached older people are more likely to want to be involved in the research. Furthermore, they are more reliable research participants and are more likely to comply with the requirements of the research.

UK law [Mental Capacity Act 2005, Adults with Incapacity (Scotland) Act 2000 and Medicines for Human Use (Clinical Trials) Regulations 2004] has clarified issues relating to involving adults lacking capacity in research in England, Wales and Scotland but there has not been a clear upsurge in the volume of research exploring conditions such as dementia and Alzheimer's disease, which are more common in older populations.

The recruitment of older people can be a complex process but researchers need to face these challenges if they are to include older people in research important to a large and growing part of the European population. This paper will describe and explore some of the important practical and ethical challenges to be faced when involving older people in research and will suggest how these might be overcome.

Factors for successful international research collaboration – Experience from the AgeD in Home Care project with 11 sites in Europe

Wergeland Sørbye Liv

Diakonhjemmet University College

The overall purpose of this presentation is to present factors for successful international research collaboration drawing on experiences from the aged in home care (AD HOC) project.

Legal regulations and ethical guidelines are key elements to consider when planning of both international and national research. Talented and creative researchers are critical and the research institution at which they work would commonly function as the host country. Other investigators are invited to participate and the development of a project proposal is initiated. A research protocol must be signed by all local participating parties. The institution must commit to participate in the research. Management support is necessary to ensure success of the individual investigator. A contract that specifies rights and obligations of all parties is necessary.

Before the project can be initiated the project must be funded. The ownership and authorship of the data must also be clarified. Usually the secretary and the repository for the database would be in the host country.

In writing the protocol robust research questions are of great importance. Today a large number of different instruments and tools for data collection are available. Selecting the 'best' tool is an important process in itself. The aim of research study must be clearly defined in the protocol. And when the data base is locked, data analysis is initiated to answer the prewritten research questions. Experiences during data collection and unexpected results may lead to new questions and research articles. A robust database built on a well recognized tool provides good possibilities for publication at different levels: doctoral dissertations (including articles in scientific journals), master theses or specialized articles in national nursing journals.

The use of a common research instrument in cross-national studies gives nurses the opportunity to benchmark practices and learn how to publish in peer-reviewed journals and improve praxis. Good models provide support for health policy decisions as well, and thus promote equality and justice.

Multidisciplinary collaboration in nursing research – Experiences from pain research in residents with dementia

Zwakhalen SMG

School for Public Health and Primary Care (Caphri) Maastricht, the Netherlands

Nursing science is characterized by a great variety of research topics that can be viewed in the context of the target population and/or diseases. Many of these research topics are complex and require the

urgent need for interdisciplinary collaboration in order to improve the quality of care. The topic of pain in elderly people with dementia and limited abilities to communicate is an example of a challenging research area in a complex care setting involving a variety of disciplines that needs multidisciplinary alliances to improve the patients quality of life.

It has been mentioned in the literature that the collaborative process consists of six Cs: contribution, communication, commitment, consensus, compatibility, and credit Lancaster *et al.* (1985). In this presentation we explore these C's of (inter)national multidisciplinary collaboration from a nurse perspective. We focus on the process and outcomes of collaboration in research. More specifically, examples and experiences from studies on pain research in nursing home residents/care will be used.

The importance of multidisciplinary involvement in nursing research will be acknowledged and several ways to improve international and multidisciplinary collaboration will be discussed. The presentation will furthermore focus on the challenges, opportunities, efforts in collaborative alliances for nurses and nursing research to promote a dialogue between parties involved in nursing research.

I 4-S10 Symposium

Ensuring an effective nursing workforce for an aging population

Goal: RN4CAST (Nurse Forecasting in Europe) is a 3-year (2009–2011) study funded by the EU under the 7th framework. The project RN4CAST aims innovative forecasting methods by addressing not only volumes, but quality of nursing staff as well as quality of patient care. RN4CAST is a consortium of 15 partners that will quantify in 11 European countries-Belgium, Finland, Germany, Greece, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands, the UK- important unmeasured factors in forecasting models including how features of hospital work environments and qualifications of the nurse workforce impact on nurse recruitment, retention, productivity and patient outcomes. The papers presented in this symposium aim to illustrate the main goals and objectives of the study, the instruments used and preliminary study finding by the case of Belgian, Swiss and Spanish data.

Overview:

- 1 General introduction and objectives RN4cast-study
- 2 Predictive validity of the RN4CAST questionnaire: connections between different aspects of the nursing practice environment and quality of patient care
- 3 A comparison between the Belgian and Spanish Nursing Workforce: do different nurse density and nurse education result in different nursing practice and patient outcomes?
- 4 Implicit rationing of nursing care and quality of patient care
- 5 Discussion & conclusion

Predictive validity of the RN4CAST-instruments: a pilot Study

Heede Koen van den¹, Aiken LH², Diya L¹, Bruyneel Luk¹, Sermeus W¹

¹Catholic university Leuven, Leuven, Belgium

²University of Pennsylvania, Philadelphia, PA, USA

Introduction: The large scale Registered Nurse Forecasting (RN4CAST) study aims at indicating the effect of care elements, measured with the PES-NWI (the practise environment scale of the Nursing Work Index), and nursing staff deployment on nurse recruitment, retention, and productivity and on patient outcomes in 11 European countries. The objective of this pilot study therefore was to demonstrate predictive validity of the NWI by linking care elements and nurse outcomes in a small scale setting.

Methods and Materials: Cross-sectional analysis of data from 179 nurses (75% response rate) who completed an IHOS-like nurse survey questionnaire, which included the Revised Nursing Work Index (NWI-R), the Maslach Burnout Inventory (MBI) and questions on job satisfaction, intent to leave and nurse-perceived quality of care. The nurses worked in four Belgian acute-care hospitals. Logistic regression modeling was performed to explore associations between nurse outcomes and nursing work environment factors that were checked with confirmatory factor analysis.

Results: We confirmed associations between nurse outcomes and the following nursing work environment factors: nurse-physician relationship; staffing, and resource adequacy; and nurse manager ability, leadership, and support of nurses.

Conclusion: Predictive validity of the NWI was supported by the confirmation of key factors, which were identified by prior international research, and by the finding of similar associations between these factors and nurse outcomes, indicating psychometrical soundness of the IHOS instrument. The RN4CAST consortium, consisting of members from 15 countries, will use a similar instrument to measure the nursing work environment. This information will be linked with patients' experiences and data extracted from routinely collected hospital discharge data and will later be used to refine

forecasting models. RN4CAST advocates the important role of nursing staff in providing high quality care and advances the use of forecasting models for personnel planning in work redesign.

Comparing the Belgian and Spanish nursing workforce

Heede Koen van den¹, Moreno-Casbas MT², Ramillategui-Dos Santos R², Bruyneel Luk¹, Fuentelsaz-Gallego C², Aiken LH³, Sermeus W¹

¹Catholic university Leuven, Leuven, Belgium

²ISCIII, Madrid, Spain ³University of Pennsylvania, Philadelphia, PA, USA

One of the main objectives of the Registered Nurse Forecasting (RN4CAST) European project is to study the dynamics between different aspects of the nursing work environment, and nurse and patient outcomes in 11 European countries. In this paper it will be explored if differences between the Belgian and Spanish nursing workforce translate in different nursing practice and different patient outcomes.

The number of practicing nurses per 1000 inhabitants is much higher in Belgium (14.8/1000) than it is in Spain (7.5/1000). In addition, the nursing education system is approached in a different way. Spanish nurses are trained on a higher level (i.e. university degree), whereas Belgian nurses can opt between two educational pathways (i.e. professional diploma and bachelor degree) in becoming a nurse.

In this session only data of the Spanish and Belgian Branch of the RN4CAST study will be used. A total of 56 Belgian and 34 Spanish acute hospitals are currently participating in the RN4CAST study. In each of the selected hospitals all registered nurses working on 4–6 (depending on hospital size) randomly selected internal medicine and general surgical nursing units were surveyed between November 2009 and February 2010. The nurse survey includes validated instruments to measure nursing work environment, nurse to patient ratio's, Educational level of nurses, perceived quality of care, non-nursing task performed by nurses, job satisfaction, and burnout (MBI).

Two types of result will be presented: How macro-economic figures (e.g. nurse density) translate in daily organization of hospital patient care (e.g. nurse-to-patient ratios); A comparison between Spain and Belgium regarding different aspects of the nursing work environment (e.g. nurse staffing, skill mix, magnet hospital characteristics), nursing practice and nurse outcomes (e.g. burnout, intention to leave) and nurse perceived quality of care.

Implicit rationing of nursing care and quality of patient care

Schubert Maria, Schwendimann R, Ausserhofer D, Desmedt M, Geest S de

University of Basel, Basel, Switzerland

Introduction: The Rationing of Nursing Care in Switzerland Study (RICH Nursing Study) indicated that rationing is an important newly-identified organizational variable, which appears to be directly linked to patient outcomes. Rationing seems to capture the effects of staffing and skill-mix and nurse work environment factors on quality of patient care. This might explain why rationing was such a strong factor and already low rationing levels was linked with deteriorating patient outcomes. As an end result of several ongoing decision making and clinical judgment processes rationing seems to capture the effects of staffing and skill-mix and nurse work environment factors on quality of patient care. This might explain why rationing was such a strong factor and already low rationing levels was linked with deteriorating patient outcomes. Due to the shown importance of this new factor was an aim of the Swiss part of the RN4CAST Study, to further explore the relationship between implicit rationing of nursing

care and quality of patient care in Swiss acute care hospital, adjusting for major organizational variables.

Methods and Materials: Descriptive cross-sectional multi-center study design, including a representative sample of 35 stratified selected Swiss acute care hospitals (21 German, 10 French, and four Italian speaking hospitals), and 2261 nurses and 1458 patients on 133 medical and surgical units.

Implicit rationing of nursing care was measured with the Basel Extent of Rationing of Nursing Care (BERNCA) instrument.

Results: The data analysis is still in progress, but two types of result will be presented at the conference: Descriptive results of the major variables of interest (implicit rationing, quality of the nurse work environment, staffing and skill-mix, quality of patient care); Preliminary multivariate results about the relationship between implicit rationing of nursing care and quality of patient care, adjusting for other major organizational variables.

I 5-S27 Symposium

Improving the lives of people with dementia in Europe. How Dementia Care Mapping (DCM) gives us a process to develop better dementia care

Goal: The goal of the symposium is to demonstrate the use of Dementia Care Mapping in improving person centred care for people with dementia across different countries in the EU.

Overview: Dementia Care Mapping (DCM) is a set of observational measures that were developed by the late Professor Tom Kitwood *et al.* working with the Bradford Dementia Group. DCM is used in a series of developmental evaluations over time to push forward the quality of organisational practice in person centred care. It has been used since the early 1990's in residential and nursing homes, day care, respite care and hospital wards. Through a process of preparation and feedback, staff are empowered to consider care from the point of view of the service user with dementia. On the basis of these observations, changes are made to care plans and practice generally. DCM provides an evidence base that can be used to monitor change over time on an individual resident level and an organisational level. DCM training has been available in the UK since 1991. Since 1998 Bradford Dementia Group has developed International Strategic Partnerships with organisations in the USA, Germany, Denmark, Australia, Switzerland and Japan. Individual dementia care practitioners from Finland, Spain, Norway, the Netherlands, Sweden, Ireland, New Zealand, Canada, Luxembourg, Italy, Belgium, South Korea and Hong Kong have also attended basic DCM courses. During this symposium we will share some of the experiences of mapping in different cultures and how results from our DCM observations can help us enrich the experience of care for people with dementia both nationally and internationally. This workshop will be of interest to those who would like to learn more about DCM and explore what lessons we can learn from our observations to improve the experience of care for people with dementia.

Improving the quality of care for people with dementia using Dementia Care Mapping (DCM)

Edwards Paul

Bradford Dementia Group, Bradford, UK

Dementia Care Mapping (DCM) is a set of observational measures, designed to push forward the quality of organisational practice in person centred care. It has been used since the early 1990's in residential and nursing homes, day care, respite care and hospital wards. Through a process of preparation and feedback, staff are empowered to consider care from the point of view of the service user with dementia. On the basis of these observations, changes are made to care plans and practice generally. DCM provides an evidence base that can be used to monitor change over time on an individual resident level and an organisational level.

This presentation will highlight the powerful impact the tool can have on informing care teams about the potential in people with dementia to thrive in care settings. Through its process of feedback and action planning, DCM challenges care teams to unlock the abilities within each person. DCM can change a care teams' perception about the lived experience of a person with dementia. This presentation will provide evidence from a variety of DCM observations across Europe and will demonstrate the potential DCM has for improving personhood. Discussion will be offered as to the future of DCM in relation to the changing dementia care field across the European Union. In an increasingly resource stretched field, evidence will also be offered about the cost effectiveness of the tool and how care organisations can improve the services they deliver. Behind every diagnosis is a person with needs that need to be understood and supported. DCM can offer an insight into how these needs can be met and how care teams can re-think the care they give so that quality across services can be improved.

Dementia Care Mapping (DCM) in the Netherlands: present past en future

Post Aukje¹, Kuiper Daphne²

¹*Department of Health Sciences of the UMCG, Groningen, the Netherlands*

²*Applied Research in Health Science (TGO), Groningen, the Netherlands*

Dementia Care Mapping is an observational method that has been used in formal dementia care settings, both as an instrument for developing person centered care practice in and as a tool in evaluative research.

DCM was developed in the early 1990's in the UK by the late Tom Kitwood and Katherine Bredin, but since then has kept pace with the changing face of dementia in present times (to the current time). DCM trained personnel is working world wide in Spain, Finland, Norway, Sweden, New Zealand, Portugal, Ireland, Hungary, Canada, Luxembourg, Hong Kong, Italy, Singapore, Taiwan, South Korea, Belgium, South Africa and in the Netherlands. This workshop will provide an overview of the implementation of the DCM method in the Netherlands. Aukje Post, project leader of DCM Netherlands, will give an overview of the actual state of affairs of DCM in the Netherlands, including:

1 Results of the evaluation of a pilot project on the implementation of DCM in the care organisation the Friese Wouden in 2007/2008.

2 Overview of a RCT study of (cost) effectiveness of Dementia Care Mapping intervention in nursing home settings by the University Medical Centre St Radboud Nijmegen. Start date 01-03-2010

3 Overview of a qualitative study of the use of DCM in monitoring care settings for dementia. Qualitative research. Trimbos instituut (Research Institute on mental health, mental resilience and addiction).

4 Preview on a proposed research project for applying DCM in supported living settings and evaluating its effects on the quality of life of people with dementia who live at home, the sense of competence of informal caregivers and the job satisfaction of home support workers. University Medical Centre Groningen (ZonMw proposal, submitted Feb 2010).

Development of DCM in Germany over the last 12 years with reference to the national issues of dementia care

Riesner Christine

German Center for Neurodegenerative Diseases (DZNE), Bonn, Germany

In Germany DCM is in use since 12 years now. DCM is a tool and a process, the theoretical background is Personcentred Care for people with dementia. The observational tool was built to improve well-being for people with dementia in day care centers and nursing homes.

There were some important developments in the field of dementia care in Germany, which were all affiliated with personcentred care and DCM. These developments took place in political initiatives, care settings, trainings for careers and staff members and voluntary organizations.

This speech will show some essential examples about the influence of Personcentred Care and DCM during the last period of dementia care in Germany.

Evidence from a Catalan residential and nursing home of DCM observations & developmental evaluations

Vila-Miravent Josep¹, Roca Amparo²

¹*Alzheimer Catalonia Foundation. Barcelona, Catalonia, Spain*

²*Llar CaixaTerrassa, Terrassa, Catalonia, Spain*

Introduction: The goal of this presentation is to demonstrate the use of Dementia Care Mapping in improving person centred care for people with dementia in a 170 beds residential and nursing home located in the city of Terrassa (Catalonia). Llar Caixa Terrassa is a non-for profit social and health care organisation that provides services to older adults with a specialization in services targeted to those affected by dementia and their caregivers. Main dementia care services include three 30 beds units and a day care centre.

Methods and Materials: This facility has been using DCM in their three dementia care units as a developmental evaluation over a period of 18 months to push forward the quality of organisational practice in person centred care.

The implementation process has been done with the support and consultancy from Alzheimer Catalonia Foundation, the DCM strategic lead organization in Spain.

Results: On the basis of their observations, Llar CT care team will present: Changes made in individual & group care plans to improve personhood; Changes made in organizational practice to consider care from the point of view of the service user with dementia; Actions done to empower staff to provide person centred care.

Conclusion: Quality of care can be improved by DCM within a developmental cycle framework. Objectives to improve care need to be set in the long term so that staff will feel empowered to lead those changes.

Dementia Care Mapping in Norway – part of a National developmental program for milieu therapy in dementia care

Mork Rokstad Anne Marie

Norwegian Centre for Dementia Research, Norway

Background: Dementia Care Mapping (DCM) was developed in UK in the early 1990s and is used as a method to evaluate and develop dementia care in several countries. In Norway DCM is introduced as part of a national developmental program for milieu therapy in the Dementia Plan 2015.

Objective: The objective of the project is to gather information of how DCM influence the development of dementia care in nursing home units, especially focusing on how the method initiate reflections in the care staff and how this affect their practise and the quality of life for the nursing home residents.

Design and Method: The project includes three nursing homes in tree municipalities and the interventions takes 12–14 months including tree DCM-mappings. Patient data are collected before and after the intervention by means of standardised scales, for example Quality of life in Alzheimer's disease (QUALID), Brief Agitation Rating Scale (BARS) Neuropsychiatric Inventory (NPI), and Cornell scale for depression in dementia (CSDD). Information from the care staff is collected in qualitative focus group interviews with staff members and leaders directly involved in the DCM- mapping and feedback process, and by means of scales such as the Person-Centered Care Assessment Tool (P-CAT).

Results: The presentation will focus on the results from the focus group interviews with care staff. The care staff experience increased consciousness, self-reflection and sheered reflection based on the DCM-feedback sessions. They describe how feedback confirms their work and how they are inspired to further development of the milieu therapy in the units.

I 6-77

Clinical decision making of signs of infection in elderly persons: experience of nursing assistantsSund-Levander Märtha¹, Tingström Pia²¹Hoegland Hospital, Eksjö, Sweden²Health University, Linköping, Sweden

Background: In a recent study we explored that nursing assistants have a keen observational ability to detect early signs and symptoms that might help to confirm suspected infections early on. Hence, in order to optimize the clinical evaluation of the individual, it seems important to involve nursing assistants in the process of decision making. To our knowledge, this is the first paper describing nursing assistants participation in the clinical decision making process.

Aim: To illuminate how nursing assistants think and act when the resident does not feel well. Design: Explorative, qualitative study.

Context: Community cares organization including non-profit nursing homes, and individuals in need of daily care living in their own apartment.

Method: Focus interviews with 21 female nursing assistants. The interviews were verbatim transcribed and analyzed with qualitative content analysis for manifest and latent content with no preconceived categories.

Findings: The findings emerged as a theme in which the nursing assistants wished for partnership in the decision process with nurses and the doctors, but also that they described themselves as 'we' and nurses and the doctor as 'the others'. Nursing assistants revealed that the decision making process was influenced by personal experiences and preconceptions and external support system, and secondly that taking action was influenced by their clinical experience in information search, the reasons for choice of action, the choice of action and feedback from the nurse and physician.

Conclusion: Overall the findings illustrate that the nurse's and physician's response to the nursing assistant's observations had great impact on their further actions. The results indicate that nursing assistant's part in the clinical decision process is more of involvement/collaboration and sometimes participation than partnership.

I 7-197

Prevention and reduction of physical restraints in long-term geriatric care: a systematic reviewMöhler Ralph¹, Köpke Sascha², Meyer Gabriele³¹Witten/Herdecke University, Witten, Germany²University of Hamburg, Hamburg, Germany³Witten/Herdecke University, Institut of Nursing Sciences, Witten, Germany

Introduction: In recent years several attempts have been undertaken to prevent and reduce PR use in nursing home residents. A number of intervention studies have been published, evaluating complex interventions consisting of different components, i.e. educational sessions aimed at changing nurses' attitudes, information about and implementation of alternatives to PR use. So far, no systematic review of high methodologically quality has been conducted. Therefore, we aimed to prepare a Cochrane review summarising available efficacy studies.

Method and Material: A systematic literature search was performed covering all relevant databases. In addition, hand search and search for ongoing trials in trial registries was conducted and experts in the field were contacted. Titles and abstracts of citations identified were examined independently by two authors.

Preliminary Results: The results of the studies are inconsistent. One study showed no PR reduction after 8 months and one found no difference in change between groups after 12 months. In one study, PR use significantly decreased in one intervention group (education plus consultation) and non-significantly in the second inter-

vention (education) and the control group after 12 months. One study found a significant decrease in the intervention group and a non-significant increase in the control group after 6 months. The fifth study found an increase of PR after 12 months in the control group. Quality assessment revealed methodological shortcomings of all studies. Two studies indicated relevant baseline differences between study groups. Only one study used adequate statistical methods for cluster-randomisation. Development, piloting and actual success of the complex intervention's implementation was insufficiently reported in all studies.

Conclusion: There is no clear evidence on the efficacy of interventions aiming to prevent or reduce the use of PR in long-term geriatric care. Methodological shortcomings of the studies included affect the internal and external validity of the results. Further research on carefully designed and piloted interventions using rigorous experimental research methods is urgently needed.

I 8-318

Light conditions and vision problems of older adults in the nursing home

Sinoo Marianne, Hoof Joost van, Kort Helianthe

Hogeschool Utrecht, Utrecht, the Netherlands

Introduction: In 56% of the cases of low vision treatment or slow down of a further decline is possible. Still 44% of persons affected by low vision remain untreated. The impact of vision loss affects daily care and the design of the living environment for older adults in the nursing home. Basic strategies for a healthy living environment for older adults with low vision include light conditions as increasing illuminance levels, controlling brightness and luminance ratio. In this pilot study an assessment was made of vision problems and the light conditions in nursing homes in the Netherlands.

Methods and Materials: Older adults ($n=165$) in three nursing homes were screened for vision problems by an optometrist. Consequently health care records of these persons were analysed for presence of vision problems. Light conditions were assessed in common spaces and corridors using a Konica Minolta chromameter CL-200. The results were compared to the minimum illumination levels as given in a guideline by the Dutch Society for Illumination (NSVV).

Results: Results show that over 40% of the screened older adults eligible follow-up screening or monitoring. More than 75% of these cases were not reported in the health care records. The illumination level in the nursing homes fell far below standard. Light conditions in private rooms were better. Assuming that specific tasks are performed in common rooms, additional illumination is needed. Light conditions in corridors vary according to the position in the corridor. Right below the luminaires conditions met the lower criteria, although levels decline sharply when stepping out of the direct flux. Such variation may go together with an increased risk for falls.

Conclusion: Low vision is a serious problem for older adults. Vision screening by an optometrist can reveal which older adults are at risk. The living environment can be improved or enhanced through vision devices. Special attention should be given to light conditions in corridors to prevent falls.

I 9-422

Pain treatment: a risk factor for delirium in older adults with hip fractureBjoro Karen¹, Herr Keela²¹Oslo University Hospital, Oslo, Norway ²College of Nursing, University of Iowa, Iowa City, IA, USA

Introduction: Delirium and pain are common following hip fracture. Undertreatment of pain has been shown to increase the risk of delirium in older adults with hip fracture in only a few earlier studies. This study was conducted to investigate relationships between pain,

pain treatment, and other factors on delirium in older hip fracture patients.

Methods and Materials: A prospective cohort study was conducted at two Norwegian hospitals. The consecutive sample included 204 patients aged 65 years and above with no delirium at baseline. Patients were screened daily using the Confusion Assessment Method (CAM). All analgesics administered from admission through the third postoperative day were extracted from the patient record. A five point verbal rating scale was used to measure pain in cognitively intact patients and the Checklist of nonverbal pain indicators was used to measure pain in those with cognitive impairment. Multiple logistic regression was used to identify risk factors.

Results: Of 204 patients, 70 (34.3%) developed delirium postoperatively. Risk factors for delirium were cognitive impairment, complete or hemiarthroplasty, postoperative anemia and prolonged preoperative fasting. Patients who received inadequate multimodal pain treatment (<9.9 mg of opioids and 3500 mg acetaminophen or less) had a significantly increased risk of delirium compared to patients who received more analgesics ($P=0.02$).

Conclusion: Avoiding both opioids and acetaminophen increased the risk of delirium. Undertreated pain appears to be a risk factor for delirium. Improved pain treatment may reduce the incidence of delirium in older adults with hip fracture.

I 10-135

Developing future nurse leaders in the care of older persons

Morin Karen, Hurley Mary Rita, Prevost Suzanne
Honor Society of Nursing, Sigma Theta Tau International, Indianapolis, IN, USA

Introduction: With a grant from the John A. Hartford Foundation, Sigma Theta Tau International (STTI) created an innovative mentorship program to develop leadership skills for individuals involved in long term care. Additionally, the program develops skills that lead to the promotion of health policies for the geriatric population in diverse and global health care settings.

Methods: The Geriatric Nursing Leadership Academy (GNLA) is an intensive 18 month mentored leadership program. The GNLA Fellow-Mentor dyads are comprised of academicians and clinical geriatric experts. Faculties representing the original five Hartford Centers of Geriatric Nursing Excellences provide expertise and guidance throughout the program, creating triads of nurses with varying expertise in geriatric care. Individual leadership knowledge transfer and evidence-based clinical experiences are expected of the participants. The curriculum draws from many disciplines with a goal of promoting nurse-led interprofessional teams.

Results: To integrate the curriculum into the participant's personal leadership journey, participants complete such projects as maintaining a reflection journal; participating in an on-line community for support, discussion, and debate; and developing an evidence-based clinical project to address a geriatric nursing issue in their practice setting/community. Recently completed projects include Nursing Leadership and Gerontological Knowledge: Key to Quality Nursing Home Care; A Voice for Older Adults: Promoting the Role of the Nurse in Assisted Living; Geriatric Resource Nurse Model; and Alternatives to Personal Alarm Systems in Long Term Care.

Conclusion: With continued growth in the ageing population globally, nurses need to be the leaders in practice, education, administration, research, and health care policy development/implementation. As the older adult population grows, the number of geriatric advanced practice nurses is lagging behind. It is critical to be at the forefront of preparing such nursing leaders. The GNLA model should be replicated on a global level in order to facilitate the ageing process at all levels of the health care continuum.

I 11-350

Person-centred leadership for person-centred care

Cardiff Shaun

Fontys University of Applied Sciences, Eindhoven, the Netherlands

Introduction: Leadership style is a widely documented enabler of change, but what style of leadership is needed for the implementation of person-centred care? Stanley (2008) argues that clinical leaders are followed not only for their vision or creativity, but mainly because of how they translate their values and beliefs about care into action. Plas and Lewin (2001) describe person-centred leadership as a participatory approach to leadership in which the leader gives as much attention to the individual as the whole team, aiming to empower people and develop quality of care by attending to workplace culture and system processes. So, how can leaders develop this style of leadership?

Methods and Materials: A participatory action research (PAR) project was started in a gerontology ward of a general urban hospital within the Netherlands. The aim was to enable ward leaders to develop person-centred leadership in order to provide more person-centred care, as described in McCormack and McCances (2006) framework of person-centred nursing.

Results: The results presented here are those from an early action research cycle. Critical reflective inquiry (Kim, 1998) sessions, combined with participant observations and critical dialogue, have enabled the clinical leaders to develop a style of leadership where they can translate the values and beliefs associated with person-centeredness into action. Stories and observations have emerged of staff becoming more empowered, and leaders changing their traditional style of leadership as they search for relationships based on interdependency rather than hierarchy and power. The nursing care system has been collaboratively restructured to enable others, apart from the charge nurses, to lead clinical nursing. Storytelling sessions have been instigated that enable team members to examine the values and beliefs guiding care, enabling the development of a more person-centred approach to nursing.

Conclusion: This paper will argue the need for a style of leadership that is congruent with the concept of person-centred care, using the propositional knowledge available to date and experiences from this study.

I 12-148

The use of comprehensive geriatric assessments for clients using home care services: a Flemish study

Almeida Mello Johanna de, Declercq Anja, Spruytte Nele
Katholieke Universiteit Leuven, Leuven, Belgium

Introduction: This study compared a practical instrument applied in home care services in Flanders, the BEL instrument, to a shorter version of the Resident Assessment Instrument (RAI) Home Care (HC). The goal is to map the similarities and differences between these two instruments and to explore caregivers' experiences in working with them. The paper also offers insight into the relevance of comprehensive geriatric assessments for clients using home care services.

Methods and Materials: Participating caregivers were social workers and other non-medical professionals from 20 home care service providers in Flanders. Five hundred and thirty-three clients using home care service were scored with the BEL instrument and an adapted version of the RAI-HC instrument. Correlation analyses were performed between the data of the two instruments. RAI HC outcome variables were calculated and the content of clients' care needs was compared.

Furthermore, semi-structured group interviews were conducted with 19 professional caregivers to explore their experiences.

Results: The study showed many similarities between both instruments and high correlations between the items for IADL and ADL. Nevertheless, correlations were low for items related to the social and environmental context of the client.

Most of the caregivers considered the RAI HC instrument to be a very useful tool because of its holistic nature. The instrument can help to identify 'blind spots' and potential problem situations. However, caregivers pointed out that the RAI HC instrument only seemed to be useful for clients with complex health and care needs.

Conclusion: This research demonstrated that a comprehensive geriatric assessment such as the Resident Assessment Instrument is useful because of its holistic view on clients' care needs. However, the need was felt to incorporate more information in the RAI-HC instrument on social and environmental characteristics of the clients. Finally, professional caregivers judged that only a small percentage of home care clients would benefit from a comprehensive geriatric assessment.

I 13-156

Development and validation of the NOSCA – Nurses' observation scale for cognitive abilities

Persoon Anke, Schoonhoven Lisette, Joosten-Weyn Bannigh Liesbeth, Kessels Roy, Olde Rikkert Marcel, Achterberg Theo van

Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

Introduction: Assessment of a patient's cognitive functioning is an important issue as nurses tailor their nursing interventions to the patient's cognitive abilities. Although some observation scales exist concerning one or more cognitive domains, so far, no scale has been available which assesses cognitive functioning in a comprehensive manner. The objective of the study was to develop and validate an observation scale that assesses elderly patients' cognitive functioning in a comprehensive manner.

Methods: Content validity of the scale was addressed by developing the scale by means of Delphi technique. A multidisciplinary panel of 16 experts developed a scale by consensus through four Delphi rounds (>70% agreement). The International Classification of Functioning (ICF) was used as a theoretical framework.

Results: The Nurses' Observation Scale for Cognitive Abilities (NOSCA) was developed after four Delphi rounds. The panel reached consensus about including eight cognitive subscales and 39 items. The Cronbach's alphas of the total NOSCA and its subscales were 0.98 and 0.66–0.93, respectively. The item-total correlations were satisfactory. The intra-class coefficients were good (37 of 39 items > 0.4). The convergent validity of the NOSCA against cognitive ratings (MMSE, NOSGER) and severity of dementia (CDR) demonstrated satisfactory correlations, except for IQCODE. The divergent validity of the NOSCA against depressive symptoms was low. The construct validity of the NOSCA subscales against 13 specific neuropsychological tests showed correlations varying from poor to fair.

Discussion: The validity and reliability of the total NOSCA are excellent. The correlations between the NOSCA subscales and standard neuropsychological tests were moderate. More conclusive results may be found if the NOSCA subscales were to be validated using more performance based scales and in a patient population with less cognitive impairment. Nonetheless, our results demonstrated that the use of the NOSCA yields standardized, reliable and valid information about patient's cognitive behavior in daily practice.

I 14-164

An optimal future care for older people in the Nordic countries

Finnbakk Elisabeth¹, Skovdahl Kirsti², Fagerström Lisbeth³, Olesen Anne Mette⁴, Store Blix Ellen⁵, Larsen Reidun¹, Kulla Gunilla⁶, Ahonen Pia⁷

¹*Lovisenberg Deaconal University College, Oslo, Norway*

²*Orebro University, Orebro, Sweden*

³*Skovde University Sweden/Buskerud University College Norway, Skovde / Drammen, Norway*

⁴*VIA, University College, Århus, Denmark*

⁵*Bodø university College, Bodø, Norway*

⁶*Novia University of Applied Sciences, Vasa, Finland*

⁷*Turku University of Applied Sciences, Turku, Finland*

Introduction: This actual study is a part of a Nordic project, so called GEROPROFFS, between eight Universities and University Colleges in Sweden ($n=2$), Finland ($n=2$), Denmark ($n=1$) and Norway ($n=3$), to promote higher education in advanced nursing for older people. The purpose of this qualitative study is to explore and describe top managers and top politicians attitudes and views of the optimal care for older people for the next decade in the Nordic countries.

Methods and Material: The participants; top managers and top politicians from primarily elderly care ($n=19$), were recruited from surrounding regions of the University/University Colleges. Individual semi structured interviews were conducted. The main research question was 'What are your official attitudes and views connected to an optimal future elderly care; more precisely – for the next decade?'

Results: Three main levels were distinguished: an individual level with the core categories individual needs, valuable views and prevention; an organizational/managing level, in which competence development especially connected to nursing competence, leadership and attractive working place are the core categories, and the level of society, including willingness to organize care for older people in new ways, recourses and technology. Economic matters, increasing numbers of older people with complex needs and multi illnesses in the future, are some of the future challenges in the Nordic countries and welfare states. Nevertheless there seems to be an optimistic and creative willingness to act by most of the participants in this study – but with a potential underlying fear. This fear can be related to 'how to do and solve'. One latent answer for the challenges of the future elderly care might be an advanced nursing skill mix competence. The analyzing process is ongoing.

Conclusions: The final findings will be presented at the conference.

I 15-375

Supporting and strengthening community care for older people in The Ukraine

Notter Joy

Saxion University of Applied Science, Enschede, the Netherlands

Introduction: This project was developed with four universities in the Ukraine, one medical college, national organizations and the Ministry of Health, together with Saxion University of Applied Science (and funded by The Ministry of Foreign Affairs, the Netherlands). The aim of the project was to create local networks between universities/medical colleges, stakeholders, and professionals in the community, to develop a national curriculum for community nursing and to pilot a series of initiatives for care in the community.

Method: An approach was needed whereby ownership stayed with the Ukraine partners, so a facilitation model was used to develop workshops and activities. Working groups were convened, one to work on developing a national curriculum for community nursing and four to develop specific pilot activities. The project team from Saxion acted as facilitators providing education, expertise and guidance as activities progressed, and as requested by the Ukraine partners.

Results: Regional research groups identified key issues and concerns in the care of older people in the community and from these pilots were designed and implemented. These included a daycare centre for older people, two different types of volunteer movement to support older people (using volunteers is a new concept for the Ukraine), and an information centre for both professionals and older people themselves.

Conclusions: Project partners were enthusiastic about the approach used and highly positive about the outcomes. They appreciated that the approach used enabled some direction to be given in the initial stages, then gradually reduced, so handing control and ownership to participants as they became more aware of the overall aims/objectives and more confident of their ability to achieve them. They were confident that the pilots could be sustained and that the national curriculum for community nursing care would enhance the services provided.

I 16-42

Nursing students' experiences of nursing homes as learning environments: a qualitative study

Skaalvik Mari Wolff, Normann Hans Ketil, Henriksen Nils
University of Tromsø, Tromsø, Norway

Introduction: Globally there is a focus on the lack of nurses who provide care for older people especially in nursing homes (NHs). Many nursing students (NSs) regard this field of work as boring, unstimulating and frustrating. Studies show that clinical experiences have an impact on feelings towards older people and preferences regarding NHs as future workplaces. NSs often return to practice in a location where they experienced a positive learning environment. It is important to identify factors underlying a positive learning environment as well as factors that may discourage nursing students from this line of work.

Methods and Materials: A qualitative study based on field work, field notes and qualitative research interviews conducted with 12 third year nursing students undergoing clinical practice in nursing homes. The contexts of this study were three NHs in Norway used as sites for clinical practice on a regular basis throughout the academic year.

Results: Three main themes with varying experiences and perceptions connected to learning environment were found: acceptance and appreciation; supervision and learning process; professional discussions and learning outcomes.

Conclusions: We found variations in nursing students' experiences and perceptions of their learning environments while caring for older people. The findings strongly indicate a deepening knowledge about how psycho-social aspects are important components to nursing students' perceptions of the learning environment in nursing homes. A good learning environment includes expert guidance, feedback and critical and reflective processes in a community of professional practice. The experiences and perceptions of the professionalism in the learning environment are pivotal factors as students seek refinement in their learning process through critical reflection and professional discussions.

Policy-makers, managers and researchers must develop positive learning environments in nursing homes if graduated nurses shall be recruited to and retained in this part of the health care system.

I 17-143

Geriatric nursing education in Israel: achievements, barriers and challenges

Golander Hava
Tel Aviv University, Tel Aviv, Israel

Objective: Nurses are involved more than any other professionals in caring for healthy and sick elderly within the community, in general hospitals and extended care facilities. Where will the nurse reserve needed to care for the elderly come from? How should the various

training programs prepare nurses to function properly and willingly in different care settings? How can we ensure nurses' work satisfaction in caring for the elderly? The presentation is focused on discussing these issues in the Israeli context.

Method: Data was derived from analysis of surveys exploring the attitudes of nurses towards the elderly as well as from interviews with geriatric nursing teachers and managers, analysis of teaching programs in the various training levels and analysis of research publications.

Results: During the last 20 years geriatric nursing in Israel has achieved enormous progress and achievements in promoting the clinical care of old people, research, education, management and policy making. Yet, we still face serious difficulties that hamper our ability to provide adequate professional taskforce for the future. The majority of nurses lack the motivation, the knowledge, the attitudes and the skills needed to treat the elderly satisfactorily. Nursing students are not interested in geriatrics. Nurses, particularly younger ones working in general hospitals, hold negative stereotypes towards both healthy and sick elderly people. The gerontological component in the curriculum is insufficient.

Conclusions: The existing educational programs and resources are incapable of producing the sensitive and skillful nurses needed to fulfill the expanded independent roles we ascribe for nurses in the future. A reform necessitates a joint strategic policy plan, along with national resource allocation, in order to re-instate the entire process of how to prepare, recruit, maintain and nurture competent and content nurses in geriatrics. Fostering and refreshing the professional leadership in education, practice, research and management is a precondition to this well needed reform.

I 18-144

Alternative supervising model and assessment of nursing students

Struksnes Solveig, Engelen Ragna Ingeborg, Solvik Elisabeth, Nordhagen Siv, Bogsti Wenche, Moen Øyfrid, Arvidsson Barbro
Gjøvik University College, Gjøvik, Norway

Background: Nurses' conceptions of how an alternative supervising model influences their competence in assessment of nursing students in clinical practice. Nursing education programme in Norway encompasses 50 weeks clinical studies. Twenty of these weeks are related to community care and care for older people. Due to changes in the educational system and increased focus on evidence based practice alternative models of supervision and assessment are developed.

Aim: The aim of this study was to describe variations in how nurses in nursing homes conceive how an alternative supervising model influences their competence in assessing nursing students in clinical practice.

Method: The study has a qualitative, explorative and descriptive design using a phenomenographic approach. The informants were in total 49 registered nurses in five different nursing homes. The nurses followed the alternative supervising model during 10 weeks with 17 students in third year and following 10 weeks with 43 students in first year of the education programme. During 10 weeks of clinical practice the nurses attended three group supervision sessions with a nurse teacher.

Results: The nurses' experiences are described through three description categories; 'Support', 'demands' and 'personal development'. The nurses experienced demands from University College and colleagues, but support through group supervision and written information from the University College contributed to personal and professional development. The alternative supervision model supported the nurses in the assessment of the nurse student. Group supervision promoted personal and professional development. The alternative supervision model also seems to strengthen the relationship between clinical practice and the University College. Subsequently it may support the implementation of evidence based practice in the care units in question.

Parallel Session J

J1-170

Attitudes towards the anticipated transition into retirement in the Nordic welfare context

Söderhamn Olle¹, Skisland Anne², Herrman Margaretha³

¹University of Agder, Faculty of Health and Sport Sciences, Arendal, Norway

²University of Agder, Faculty of Health and Sport Sciences, Kristiansand, Norway

³University West, Trollhättan, Sweden

Introduction: There may be different attitudes towards the transition into retirement and old age pensioner life among people who are relatively close to get into their third age. This phenomenon has not been widely studied in the nursing literature. Since this predictable-involuntary transition may have influences on personal health and well-being, it should be meaningful to study it in a self-care perspective. The aim of this study was to illuminate aspects of self-care in a group of middle-aged individuals in relation to their anticipated transition into retirement in the Nordic welfare context.

Methods and Materials: A qualitative design was used in this study. A total number of 13 individuals, 55–65 years of age, were randomly chosen from the total number of inhabitants in three municipalities in mid-west Sweden. The interviews were tape recorded and transcribed verbatim. After content analyses and interpretation, a comprehensive understanding of the phenomenon was revealed.

Results: All informants viewed their lives in retrospective with positive feelings with respect to their childhood and youth. As grown up individuals, they saw family, friends and social relations as very important. No particular differences between the informants from the different municipalities were found, nor in relation to age, sex or profession. There were opportunities, expectations, wishes, concerns and worries related to the transition into old age pensioner life among the informants from both the rural and urban municipalities.

Conclusion: Autonomy and mature dependence seem to be positive driving forces for reaching a successful transition into old age. Supporting autonomy should, therefore, be a way for facilitating the predictable-involuntary transition into retirement. Further studies about the retirement transition within a self-care perspective are needed. This study indicates that motivation, autonomy and mature dependence are important issues that should be focused in such research. Gender issues and connectedness are other important areas.

J2-100

Preservative care. On good nursing care for vulnerable older persons in nursing homes

Jukema Jan¹, Grypdonck Mieke², Verkerk Marian³

¹Windesheim University of Applied Sciences, Zwolle, the Netherlands

²University Medical Center Utrecht, Utrecht, the Netherlands

³University Medical Center Groningen, Groningen, the Netherlands

Introduction: Older persons in nursing homes often describe their situation as difficult and hopeless. Nurses play a decisive role in their lives. Without their permanent care these dependent and vulnerable older persons would be lost. But reports show cases in which residents were actually harmed by a lack of care given by nurses. This inadequate care is morally reprehensible. The aim of this research is to articulate good nursing care in nursing homes. The research ques-

tion is: 'what daily nursing care of vulnerable older persons in nursing homes is morally good?'

Methods: This research is an example of an empirical ethical research. Within an iterative research process theoretical work (by nurses like Benner, Eriksson, Grypdonck, philosophers like Kukla and care ethicists like Van Heijst, Lindemann Nelson, Ruddick, Tronto, Verkerk) helped to interpret the empirical data (participative observations (515 h) and interviews ($n=35$) with both older persons and nurses in nine nursing homes) whereas empirical data helped to discuss and clarify theoretical insights.

Results: When nurses' concrete daily care preserves an older person in such a way that he is maintained as a particular person within a changing context of progressive dependency and permanent stay in a nursing home, preservative care is said to be carried out and experienced. Within the practice of preservative care moral elements like attentiveness, responsibility, preservation and responsiveness are present.

Conclusion: In practices of preservative care older persons remain worthy members of society at large. Preservative care is a relational practice. In practices of preservative care nurses in their turn are also valued and held as valuable and unique persons. The contribution of nurses to sustaining and maintaining a nursing home as a moral practice is of utmost importance. It contributes to a decent society.

J3-414

Ethical issues of the research interviews with people with dementia and their significant others

Pesonen Hanna-Mari, Remes Anne, Isola Arja

University of Oulu, Oulu, Finland

Introduction: Researching sensitive issues with vulnerable people highlights specific ethical questions throughout the research process. This presentation reflects certain ethical issues when conducting a qualitative longitudinal research with people with early stage dementia and their significant others. The focus is especially on the interviewer's and interviewee's relationship.

Methods and Materials: The presentation is based on researcher's reflections of an ongoing doctoral study that follows subjective experiences of both people living with dementia ($n=8$) and their family members ($n=8$) during the early phase of the illness. Research data consists of semi-structured in-depth interviews. The data has been collected in Northern Finland at regular intervals during 1.5–2 years and is analyzed using grounded theory -method.

Results: The informed consent was seen as an active process where the researcher aimed to ensure that the study participants understood the nature of the study and that participation was voluntary in each phase of the study. This required monitoring the verbal and non-verbal signs of the study participants. The study participants experienced interviews as positive events although sometimes interviews brought up emotions and feelings of sadness. It was challenging for the researcher to maintain the investigator's role and protect the interviewee's well-being at the same time. Therefore clarifying the interviewer's role and self-reflection was essential for the researcher.

Conclusion: Researching sensitive issues with vulnerable people requires accurate procedure planning as well as sensitivity and reflexivity in moral decision making and relationship with study participants. Research interviews allow people to share their experiences and this requires confidential atmosphere and sensitive interviewing skills from the researcher. Despite these challenges it is necessary to hear the voices of people with dementia and their significant others through research.

J4-448

How decisions are made by and for older residents with dementia in residential care homes

Wood Julia

St George's, University of London, London, UK

Introduction: Research has shown that people with dementia are able to make decisions about how they live their lives. There is evidence that people with dementia want to maintain control and autonomy and this affects their well being. However there has been little research into everyday decision making by and for people with dementia living in care homes. The aim of this study is to explore the experiences of staff, residents and their friends and relatives of decision making in care homes.

Method: This is a qualitative study employing grounded theory (Dey 1999) which enables the generation and discovery of theory focusing on how individuals interact in relation to the phenomenon under study, in this case decision making by and for residents in care homes.

Methods used are observation and interviews with residents, managers, nurses, carers and residents' friends and relatives. In the first care home, participants for interview have been selected using theoretical sampling. Analysis commenced as soon as data was collected. A second care home will be selected using theoretical sampling and the process repeated. Up to two more care homes will be included, until saturation is reached, or when no new ideas are being generated by the data.

Theoretical sampling takes place in two stages. First, groups with minimal differences are targeted to establish 'the basic properties of a category'. Second, groups with maximal differences are sought to explore the widest variations within categories, enabling constant comparison

Analysis has four stages. First, generating categories and their properties. Second, categories are integrated. Third, delimiting. Coding becomes more selective as areas of importance become clear from the data. Finally, the writing of the emerging theory

Results: Some initial findings will be presented.

Conclusions: It will be considered how experiences of staff, residents and their families enhance or detract from their autonomy and dignity.

J5-20

Taking leave from the life of care-giving: burden relief among advanced dementia caregivers

Cuesta-Benjumea Carmen de la

University of Alicante, Alicante, Spain

Introduction: Qualitative studies have begun to focus on respite as an outcome and are contributing to an understanding of caregivers' experience of rest. However, the means by which caregivers relieve the burden of care remain incompletely understood. The aim of this study was to uncover the strategies that women caregivers of relatives with advanced dementia use to rest from caregiving.

Method: A qualitative approach was used influenced by Charmaz's constructivist grounded theory. Twenty-three semi-structured interviews and one group session to validate findings were conducted between November 2006 and April 2009 in Alicante (Spain) with 23 female primary caregivers of relatives with advanced dementia.

Results: Taking leave from the life of care-giving is the overall strategy that caregivers use to relieve the burden of care. It shows that participants rest by doing, by thinking and by relating to others in ways different to those linked to caregiving. As one participant expressed, this feels like being another person. The study found that caregivers exit their care-giving life by: (1) Connecting with a life of their own, (2) Building moments of life in common with the sick relative, and (3) Keeping in touch with caregiving. The key to a genuine rest is to connect with a different world from that of care giving;

however caregivers do not always fully achieve this. These strategies will be presented at the Conference.

Conclusion: These findings are consistent with previous studies and provide the concept of taking leave from the life of care-giving that unifies disparate information relating to caregivers' activities and sources of respite. Recognizing caregivers' strategies for achieving relief would enable nurses to support such strategies as well as to discourage those that, disguised as breaks from caring, add stress.

J6-30

Challenging experiences of relatives in caring for a family member with Alzheimer's disease at home

Zydzunaite Vilma¹, Bubnys Remigijus²¹*Vytautas Magnus University, Kaunas, Lithuania, Lithuania*²*Siauliai University, Siauliai, Lithuania*

Introduction: Caring for AD persons imposes a great burden on carer's health, as well as on their time and resources. Family members can act as interpreters of AD person's needs, contact persons or performers of various caring roles at home. Relatives often experience lack in possibilities in providing holistic care and incapability to develop relationships with AD person. In literature the emphasis is on professional carer's experiences. A lack exists in literature on challenging specific relatives' experiences concerning care of AD person at home. The study aims to describe these.

Methods and Materials: Sample consisted of 25 relatives. In data collection the relatives narrated their experiences concerning changes in families and the need for support in caring for AD family member. The narratives were audiotaped and transcribed verbatim. The data was analyzed using four-step interpretive phenomenology.

Results: Results revealed challenging changes in family situation, such as family members' experiences of emotional-spiritual crisis and stress; (re)distribution of the roles in family; adaptation to psychosocial, spiritual, physical and economical difficulties. Participants defined the need for support of nurse, social worker and psychologist. Family members believe that these professionals can relieve family members' stress, help to plan the care of AD person at home and manage the emotional challenging consequences. Family members' need for support is complex, with external and internal orientations that are presented in established model.

Conclusion: Study results suggest research on caring for AD person at home should integrate specific data about roles and needs of family members with the focus on collaboration with various professionals. It is important to investigate the challenging experiences as a complex phenomenon, which is attached to decision-making concerning nursing and social care. The presented research problem requires extensive scientific discussions and continuous empirical research how to best address the needs of family members in caring for person with AD at home.

J7-31

From hospital to home

Duarte Susana

ESEnfC, Coimbra, Portugal

Introduction: Home care has always been an important subject in nursing care. The practices associated to home care have been changing dramatically in the last decade, driven, for example, by profound changes in patient clinical complexity, increase of early discharges from the hospital of patients still requiring a great amount of care and, especially, because of an aging population. At present, different teams, often with different goals, provide home health care and it is therefore important to ensure the continuity of care. The nurse seems to be the professional best placed to assume the leadership of the process of continuity.

Method: As part of PhD achievement process we are conducting a study to identify the nurse's role in that environment of health care, with Symbolic Interactionism as theoretical framework and Grounded Theory as methodology. The research takes place in a Portuguese town with a newly program of Continuous Home Health Care performed by a multidisciplinary team under the management of the nursing staff. This program intends to support people in their own home after discharge from the hospital or in any situation of health needs such as chronic disease, dependency or elderly. By means of in deep interviews to informal caregivers, nurses and administrators, as well as participant observation of home delivery of care, we intend to identify the way they construct continuity of care and how they ensure their maintenance.

Results: The main findings are: (1) the person, specially the elderly, wants to stay in his own home; (2) the nurses and family build up their role as caregivers in partnership; (3) the context of the home creates the particular conditions for the establishment and maintenance of a particular climate that makes possible the maintenance of continuity. We may conclude that continuity is a movement for the independence of the person built on close cooperation between the nurse and the family of the elderly patient.

J8-32

Home care: building a partnership to take care of the older loved one

Duarte Susana

ESEnfC, Coimbra, Portugal

Introduction: The family remains as the basic relational unit in society and, notwithstanding the social transformations of recent years, remains as support for meeting the needs of security and physical and emotional welfare of the older person. This becomes even more evident when health care is provided at home and the family assumes the role of caregiver.

Method: As part of PhD process we're conducting a study to identify the nurse's role in Home Care, with Symbolic Interactionism as theoretical framework and Grounded Theory as methodology. Data have been collecting by means of in Deep Interviews (informal caregivers, nurses and staff) and Participant Observation of home care's delivery. The research took place in a Portuguese town with a Program of Continuous Home Health Care performed by a multidisciplinary team under nursing staff.

This program intends to support people in their home after hospital discharge or in any situation of health needs (chronic disease, dependency or elderly). The results indicates that, for nurses, family is: (1) a group of people linked biological, emotional or legally; (2) target of nursing care in order to mobilize the person's natural system to purchase and maintain the health and well-being; (3) the triple perspective of an outbreak of care, care partner and source of concern; (4) dynamic system of relations, with a tendency to entropy, which is essential to preserve; (5) essential to Program of Integrated Care.

The family becomes a partner in care to assure continuity of health. To pursuit such aim, the nurse adopts identified strategies.

J9-53

Attitudes of relatives of nursing home residents towards physical restraints in Germany

Haut Antonie, Mayer Herbert, Meyer Gabriele

University of Witten/Herdecke, Witten, Germany

Introduction: Nurses often justify restraint use based on their perceived pressure from relatives. However, international knowledge on nursing home resident relatives' attitudes towards physical restraints is sparse. We surveyed relatives' attitudes towards physical restraints and compared the results to a previous survey of nursing home staff.

Methods and Materials: A cross-sectional survey comparing 177 residents' relatives from 13 nursing homes in 2008 with 258 nurses from 25 nursing homes in 2007 was conducted in Germany. The German version of the Maastricht Attitude Questionnaire, asking for attitudes regarding reasons, consequences, appropriateness, restrictiveness and discomfort of restraint measures, was administered. Descriptive and explorative inferential statistics were used for data analyses.

Results: Response rate in both samples was above 90%. Mean age was 62 years in relatives and 44 years in nurses; 72 and 82% were female, respectively. Relatives assessed physical restraints slightly more positive compared to nurses with an average of 3.4 vs. 3.07 on a 5-point scale (5=strongly positive attitude). Relatives assessed physical restraints less restrictive with 2.11 and less discomforting with 2.1 points than nursing staff, who assessed the restraints' restrictiveness with 2.19 points and its discomfort with 2.17 on a 3-point scale (3=very restrictive/discomforting). Both groups considered wrist and ankle belts as most restrictive and uncomfortable while sensor mats, infrared systems and unilateral bedrails were rated as the lowest for restrictiveness and discomfort.

Conclusion: Attitudes of German nursing home residents' relatives towards physical restraints are rather positive and generally comparable with German nursing home staffs' attitudes. The findings suggest that education interventions aimed to reduce restraints need to target not only staff, but also nursing home residents' relatives. There is a need for further research to investigate relatives' attitudes more thoroughly and from a culturally sensitive perspective, in order to contribute effectively to restraint reduction programmes.

J10-84

Positive and negative impact in caring for older people living in Sardinia, Italy

Vellone Ercole¹, Piras Giovanni², Venturini Giulia¹, Alvaro Rosaria¹

¹*University Tor Vergata, Rome, Italy*

²*Health District of Sassari, Sassari, Italy*

Introduction: International literature reports mainly the negative effects of caregiving to older people but only few studies have paid attention to its positive impact. People living in Sardinia are a particular ethnic group with cultural characteristics due to their agricultural and pastoral heritage that are uncommon with other parts of Italy. The aim of this study was to evaluate the positive and the negative impact of caregiving to older people living in Sardinia, Italy.

Methods and Materials: A descriptive and correlational design was used to study 80 caregivers of elderly people. Caregivers were living in several cities in Sardinia. To be enrolled in the study they had to give care at least 4 h per week to a person over 65 years old. Instruments used: a Sociodemographic Questionnaire, the Carers of Older People in Europe Index, the IADL, the Barthel Index the Hospital Depression Scale the Neuro-Psychiatric Inventory the Mini Mental State Examination and the WHO Quality of Life BRIEF Scale.

Results: 87.5% of caregiver were female with a mean age of 59.70 years. 72.5% of carereceivers were females with an average age of 84.03 years. Results show that caregivers had a more positive impact of caring when the elderly people were more independent and were receiving care for more time; caregivers had a more negative impact of caring when they had a lower QOL, and when the elderly people had more neuropsychiatric and cognitive problems, received more care, and were less independent.

Conclusion: This study shows as some variables influence the positive and the negative impact of caregiving to older people living in Sardinia. Positive and negative impact for providing care to elderly people can coexist. The results of the present study show important aspects that Sardinian healthcare professionals can take into account to provide older people and their caregivers with a better care.

J11-85

Development of a project framework for the training and support of 'community grannies'

Defilippi Kath, Cameron Sue

Hospice Palliative Care Assoc of South Africa, Cape Town, South Africa

Introduction: Because the majority of dying HIV+ patients are young adults, AIDS has been referred to as the 'grandmothers' disease, in that elderly women so frequently assume the role of caregivers, tending to their dying sons and daughters and then the children left behind (Broderick and Drenth). There are already 12 millions orphans in Sub-Saharan Africa. It is within this context that the national Hospice Palliative Care Association (HPCA) identified the need for developing a specific project framework for the training and support of community grannies involved in the provision of care within member HBC programmes.

Methods and Materials: An existing reputable granny support training programme aimed at improving general coping skills and parenting ability will be reviewed and expanded to include important criteria related to palliative care. The adapted interactive training programme will be piloted in three settings using selected HPCA member organisations with a well established HBC programme. The impact of the training on the quality of life of the relevant 'grannies' will be measured by an assessment tool which will be compiled to focus on the criteria stipulated above. The three participating hospice programmes will each submit an evaluative report.

Results: Pilot findings will inform the implementation of 'Guidelines for Grannies' by all HPCA member organisations providing HBC. It is anticipated that these will be put into place during the latter part of 2010.

Conclusion: This presentation describes the plight of one of the world's most vulnerable groups of older people and the initiation of a project to improve their quality of life. The harsh reality of HIV/AIDS in South Africa has dictated the need to link this provision of care and support of 'grannies' to the enhancement of their parenting skills.

J12-86

Overload, difficulties, coping and satisfaction of caregivers in PortugalSequeira Carlos¹, Sotto Mayor Margarida²¹*School of Nursing of Porto, Porto, Portugal*²*Hospital Magalhães lemos, Porto, Portugal*

Introduction: The study has been focused on the caregivers of dependent aged with or without dementia, and it makes a comparative analysis between the consequences related to the Caregivers of Dependent Aged without Dementia (CDAWD) and the consequences associated with the Caregivers of Dependent Aged with Dementia (CDAD).

Method: The target of this sample was the informal, main or primary, related caregivers, who live with the dependent aged in the same house, and covered 184 carers of dependent aged, from which 101 have a physical dependence and 83 a 'mental' one.

Results: Caregivers are usually adults or aged (M=55, 58 years old) female (87%), married (78.8%), with a low education up to primary school (73.6%), spouses (44%) or children (31.5%), without a career (57.6%), with a previous relationship of friendship/respect (65.6%), and with general health complaints (54.3%), yet with an optimistic (satisfactory/good/very good) perception of their health state (77.2%). The 'care receiver' is described as being a dependent aged (with or without dementia) with a clinical history of dependence, inferior to 2 years, with advanced age (M=77, 84 years old), most of them being female (59.8%), married (57.1%), with a low education up to primary school (90.2%), with from slight to moderate dependence in the BADL (M=57, 61) and from moderate to severe dependence in the IADL (M=23, 43). The Dependent Aged

with Dementia present a MMS that points to cognitive deterioration (M=17.5%), being the main alterations on the memory (86.7%) and orientation (57.8%). As regards care giving, it is verified that most carers (69.5%) need more than 6 h to take care of the dependent aged, 64.6% of them consider the information that they own as scarce or very scarce, 55.4% belong to the low-class (IV and V), 53.3% do not have any help when they are taking care and 80.5% see the situation as highly serious.

J13-93

Moral reflection by family caregivers

Jansen Michel, Duijnste Mia

Hogeschool Utrecht, Utrecht, the Netherlands

Introduction: Family caregivers deal with ethical questions which are not easily shared with others such as: can I allow myself to have some free time and is it bad that I get angry with my demanding partner while he or she is ill. The aim of the study is to elaborate a method of moral reflection which can be used among family caregivers.

Methods and Materials: Literature study and analysis of 15 group sessions with family caregivers. The literature study was related to ego-documents of family caregivers on one hand and scientific publications about the burden of family caregivers on the other. Group sessions in which moral problems were discussed were recorded and analyzed by Winmax.

Results: Research shows that moral problems of family caregivers don't get a lot of attention compared to other problems. Moral problems family caregivers face, are closely knit to various caring-related experiences. The focus of family caregivers lies on responsibility, courage and altruism on one hand and guilt, sense of failure, isolation and anger on the other. All family caregivers experienced relief by sharing their experiences with each other.

Conclusion: Consequently we developed a method (derived from the Socratic conversation method) for moral reflection with family caregivers. This method consists of four group sessions with four participants and one panel chairman/chairwoman. The method is meant for use by professional caregivers such as nurses and welfare helpers who have frequently contact with them. We also developed an instruction course for professionals to familiarize with the method. This course consists of six workshops: four of them mainly focus on reflection by the professional himself on his or her personal moral attitude regarding family care and old age. The other two workshops focus on technical and moral aspects of group sessions.

J14-129

Family carers: nurses' perception and attitudes

Delicado Victoria, Alfaro Antonia, Candel Eduardo

Castilla La Mancha University, Albacete, Spain

Objectives: To find out the social representation and perception nurses have about informal carers of dependent people, identifying all dimensions: information, image and attitudes.

Design: Qualitative research with discussion groups.

Subjects studied: Nursing professionals from different care fields.

Techniques: Seven discussion groups of nurses.

Results and Conclusions: Nursing professionals have empiric knowledge about the role of informal care, and they are aware of how hard this task is and that carers' psycho-physical health can be adversely affected. Nurses are in favour of family caring, but they also show their concern about carers' isolation and lack of support and resources to face long-term care. The evaluation of a carers' role is usually very positive, recognizing their steadiness, dedication, continuity, sacrifice and affection towards the dependent person. However, family carers need more information and care training. Nurses are willing to help carers and are also conscious of their need to be listened to, psychologically supported and emotionally unburdened.

J15-189

Home care and support for the elderly in Switzerland

Schwarze Thomas, Hahn Sabine

Bern University of Applied Sciences, Bern, Switzerland

Introduction: Demographic changes within the Swiss population will result in an increasing number of elderly people with specific care requirements. It does not seem feasible to fulfill the desire of elderly people to live at home for as long as possible without the support of family members. The aims of this study are to obtain a systematic overview of the overall care requirements and unmet needs of the elderly population in Switzerland and to develop measures in which voluntary involvement can be improved upon.

Methods and Materials: In module one, 712 elderly people (70+) were interviewed in their homes regarding their care and support needs. The instrument utilized explored care dependency and functional limitations, activities of daily living (ADL's) and participation, support networks and personal information. Module two will consist of an in-depth evaluation of the collaboration between professional and non-professional care-givers.

Results: The sample was comprised of 712 persons; 70.9% were women and 29.1% were men. Regarding the ADL's, 4.2% reported not requiring any support. One third required support in one or two activities. One fifth required support in three activities and 11.4% required support in four or more activities. 43% of all support activities were performed by spouses and 21% were provided by home care organizations. 67.9% of the sample reported that formal support had been provided by home care organizations. 72.8% reported that informal support had been provided by family members, friends and neighbors within the same timeframe.

Conclusions: The results of this study reveal that the majority of support is provided by family members, especially spouses and daughters. Professional home care, however, has a significant role in the support of the elderly living in their home.

J16-245

Promoting improved staff-family relationships in residential aged care

Bauer Michael, Nay Rhonda, Fetherstonhaugh Deirdre, Bathgate Tenzin, Winbolt Margaret, McAuliffe Linda

La Trobe University, Bundoora, Australia

Introduction: Research shows that when staff and family have more positive relationships residents' experience of care is enhanced. This project aimed to develop, implement and evaluate an evidence based guideline for use by residential aged care staff to promote more positive staff-family relationships.

Methods and Materials: The project used an action research approach to embed changes in practice. A systematic review of the research evidence on the promotion of constructive staff-family relationships was conducted, staff and families' perceptions of their relationship were surveyed and a guideline incorporating a clinical audit tool was developed. The guideline incorporated feedback from facility staff and residents' family. A second survey of staff and families was conducted to determine any changes. Three aged care facilities in Melbourne Australia participated in the survey.

Results: The systematic review found that staff and family education on relationship development, power and control issues, communication skills, negotiation techniques and the support of management were crucial factors to the success of any interventions.

Survey analysis using Mann-Whitney revealed significant differences between staff and family perceptions for both surveys 1 and 2 and both staff and family perceptions at each site between survey 1 and 2.

Conclusion: While staff-family relationships generally improved after the guideline was implemented, a number of areas for improvement were identified. These issues and the implications of the findings will be presented.

J17-311 (Abstract withdrawn prior to print)

Impact of homecare of demented family members on their informal caregivers in a West Austrian region

Mueller Irene

TILAK, Innsbruck, Austria

Introduction: In Austria there are no studies that represent the impact of home care for people with dementia on their caregivers yet. The aim of this study is to describe effects of home care on the caregivers of family members with dementia in a West-Austrian region.

Methods: In a cross sectional-survey demographic data were collected and the following instruments were used: MMSE, CDS, IADL, NPI, BDI, SF-36, VAS. The ethics committee of the University of Innsbruck gave their consent to carry out the investigation. It was conducted in accordance with the Declaration of Helsinki. All participants gave a written informed consent.

Results: The mainly female (76.5%) caregivers were between 38 and 89 years old. The caregivers had been looking after the family member with dementia for an average period of 5.3 years. 15.9% of the family members with dementia had been assigned to care levels 0-2, 32.9% to care levels 3-4 and 41.2% to care levels 5-7. However, the analyses of the CDS showed for n=25 persons with dementia a high level of care dependency despite allocation to an intermediate care level (3-4). 10.6% of the caregivers showed moderate and 25.9% of the caregivers showed strong depressive symptoms, which were enforced by a rising number of neuropsychiatric symptoms of the patient and the informal role of the caregiver. A heavy or extreme burden for caregivers were the following neuropsychiatric symptoms of the patient: depression, aggression, delusion, anxiety, apathy. Especially spouses are at great risk to suffer from depressive symptoms.

Conclusions: The prevalence for depression in an average population equals 9.1%. The risk for suffering from depressive symptoms is four times increased in caregivers as they were related family members. Unfortunately in Austria there is no sufficient support for caregivers of patients with dementia. Future research should increasingly concentrate on possibilities to reduce various aspects of burden of home caregivers.

J18-408

Knowledge, attitudes and experiences of family members of homebound elderly

Rashin Michael, Golander Hava

Tel Aviv University, Israel, Tel-aviv, Israel

Introduction: Frail elderly, who are bedridden or homebound, are the most vulnerable sector of patients. They consume wide range of services which are costly to the providers. Their visibility as well as their negotiative power – are very limited. They are dependent upon their family members for receiving services, obtaining information and consultation. The aim of this study was to document and evaluate the community services development policy from the consumers' viewpoint. We examined the knowledge, attitudes, and experiences of homebound elderly relatives in relation to their satisfaction from the health services.

Methods: One hundred and seven primary family caregivers were interviewed. The questionnaire consisted of six parts: personal characteristics, level of knowledge about the law and consumers' rights, experiences and satisfaction with care, general evaluation of the appropriateness of care, and open questions.

Results: The level of knowledge was average and was positively related with the extent of experience and satisfaction with the health care system. Despite of the recent development of various services for chronic patients within the community, the majority of the subjects still feel that today's health care system is geared more

to younger people rather than to the needs of the elderly. They reported that their care burden is too heavy, that services are not patient centered, medical expenses are high, and lack of continuity in care. Satisfaction level was found to be average. High satisfaction was attributed to professional care and attitudes while low satisfaction – to the availability and accessibility of services. They felt helpless in dealing with the bureaucracy. The clinical staff were ‘nice but very busy’.

Conclusions: The study provides comprehensive information about the effectiveness of the current health care system from the consumers’ perspective. It pin points to areas in need of improvements (professional home visits, emergency consultations, patient centeredness, participation in care plans etc).

J19-425

Stress and burden evaluation in the Alzheimer patients caregiver in Alessandria (Italy)

Germini Francesco¹, Oddone Elena², Chilin Giovanni², Dogliotti Daniele², Lattarulo Pio², Suardi Barbara²

¹Bari, Italy

²University of East Piedmont, Novara, Italy

Introduction: Caring for a demented patient can exhaust the caregiver’s emotional resources because of physical charge, behaviour disorder and change of interpersonal relation. It is important to evaluate the physical, emotional and psychological, as well as social and financial problems of the caregiver. The aim of this study is the burden and stress evaluation of the Alzheimer patients caregiver.

Methods and Materials: Type of research: descriptive-correlational. Setting: country clinics for Alzheimer disease in Alessandria (region Piedmont, Italy). Tools for collect data: Caregiver Burden Inventory (CBI) for burden evaluation and Relative’s Stress Scale (RSS) for stress evaluation of the caregiver. The distribution of the tools has happened in the wards during the periodic visits to this patient.

Results: Two hundred caregivers participated, 29.1% men and 70.9% women. The mean of RSS score has been 12.6, for caregivers by less than a year; 17.3, from 1 to 2 years; 25.2, from 3 to 7 years; 34.4, from 7 to 11 years. The mean of CBI score has been 15.3, for caregivers by less than a year; 24.4, from 1 to 2 years; 36.3, from 3 to 7 years; 49.7 from 7 to 11 years. The statistical analysis show a positive correlation between the RSS and CBI scores, evacuate for years of care ($R=0.92$); the burden of woman caregiver is significantly higher to burden of man caregiver ($P<0.05$); the stress of woman caregiver is significantly higher to stress of man caregiver del caregiver ($P<0.05$).

Conclusion: It is important to use CBI and RSS scale to monitor the caregiver, so that psychological support can be offered before stress and the burden become extreme.

J20-432

Family and health care. Quality of life of caregivers and impacts of the dependence

Delicado Victoria

Castilla La Mancha University, Albacete, Spain

Preliminaries: Traditionally, women have been the ones taking care of disabled people, with the logical costs and consequences for both their health and life.

Objectives: To describe socio-demographic profiles of caregivers of patients confined at home (home carers). To identify consequences of caring as burden, quality of life and psychic state of health of caregivers. To characterize networks of supports and available resources, among them nursing care.

Methodology (Design): A descriptive (quantitative) study on informal health care in Albacete, and a qualitative research based on focus groups formed by primary care nurses. Target population: Caregivers of dependent patients confined at home. Two hundred and nine interviews were carried out in Albacete (Spain) along 2001 and 2002.

Measure Tools: A questionnaire collecting socio-demographic information, quality of life measured with COOP-WONCA charts, Zarit’s CBI and Goldberg’s GHQ-12 to detect psychic alterations.

Results and Relevant Conclusions: 82.8% of caregivers are women, their average age is 58.7 years old and 25% of them are 69 or older. Most of them are housewives and their educational level is low. 22.5% are spouses, and 45.5% children, of the person in need. Most of them share home although 25.4% rotate in the care. 10.5% are paid caregivers. Men caregivers have a higher average age, they are basically retired, husbands of the person in need. Lack of time, fatigue and a decrease of their leisure time are the most common consequences on caregivers. 70.8% receive support from other relatives and one third have external domiciliary help. Health professionals support caregivers. On average, nurse home-care visits takes place twice a month and each visit lasts 22 min. Nurses are aware of the caregiver situation but, in general, do not consider them as subject of their care. One third of the studied home carers have values showing poor quality of life. In 31.4% of them the burden is intense. Psychic alterations appear in 43.6% of the interviewees.

J21-461

Informal elderly caregivers quality of life from the councils of Lagoa and Ponta Delgada in Azores

Tavares Márcio

University of Azores, Ponta Delgada, Portugal

Introduction: While informal care is unpaid, its value has been estimated at 240 billion euros annually through all Europe. Caregiving is primarily a family issue – often an intergenerational family issue – and most care recipients are older family members. Although caregivers make many contributions, being one may take a personal toll since the demands on their time can range from a few hours a week to 16 or more hours per day, essentially constant care.

The purpose of this study was to update and expand our knowledge about the activities caregivers say they perform, the perceived impact of caregiving on their daily lives, and the unmet needs of this population.

Method: Data were collected on the domicile of 247 caregivers age 18 or older, living on the councils of Ponta Delgada and Lagoa. Interviewing was conducted from January through March, 2006. Caregivers were identified through Ponta Delgada Health Center domicile registers. To accomplish our study, we developed an Elderly Informal Caregivers Characterization Questionnaire (QCCII), to characterize caregivers and care recipients and to detect caregivers needs. To understand the mental, physical and social strain and financial hardship experienced by caregivers, we resorted to Medical Outcomes Study SF – 36 (Mos SF-36), a 36-item short-form constructed, designed for use in clinical practice and research, for health policy evaluations and for specific and general population health status surveys.

Result/Conclusion: We find that caregiving is still primarily a family issue, often an inter-generational family issue, and most care recipients are older family members, facing frequently issues associated with aging.

Results also reveal that women provide more hours of care and they feel they have less of a choice in taking on the role compared to men. These factors increase a women’s risk for emotional stress and lower quality of life, therefore there needs differs from one to another.

J22-L21**A synthesis of qualitative studies: the adaptation process of dependency in older people and their families**

Abad-Corpa E, Martínez-Hernández A, González-Gil T, Monistrol-Ruano O, Barderas-Manchado A, Mahtani-Chugani V, De la Cuesta-Benjumea C

Research Unit. J. M. Morales Meseguer General University Hospital, Murcia, Spain

Introduction: For the nursing science and the nursing practice is important to explore the experience of the people around the dependency as well as the traditional practices relative to the same ones allow approaching attention to the dependency in terms of 'well-taken care of nurses towards the dependency'.

Methods and Materials:

Aims: To present the synthesis of the qualitative evidence available on the process of adaptation to the dependency in the greater people and their families.

Design: To identify as many qualitative studies as possible an extensive search without time and idiom limitations was conducted for the main data bases (CINAHL, MEDLINE, EMBASE, PsycInfo, PSICODOC, Cochrane Library, JBI, EMBASE LILACS, CUIDEN, CUIDEN cualitativa, CUIDATGE, SSCI). Personal communication from expert panel members was also used to identify adequate qualitative filters. The search resulted in a vast amount of potentially relevant papers (2304). In order to determine their eligibility for inclusion, two of the research assessed the identified studies by title and/or abstract. After, 295 papers were critically appraised for eligibility for inclusion and methodological quality independently by two reviewers. Finally, the synthesis of the 19 studies involved the comparison of the findings from each study. The analysis of the evidence was based in the principles and procedures of the Grounded Theory.

Results: Currently we can provide some descriptive data about the articles and the preliminar and incipient fundings. The participants are the caregivers and the elders. The 19 included studies (descriptive and interpretative studies) were addressed a variety of themes relating to elder-family relationships; to the adaptation to unpredictable fluctuations in physical and psychosocial competence; and to the experiences, sentiments and personal perceptions.

J23-L4**Nursing intervention strategy with dependent elderly**

Vivar C

Hospital Clínico Universitario, Malaga, Spain

Introduction: Nursing plays an important role in care of the elderly, since it is in charge of detecting and preventing problems and provides health care that guarantee our elders quality of life.

The growth in population is characterized by the increase of elderly people.

Because of their health problems they have become dependent members of the family. Therefore the society has to put forward new strategies in order to tackle all these difficult subjects. These issues should be reorganized within the everyday family life.

Investigation Objectives: To know the real needs of the dependent elderly population from our health working area and create nursing intervention strategies in order to teach the family members to take care of their relatives. Identify the social and health needs in the area.

Method: A Descriptive transversal design; Significant accidental sampling; Study variables: Socio-demographic, types of available resources, sanitary needs, degree of knowledge on health and resources; Data analysis: Correlation, descriptive statistics.

Results: For 2 months 100 families were interviewed, where one of the family members was a dependent elderly with a lesser Barthel index than 60.

The identified needs in patients/carers have been classified in accordance to three categories: Biological, emotional and social/environment.

Conclusions: The needs of the elderly are represented on the first step of the Maslow pyramid. It detects a lack of information of the main carer particularly in nutritional care and information regarding the help resources available. There is a work overload on the main carer, above all in the most dependent.

The training programs and the nursing intervention improve the quality of life of the elderly dependent, avoiding complications and to strengthen the emotional health of the carers.

J24-224**Impact of ethics and behavior in monetary satisfaction with life: elderly alone**

Santos Gorete, Tavares João, Sousa Liliana
Aveiro, Portugal

Objectives: Ageing is one of the main challenges of societies. Satisfaction with life is a desire in any stage of life, including old age. It is influenced by diverse social and psychological variables. In this study, we aim to understand how ethics and monetary behaviour do (or not) influence satisfaction with life in elderly men and women (over 64) who live alone.

Methodology: Data were collected based on a questionnaire carried out by interview, which includes: (1) social and demographic data, (2) isolation and depression indicators; (3) Satisfaction with Life Scale (Diener, 1985; Portuguese version Simões, 1992), (4) Monetary Behaviour Scale (Furnham, 1984; Portuguese version Patrão & Sousa, 2007); (5) Monetary Ethics Scale (Tang, 1992; Portuguese version Patrão & Sousa, 2007). The sample comprises 32 elderly people, 16 men and 16 women, who live alone and are of the middle class.

Results: The results suggest that: (1) satisfaction with life is not influenced by monetary ethics and behavior; (2) the elderly are moderately satisfied with life; (3) the monetary ethical is influenced by anxious behavior regarding money; (4) monetary attitudes and behaviours are not influenced by socio-demographic variables, place of residence or isolation factors.

Implications: These results have implications on the in level of understanding satisfaction with life. They suggest factors that influence satisfaction with life. Moreover, this study can clarify the role of personal goods in the construction of integrity and preservation of the identity of the elderly person.

J25-7**Empowering management for dementia care units**

Laaksonen Hannele

The City of Vaasa, Vaasa, Finland

Introduction: In management, a paradigm shift is taking place from strong control, hierarchy and monitoring, to a situation where the workers are given more responsibility and freedom to make decisions concerning their own work. In this study empowering management is used to increase the empowering of employees and workplace welfare. The relationships between empowering management, staff functions, empowering of employees, and work welfare is examined. The main research question is: What kind of process is the empowering management model?

Methods and Materials: The quantitative and cross-section study was carried out with a structured questionnaire in the spring of 2003. The study is focused on the dementia units of the public sector; their higher superiors (N=113), lower superiors (N=117) and employees (N=307) of 32 dementia care units participated in the study.

Results: Empowering management was modelled through two leaders'roles – trainer and supporter – and four principles: goal-directed, developing, encouraging and caring. The empowering was modelled through the following concepts: significance inside the work, the possibilities of influencing one's own work, and validity. The model of empowering management, based on the trust and welfare of the work community, became a model for the superiors. It became apparent that there was a clear connection between empowering management, staff functions and empowering, and between empowering and the welfare of the work community. In the employees' group, a linear correlation was not stated between the empowering and welfare of the work community.

Conclusion: According to the results, in addition to empowering management, tools, and staff functions through which the empowering of employees is made possible are needed. The model can be generalised in the group of similar handlers of public dementia units. The functionality of the developed model can be tested in further studies.

J26-141

How nurses can contribute to sustainable care

Jong Rolien de

STG/HMF, Overveen, the Netherlands

Introduction: ICT in care is seen as a dreamt solution by managers for expected labour market problems and increasing patient needs. Implementation is not living up to expectations, partly due to slow adoption by professionals. The assumption is that nurses are not taking full professional responsibility for this new development in care and that managers are not consulting the nurses about the innovations in care before implementation, which leads to misfits. This project reviewed the success and fail factors of nurses active in all fields of ICT-care with the purpose of understanding their motives and empowering them to be a successful change maker in their care company and presenting other nurses with a comprehensible role model. In this way the project will also deliver topics which need to be addressed by professionals and managers to facilitate implementation of ICT-care.

Method: Practice examples were identified by the snowball method. Twelve practices were selected on basis of criteria. The selected candidates were interviewed and invited to participate in three sessions of 12 h in which they mapped their current practice in nursing terms, identified success and fail factors and appropriate actions and practiced their empowered role with a group of nurses selected on basis of interest.

Results: Results were found in care-related topics, organizational topics and professional topics. The topics were described and underpinned with examples from the practices so that they can be addressed.

Conclusion: Nurses have different motives to implement ICT-care than managers. Nurses with experience in ICT-care find it increases the quality of care they are able to give. They also encounter a lot of resistance among colleagues. The identified topics need to be addressed from both the perspective of the manager and the nurse. The nurses participating in this project feel empowered as change makers in ICT-care.

J27-175

The role of the organizational setting for quality improvement team effectiveness

Nieboer Anna, Strating Mathilde

Erasmus University, Rotterdam, the Netherlands

Introduction: Evidence on quality improvement collaboratives (QIC) suggests positive effects in participating organizations, but results are equivocal. Some features of organizations (both structural and cultural) have been shown to influence the likelihood that an innovation will be successfully assimilated (Greenhalgh *et al.* 2004). But there is

still little research on mechanisms that enhance or impede the intentional spread strategies of quality collaboratives.

Method and Materials: A quality improvement program called 'Care for Better' for nursing homes, elderly homes, home care, care for the handicapped and long-term mental health care in the Netherlands was implemented between 2006 and 2008. One hundred and thirty-one quality improvement teams developed initiatives in improvement projects. One hundred and sixteen higher management and 322 other employees in 31 organizations filled in a questionnaire on organizational characteristics. Also, in these participating organizations 24 project leaders and 64 team members of improvement teams filled in a questionnaire on their team's innovative culture and team effectiveness.

Results: The degree of effectiveness was found to vary between improvement teams ($F=2.772$, $P<0.001$). We found significant correlations between team's perceived effectiveness and organizations' environmental dynamism ($r=0.311$, $P<0.01$), organizational team climate ($r=0.300$, $P<0.01$), and passive leadership style ($r=-0.272$, $P<0.001$). Whether or not improvement teams had an innovative culture was also important for perceived team effectiveness ($r=0.515$, $P<0.001$). In addition, a multilevel analysis revealed that a passive leadership style is particularly damaging to improvement team effectiveness.

Conclusion: In preparing and organizing a quality improvement collaborative program managers should more carefully consider the role of the organizational setting for QIC effectiveness. Boards of participating organizations should realize that their responsibility for the success of QI projects does not end by providing sufficient resources in terms of time and money, but also requires an enabling context in which these teams operate.

J28-230

An electronic patient record in a nursing home: one size fits all?

Michel-Verkerke Margreet

Saxion Hogescholen, Enschede, the Netherlands

Introduction: In a nursing home an Electronic Patient Record is implemented to replace the paper records. The EPR is a multi-disciplinary system. The research aimed to measure use and user satisfaction of the end-users.

Methods and Materials: A paper questionnaire is distributed to all 429 end-users. 155 (37.5%) filled out the questionnaire. The questionnaire comprised questions about function, ward, computer skills, use of the EPR, ease of use, compatibility to the care process, support and user satisfaction. Additional interviews based on the USE IT-framework are held and reports of user-support-items are analyzed.

Results: The EPR is used by all care providers and is used in the intended way. Most appreciated is the possibility to access anywhere, anytime, the legibility and the improved quality of reporting. Although the level of computer skills was low, it proved to be ease to learn to use the EPR.

Physicians were less satisfied with the EPR, because the EPR was less compatible with their working process.

Conclusion: The EPR is accepted as a modern, professional substitute of the paper record. But the specific software needs improvement to fit all disciplines.

J29-248

Three times lucky: the future for nursing research

Witkamp Erica, Oldenmenger Wendy, Elfrink Erna, Verhoeven Karin

Erasmus MC, Rotterdam, the Netherlands

Introduction: In the past decade, the departments of Haematology and Medical Oncology started a nursing research project twice. Both did not succeed for long, mostly due to continuity problems and

insufficient support from both management and the nurses themselves. Because managers still were dissatisfied about the frequency of research utilization by nurses a new project was initiated in 2009. The aim of this project is to stimulate Evidence Based Care (EBC) by nurses.

Method: In this 3 years lasting project, the results we want to achieve are related to three subjects: (1) to improve involvement of nurses in nursing or multidisciplinary research, support them in using EBC and improve their access to research findings. (2) to coach nurses, young nursing scientists and nurse practitioners (minimum of 4) to start and perform their own research. (3) to optimize the contextual factors, like leadership and culture, and make policy on structural implementation. We decided for a gradual development of this project, to satisfy the requirements of nurses, nursing teams or others.

Preliminary Results: We compared our organizational contextual factors with the dimensions of context in the Promoting Action on Research Implementation in Health Services framework (PARIHS). Many factors improved in the last few years: The policy of the Erasmus MC to increase utilization of EBC, the implementation of education on EBC in advanced nursing training programs, the support of key administrative persons and physicians within our departments and the direct access to nursing scientists. We examined pitfalls and promising activities. Two nurse practitioners already started a research project, coached by a nursing scientist.

Conclusion: Based on the positive influence of the current context, culture and leadership within our organization, we make this third effort to develop nursing research on the departments of Haematology and Medical Oncology.

J30-434

Conflicts experienced by discharge support nurses in caring for patient and their families in Japan

Nagae Hiroko¹, Tanigaki sizuko², Okada Mari², Nagae Mayuko²

¹Graduate School of Health Sciences, Okayama University, Okayama-city, Japan

²Okayama University, Okayama-city, Japan

Introduction: There is increasing awareness of problems in interdisciplinary collaboration for community care in Japan. Our purpose was to clarify conflicts experienced by discharge support nurses (DSNs) in caring for patients and their families in Japan.

Methods: Forty-two DSNs who worked at each general hospital of nursing departments responded to a questionnaire that described refracted-sheets. The data were analyzed using content analysis.

Results: Almost of DSNs have sometimes felt conflict and experienced difficulties. The conflict situations were characterized by clients who had many problems, for example, planning care for a discharge place to home or nursing home in which is the best for the patient and their family. The differences in obligations, priorities, approaches and understanding of roles between DSNs, patient, their family and other professionals depended on the other's profession. The professionals who had different ideas from DSNs included physicians (42%), social workers (25%), primary nurses of a words (15%), policy of the own hospital (15%), and others (3%).

Conclusions: The cases in which DSNs are involved are very complex, and DSN involvement continues over long periods; many other professionals are also involved with those clients and families. It is necessary that all develop better systems and approaches to collaboration, including DSNs.

J31-L3

Is a High Performance Organization necessary to provide adequate residential care to old patients with severe mental disorders?

Sweere Marian

Dimence, Deventer, the Netherlands

Introduction: The problems of old patients with severe mental disorders are very complex. Often, standard protocols and guidelines are of little help and strict adherence to general rules and regulations may even harm the patients. For instance, in case of severe agitation, the first intervention according to the guideline may be increasing the dose of sedating medication. It is likely that this would lead to bad falls in an old patient with orthopedic or neurologic disorders. What needs to be done to give adequate care to old patients with severe mental disorders, if protocols and guidelines can not be relied on? We surveyed the literature looking for answers.

Methods and Materials: Survey of the literature.

Results: A High Performance Organization (HPO) is more successful than comparable organizations, even without protocols and guidelines. In fact, the results of HPO's may even be negatively affected by fixed regulations. A HPO is characterized by five factors: High quality of management (integrity, coaching leadership, quick decision making); Open and action directed culture; Long term vision; Continuing process of improving and renewal; High quality staff (staff members with diverse abilities, complementary to each other, who are cooperative, flexible, resilient and result driven).

Conclusion: Strict adherence to protocols and guidelines may have a negative influence on the quality of care for old psychiatric patients with severe and complex disorders. We hypothesize that it takes a HPO to be able to provide adequate care to these patients. In order to test this hypothesis we have started a research project involving 25 consecutive patients who were hospitalized for the treatment of a severe mental disorder. Three important aspects of care will be studied: restraining measures, nutrition and programmed daily activities.

J32-24

Trends in elderly caregiving: a comparison analysis between France, Italy, Denmark and Sweden

Maas Lillian

Rotterdam University, Rotterdam, the Netherlands

Introduction: The EU countries face the challenges of a simultaneous decline in mortality and fertility rates. The ever increasing lifespan of the elderly mean that more resources need to be targeted at the elderly to help them with activities of daily living. Concern over the need to provide long-term care for an aging Europe has promoted a search for non-traditional approaches to meet the needs of the elderly. The need for elderly caregivers has promulgated countries to search for innovative and financially viable alternatives to the labour shortage within traditional geriatric caregiving of France, Italy, Denmark and Sweden.

Methods: A comparison analysis between four European countries (Italy, France, Denmark and Sweden) was performed. After review of the literature, data were collected and analyzed.

Results: Although all four European countries have increasing elderly populations, their approaches to dealing with labour shortages and cost of care are different. Southern European countries such as France and Italy are commonly referred to as 'strong-family-ties countries'. For example, one solution to the labour shortage in France is by incorporating elderly care provided by a host family while Italy is utilizing female foreign workers.

The Northern European countries of Denmark and Sweden are considered 'weak family-ties countries'. For example, Denmark has introduced a growing number of senior day care centers. In addition, Sweden is working with the countries of Spain and Turkey to provide nursing and healthcare services for its elderly.

Conclusion: The strength of family ties plays an enormous role on public spending on elderly care and consequently, the availability of

care and caregivers. Southern European families spend less on long-term care as opposed to their Northern counterparts. Although all four countries have a growing elderly population, their approach to delivering care is heavily based on the nation's healthcare spending and family ties.

J33-96

Motivating and impeding factors for nurses to participate in continuing professional development

Brekelmans Gerard, Poell R, Wijk K van

Erasmus MC, Goirle, the Netherlands

Tilburg University, Tilburg, the Netherlands

Erasmus University, Rotterdam, the Netherlands

Introduction: The aim of this study was to identify motivating and impeding factors for registered nurses to participate in CPD activities. A Delphi study among 38 experts representing nursing associations, nursing education, nursing management, and nursing employers was conducted in three rounds.

Motivating Factors: Opportunities for Learning in the Workplace: the experts agreed about the need to create the right conditions for workplace learning.

Role of Line Management: According to the panel, the line managers of nurses need to recognize the concrete outcomes of professional development and reward them. Managers need to avoid, however, using control over the process of CPD. Nurses need autonomy when it comes to their own professional development. **Education Facilities:** experts agreed that education centers can encourage CPD by offering nurses demand-oriented as well as supply-driven training courses. It was, however, deemed important to make (especially compulsory) education programs more attractive and approachable to nurses.

Registration System: the panel recommended setting up a registration system, with a minimum number of mandatory training credits each year. No such system exists for the nursing profession in the Netherlands at present.

Impeding Factors: Contextual factors mentioned by the panel include lack of financial resources for participation in training programs, heavy workload, lack of time for CPD activities, and lack of staff. Often mentioned were culture aspects and communication. **Personal Factors:** age was considered an important obstacle for CPD participation. The average age of nurses is increasing and as a result their motivation to invest in personal development is decreasing. The outcomes of this study may help healthcare employers offer nurses better attuned opportunities for CPD. Furthering awareness and a change of mentality among nurses will be necessary. Management and education centers have an important role to play in this respect. Collaboration between the different groups is essential.

J34-43

Improving dementia care health service in Europe: the new European study 'RightTimePlaceCare'

Meyer Gabriele¹, Hamers JPH Jan², Rahm Hallberg Ingall³,

Leino-Kilpi Helena⁴, Zabalegui Adela⁵

¹*University of Witten/Herdecke, Witten, Germany*

²*Maastricht University, Maastricht, the Netherlands*

³*Lund University, Lund, Sweden*

⁴*University of Turku, Turku, Finland*

⁵*Fundació Privada Clinic per la Recerca Biomedica, Barcelona, Spain*

Introduction: Currently, there is a lack of clinical research data of patients/consumers and informal caregivers to develop best practice

strategies for long-term care. RightTimePlaceCare intends to deliver best practice strategies for need-tailored dementia care throughout the dementia care sectors and aims to preserve best available health outcomes for both patients/consumers with dementia and their informal caregivers at affordable cost-benefit ratios.

Methods: The study is funded by the European Commission and started in January 2010. Eight European countries are involved: Germany (University of Witten/Herdecke, UHW), The Netherlands (Maastricht University), Sweden (Lund University), United Kingdom (University of Manchester), Finland (University of Turku), Spain (Fundació Privada Clinic per la Recerca Biomedica), Estonia (University of Tartu), and France (Gerontopole, University of Toulouse). The project is coordinated by the UWH. Six work packages include description and analysis of the European health, social care and welfare systems, advocacy and informal caregiver support systems for patients/consumers with dementia and intersectorial communication. A survey will assess factors influencing the time of admission to long-term institutional nursing care facilities, investigate living conditions, and gather clinical data of patients/consumers and their informal caregivers in long-term formal professional home care and institutional nursing care facilities, and the related economic impact. Consecutively, best practice strategies will be developed for intersectorial arrangements needed to improve the effectiveness and efficiency of integrated health care in European dementia care systems, and recommendations for best practice models or interventions in long-term care facilities.

Results (expected): RightTimePlaceCare will advance the state of the art in health systems research in dementia care and will improve cooperation between researchers to promote integration and excellence of European dementia care research.

Conclusion: The knowledge generated by RightTimePlaceCare will empower the policy and decision makers to manage and reform dementia health care systems in view of common challenges and within the common framework of the EU.

J35-106

Adaptability of the need assessment for Dementia (CarenapD) into the German Community Care System

Riesner Christine¹, Zegelin Angelika², Schnepf Wilfried²

¹*German Centre of Neurodegenerative Diseases, Witten, Germany*

²*University Witten/Herdecke, Witten, Germany*

Introduction: The Scottish need assessment CarenapD was developed in 1995 to assess the needs of people with dementia and their carer in the community from an interdisciplinary perspective. CarenapD is based on personcentred care. At the University Witten/Herdecke, Institute of Nursing Science the tool was translated into German in 2004.

Method: The aim of a 2 years research project was to test the adaptability and modality of the assessment CarenapD in the German Community Care System for Dementia. CarenapD was used to measure the need of 55 families in two different regions in North Rhine Westphalia. Need was measured initially and 6 months later for the monitoring. The interdisciplinary team included 15 staff members from four different organisations. All 15 team members run a 5 day course. Then they used the assessment first (T0) with 68 clients and carers, if existing. After 6 months the assessment was used again (T1) for measurement with 55 clients.

Results: From the total amount of 57 CarenapD items 38% were rated with 'no need', 49% showed 'met need' and 11% 'unmet need' (n=55). There was a shift of 5% from 'no need' to 'met need' within the 6 months between the two measures. Greatest ratio of unmet need (20%) existed in the dimension 'Social Inclusion'. Case management processes can be navigated with the need assessment CarenapD.

Conclusion: CarenapD in the German Community Care System has the potential to manage care needs of families with dementia. At the same time the results showed that the Community Care System needs to be developed to provide appropriate support for people with dementia and their carers. CarenapD seems to be able to control this development, if it is used with expert knowledge.

J36-215

Dynamic lighting to influence the day-night rhythm of clients with dementia

Spreeuwenberg Marieke¹, Willems Charles¹, Verheesen Henk², Schols Jos², Witte Luc de¹

¹Hogeschool Zuyd, Heerlen, the Netherlands

²Vivre, Maastricht, the Netherlands

Introduction: A disturbed day-night rhythm is characteristic of people with psychogeriatric (PG) disorders [1–2]. For the nursing staff nocturnal restlessness, night wandering and an increased risk of falling of clients are recognizable signals. The aim of this study is to investigate whether offering dynamic lighting that varies in light intensity (lux) and color (K), improves the day-night rhythm of PG patients.

Methods and Materials: The longitudinal quasi-experimental study lasted 3 months and was conducted at nursing home Klevarie in Maastricht, the Netherlands. The intervention group consisted of 10 clients of the 1st ward, where special lighting of the types Philips Savio and Philips Rotaris was installed in one of the three common living rooms. The control group consisted of 10 clients of the 2nd ward with no dynamic lighting. A random intercept multivariate multilevel analysis was used to study the longitudinal group effects of dynamic lighting. This analysis corrects for potential time-dependent observations.

Results: In the intervention group, especially the 1st lighting schedule had a large influence on the activity level of clients, leading to a reduced activity during daytime, during the night and during the early evening, compared to the baseline period (Figure 1). Since both the activities during the night and the day decreased, the ratio of the day-night rhythm remained the same. During the 2nd lighting schedule the clients in the intervention group showed less activity during daytime compared to the baseline period. No other differences were found.

Conclusion: To conclude, especially the first lighting schedule led to a reduced activity of patients with PG during the day, early evening and nighttime. However, due to the small sample size of the study, the effects found should be interpreted with some caution. Although, the effects of dynamic lighting seem very promising, it but should be further explored in a larger setting.

J37-243

Translating rhetoric about person-centredness into practice in care of older people with dementia

Fetherstonhaugh Deirdre¹, Nay Rhonda¹, Bauer Michael¹, Winbolt Margaret¹, Edvardsson David²

¹La Trobe University, Victoria, Australia

²Umea University, Umea, Sweden

Introduction: The rhetoric around the provision of person-centred care is often included in the mission, vision and value statements of residential aged care services. Health policy and residential rights' statements also echo this rhetoric but there is inadequate attention paid to how person-centred care can be measured or how it can actually be implemented in practice. Researchers at the Australian Centre for Evidence-Based Aged Care (ACEBAC) identified this gap between theory, measurement and practice and commenced a research program with the objective of developing a person-centred

care implementation package for use in the residential aged care setting.

Methods and Materials: Using a combination of: a modified Delphi technique incorporating literature review, expert consultation, and research interviews with aged care staff, people with early onset dementia, and family members; and clinical audit methodology, a person-centred care implementation package was produced. This paper will report on the development of this package.

Results: Three tools were developed: (1) The Person-centred Care Assessment Tool (P-CAT). This tool has been tested and is a valid and reliable measure of the extent to which residential aged care staff rate their facilities to be person-centred. (2) The Tool for Understanding Residents' Needs as Individual Persons (TURNIP). This tool promotes reflection in the workplace thereby facilitating the development of strategies and care practices that are person-centred. (3) The Person-centred Care Implementation Tool (P-CIT). This tool identifies the criteria needed to achieve outcomes in person-centred practice and can be used to audit current practice against these criteria as well as identify gaps in person-centred practice so that implementation strategies can be developed.

Conclusion: Used in conjunction, the P-CAT, the TURNIP and the P-CIT constitute a comprehensive package for the delivery of person-centred care in the residential aged care setting.

J38-264

Small-scale living facilities in the Netherlands and Belgium. A longitudinal study on patient outcome

Rooij Ietje de¹, Luijkx Katrien², Declercq Anja³, Schols Jos⁴

¹De Wever/Tilburg University, Tilburg, the Netherlands

²Tranzo/Tilburg University, Tilburg, the Netherlands

³Lucas/Catholic University Leuven, Leuven, Belgium

⁴Maastricht University/Caphri, Maastricht, the Netherlands

Introduction: The considerable increase of the number of people suffering from dementia implies that there will be a greater demand for residential care in the future. Traditional institutional care nowadays transforms more and more into innovative living and care concepts. The development of small-scale living arrangements is a clear example of trying to achieve a more homelike environment for dementia patients in need of residential care, and facilitate the social participation of this target group. Although there is a rapid expansion of small-scale living, little scientific evidence is available about the implications and effects on residents. This paper therefore addresses the following research question: Do residents with dementia living in small-scale arrangements in Belgium as well as in the Netherlands, have better patient outcomes, such as ADL scores and quality of life, compared to similar residents in larger regular wards.

Methods and Materials: A cross-international longitudinal study in the Netherlands and Belgium was performed. In this study residents of small-scale facilities in both countries were compared with residents of regular psychogeriatric wards. In this paper the comparison of patient outcomes such as ADL scores and quality of life is central. For this comparison the Qualitative Comparative Analysis (QCA) method has been used. QCA integrates key strengths of both qualitative (case-oriented) and quantitative (variable oriented) methods (Rihoux and Ragin).

Results: The results will reveal whether residents in small-scale living facilities differ from residents in regular psychogeriatric wards on patient outcomes. Furthermore, differences and similarities among residents in both types of facilities in Belgium and the Netherlands will be elaborated on.

Conclusion: Up until now it is presumed that residents in small-scale living arrangements have better patient outcomes than residents in regular wards. This study shows to what extent this is evidence based, using valid and reliable instruments in a QCA procedure.

J39-355

Quality and safety nursing care of the elderly suffering from dementia- a challenge for the futureSedej Kodela Andreja, Mivšek Anja, Ferfolja Aleksandra
Psychiatric Hospital Idrija, Idrija, Slovenia

Psychiatric hospital Idrija is one of the six psychiatric hospitals in Slovenia. We are one of the three hospitals which also treat patients suffering from dementia and other psychical disorders in old age. The treatment of patients is multi-disciplinary, and the nursing care is an integral part of the wholesome treatment of the patients. It is based on an individual approach, where the particularities of each patient are taken into account.

The symptoms of dementia show when patients are no longer able to carry out the basic living activities. That is why we, as part of our nursing care, plan and carry out interventions, which keep the highest possible level of independence of each patient. As early as at the hospitalization stage we already plan individual treatment of the patient in the community after discharge from hospital. Community care services try to organize a network of support activities for all who require assistance and information (families, care givers). Nurses, with their work in health education, also take part in this activities. The health education work is based on the specialist guidelines of the geriatric nursing care and practical experience.

With this poster we wish to present the activity of the nursing care at Geronto-Psychiatric ward of the Psychiatric Hospital Idrija and its contribution in the community in the area of education of next of kin and significant others, who take care of patients suffering from dementia by themselves. The poster is going to present activities of the nursing care in the Geronto-Psychiatric ward of Psychiatric Hospital Idrija. Furthermore, the model of treatment of an elderly patient suffering from dementia in the hospital environment, from the viewpoint of nursing care by the basic living activities and the educational supporting program of nursing care for the next of kin, which is taking place in the community.

J40-366

A transition protocol for people with dementia and their family carers facing institutionalisationGroenewoud Hanny, Lange Jacomine de
Rotterdam University, Rotterdam, the Netherlands

Introduction: As far as we know, there are no evidence based guidelines for optimal care for professionals involved in the transition from home to nursing-home. Based on the literature and experiences of family caregivers with the decision-making regarding institutionalisation, a transition protocol was developed to ease the process of transition.

Methods and Materials: Literature was reviewed for evidence based interventions regarding the transition from home to nursing-home. In addition, qualitative interviews were held with 26 family caregivers (children and partners) of a person with dementia about their expectations and needs regarding decision-making and institutionalisation. Interview results were analysed using Atlas-ti and then translated into practical recommendations for transitional care.

Results: The transition protocol includes timely discussion of the possibility of moving into a nursing-home or a small-scale living facility with the demented person and their caregivers to promote readiness and informed choice about future living arrangements. Any conflict situations between the person with dementia, their relatives or their professional caregivers must be solved. During possible waiting for admission, monitoring is important in order to prevent a crisis and involuntary admission. The day of admission should be carefully planned, and special attention must be paid to the informal caregivers' concerns and distress. After institutionalisation the client-relative dyad needs support to give new meaning to

their lives, both as a couple and individually. Resources are needed to support and encourage social participation of the informal caregiver, both inside and outside the nursing-home. Some informal caregivers might need counselling to strengthen their confidence in their choice.

Conclusion: The transition protocol will ease the transitions of people with dementia and their family caregivers facing institutionalisation. The preliminary transition protocol will be discussed with key service providers and representatives of persons with dementia and their family caregivers to encourage widespread adoption and implementation of the protocol.

J41-57

Construction of an innovation in social practice: deconstruction for the benefit of considerationRamakers Roosmarie, Kuiper Chris
Rotterdam University of Applied Sciences, Rotterdam, the Netherlands

Introduction: Community Center Prinsenhof in Rotterdam aims to support elderly people to participate in society. It received The Dutch Best Practice Award 2009 for their innovative social business case. Though it aims for the most vulnerable people, the elderly who are lonesome and who have less skills for selfdirection and social activity, it is until now not very successful in finding those people.

In this paper we concentrate on two questions. (1) How is the theoretical term 'the elderly' constructed? We suppose that the way people think and talk (write) about elderly enacts the way they act in their relation to them. (2) What is new or different in the way Prinsenhof operates, and does it consider the history of its action?

Methods and Materials: Texts will be analysed in an hermeneutic way, partly intuitive and partly deconstructive, without the aim of totalizing unifying conclusions. Our approach is like Derrida's reading writing. We analyze texts from stakeholders, professionals and volunteers of the centre: policy documents, transcripts of interviews and publications. By questioning these texts we write new texts, that are read by the participants of Prinsenhof. Their reflections are also written down and are analysed. For the purpose of considering the past we confront texts with texts from governments and organisations for elderly since 1980 that describe projects and aims like Prinsenhof.

Results and Conclusion: Our research generates no answers, only questions. These will be discussed and used for further research that we hope will generate insights, challenging stakeholders and professionals to find new ways to contact those elderly who are the vulnerable people that need and want support, challenging them to listen to them more carefully and to open up for their particular needs. Insights and consequences for professional nursing performance will be presented.

J42-66

Older clients' and their professional carers' collaborative relationship in home careEloranta Sini
University of Turku, Turku, Finland

Introduction: With advancing age, many older people require home care support to be able to remain in their own homes. The aim of this study was to investigate the aspects of social and health care collaboration in home care provision.

Methods and Material: The data were collected with a postal questionnaire distributed to 200 home care clients (≥65 years) and to 570 professional carers: 485 home care workers (social care), 81 home health care nurses (health care) and four doctors. Responses

were received from 120 clients (60%) and 370 professional carers (65%). Group differences were analysed using cross-tabulations, Pearson's Chi-Square Test and Fisher's Exact Test.

Results: There were statistically significant differences between the two groups on collaborative relationship. The staff was more critical than the clients (Cs) in their assessment of whether all the staff is informed without delay about changes in the client's health condition and in his/her need for care ($P=0.008$). However, more than half in both groups believed that all the staff was continuously aware of the Cs' health and care needs. The Cs more seldom than the staff believed that the staff sufficiently discussed with Cs about their care needs ($P=0.001$). A similar result can be seen between the staff (31% disagree) and the Cs' closest relatives (51% disagree) from discussions about Cs' need for care ($P<0.001$). Further, 71% of the staff believed that they ensured that the Cs' closest relatives are adequately informed of changes in the Cs' health conditions and needs for care without delay, whereas only 55% of the Cs shared this opinion ($P=0.002$).

Conclusion: There is a need to develop ways in which to promote the collaborative relationship. Especially, information transfer between Cs, staff and Cs' closest relatives about Cs' health conditions and in their needs for care so that collaborative relationship would support older clients' living at home by the best way. In addition, it is important that ongoing health assessment through regular home visits is of great value in reducing or delaying the need for hospital care.

J43-127

Sexuality and the need for sexual counseling of patients with chronic heart failure and the spouses

Hosson Michèle de¹, Gamel Claudia²

¹University Hospital Ghent, Ghent, Belgium

²University Medical Center Utrecht, Utrecht, the Netherlands

Introduction: Chronic heart failure (CHF) can influence the sexuality of patients as well as that of their spouses. Both patients and spouses have questions about sexuality yet they often are reluctant to ask these questions and likewise healthcare professionals often provide little information regarding sexuality. Research is needed to clarify the sexuality and the need of sexual counseling of both patients with CHF as their patients. Consequently this study had two aims: (1) to determine the sexuality of patients with CHF and their spouses and (2) to evaluate their needs regarding sexual counseling.

Method and Materials: A convenience sample was obtained from three hospitals in Belgium. Patients and spouses were asked to participate if they spoke Dutch and were older than 18 years). The Sexual Adjustment Scale was used to measure sexuality and a questionnaire was developed to determine the Needs of Sexual Counseling Scale by Chronic Heart Failure (NSCS-CHF).

Results: Self-report questionnaires were completed by 21 patients and 13 spouses. The average age of patients and spouses was respectively 62 (± 12) and 57 (± 13) years. Sexual function of patients and spouses declined after the diagnosis CHF. Especially patients reported decreased sexual interest, sexual activity and pleasure. Few discussions about sexuality problems and the relationship took place. Patients and spouses scored most items of the NSCS-CHF as important topics for sexual counseling.

Conclusion: Both patients as spouses experience decreased sexual function in different domains yet the relationship remained positive and stable.

The majority of patients with CHF and their spouses wanted sexual counselling which dispels the notion of professionals that older patients and spouses don't need sexual counseling. Because it was easy to identify needs for sexual counselling with the NSCS-CHF, this questionnaire may be useful for professionals as a guide to discuss sexuality with patients with CHF and their spouses.

J44-132

Sexual informational needs of patients with chronic heart failure and spouses: a questionnaire

Hosson Michèle de¹, Gamel Claudia², Driel Anne Geert van³

¹University Hospital Ghent, Ghent, Belgium

²UMC Utrecht, Utrecht, the Netherlands

³Albert Schweitzer Hospital, Dordrecht, the Netherlands

Introduction: Both patients with chronic heart failure (CHF) and spouses have questions about sexuality yet they often are reluctant to ask these questions and likewise healthcare professionals often do not bring up the topic of sexuality. No assessment instruments or questionnaires were found in the literature to determine the needs for sexual information and counselling for patients with CHF and their partners. One instrument for use with another patient group with heart problems (myocardial infarction) was found.

Method and Materials: Developing the Needs of Sexual Counseling Scale by Chronic Heart Failure (NSCS-CHF) first the Sexual Counseling Needs of Myocardial Infarction Patients Survey was used as the framework.

During the second phase two nurse researchers with expertise in CHF and sexuality judged the content validity of the questionnaire. They evaluated the relevance of the domains, items and the response scale. The NSCS-CHF was adapted with their feedback. Subsequently the usability of the questionnaire was judged by five arbitrary people.

Results: The definitive NSCS-CHF consists of four domains: 'Symptoms', 'Medication and information', 'Relaxation' and 'Relationship'. The Content Validity Index was 0.94 based on the judgments of the two nurse researchers. The questionnaire was used in a study to determine sexual informational needs of patients with CHF ($n=21$) and their spouses ($n=13$). A high internal consistency was seen.

Conclusion: The NSCS-CHF can be used in practice and research. With this questionnaire, patients with CHF and spouses can clearly indicate their need for sexual information and counseling. Additionally, the NSCS-CHF can be used in future research regarding CHF and sexual counseling. Before using the NSCS-CHF for research purposes, the item concerning psychological aspects should be added and validation with different disciplines is recommended (Van Driel AG, study in progress).

J45-200

The perspectives and experiences of hearing impaired people at the hospital

Lilgenau Anneliese, Mayer Hanna

University of Vienna, Wien, Austria

Introduction: Hospital staff is faced with more persons with hearing limitations and there is a lack of evidence concerning this problem. Efficient patient care and communication related to the hearing impaired patients is essential.

The objective of this study was to describe the experience of individuals at the hospital with severe-profound hearing impairment from their subjective perspective.

Methods: Seven individuals, of which, were three women and four men with post lingual severe-profound hearing impairment took part in the study and had previous hospital care. Data was collected by means of half-structured interviews. The interviews were transcript verbatim and analysed by content analysis. The analysis of the data suggests seven categories: (1) Declaring the hearing impairment (2) Influential factors on the part of hospital staff like knowledge and care (3) Communication and information (4) Difficult situations and their environments (5) Typical techniques challenging the difficulties by the hearing-impaired and getting proper assistance (6) Hearing aids (7) The personal situation.

Results: These categories, shown in a first model, are connected and influence each other. The participants point out that there are serious shortcomings in the ability of many hospital staff struggling with the problems of hearing-impaired patients. When a patient informs the staff of their auditory disability, the hospital staff often does not understand the essential information that concerns the patient or does not properly communicate to other staff concerning the patient. The patients involved feel that they do not get the information they require and are unable to properly communicate because of their hearing impairment in comparison to patients with no audible disabilities. Hearing-impaired patients are aware that their reduced ability to communicate adds to the problem to hospital staff alongside their sickness. Appropriate training at all staff levels and changes in the structural work can lower these problems considerably.

J46-363

Older persons self determination within municipal home care services

Breitholtz Agneta¹, Snellman Ingrid², Fagerberg Ingegerd³

¹Västerås, Sweden

²Mälardalens University, Eskilstuna and Västerås, Sweden

³Ersta Sköndal University College, Stockholm, Sweden

Introduction: Studies show that a mutual caring relationship can strengthen the older persons self determination. Therefore this project is focusing on applying a more relational model of autonomy so the caregivers can help older persons to reach self determination. The studied phenomenon is 'shared decision-making'. To meet the future care needs and demands within municipal home care an increased knowledge and understanding about older person's possibilities to participate in decisions concerning their daily life is required. The purpose of the study was to describe the meaning of how older persons experience their possibilities to make independence decisions about the daily care when they receive help from caregivers in municipal home care.

Methods and Material: The project has a life world perspective. The meaning of the older persons and the caregivers lived experiences in the everyday life is focused. Participants are 12 older persons over 70 years old, who live alone in a private home and have daily help from the municipal home care services in two municipal in Sweden. Open audio taped interviews have been conducted. The data has been analyzed with a phenomenological hermeneutic method.

Results: Analyses of the result is in progress and indicating, that the older persons experiences of making independence decisions is dual. On the one hand the experience of making independence decisions is positive. But on the other hand the older persons underestimate their own needs, out of loyalty towards the caregivers time pressured working situation, and other caretakers needs of care. This duality can imply that the older persons cannot ask for more time and help from the caregivers. At the same time they cannot influence on decisions makers and the working organisation. This can limit possibilities to make independence decisions and create worry, for older persons. The entire result is to be presented at the conference.

J47-372

Determination of older individuals' life satisfaction and level of loneliness

Koc Zeliha

Ondokuz Mayıs University, Samsun, Turkey

Introduction: This study has the purpose of determining life satisfaction and level of loneliness of individuals aged 60 and above.

Methods and Materials: A total of 330 old individuals aged 60 and above who applied to village clinics numbered 1 and 2 at Sinop due to various health problems, who were ambitious to join to the

research, be able to communicate with us and who had no psychiatric disorders had been included to the research. The data have been collected by using the question form, that determines the elders' socio-demographic specifications and Life Satisfaction Scale, UCLA Loneliness Scale and the Daily Life's Instrumental Activity List.

Results: 44.2% were feeling loneliness. The elders' point of daily life's instrumental activity is 18.89 ± 7.67 , and it has been determined that most of them are independent in terms of fulfillment the instrumental activities. While the elders' loneliness point average is 47.34 ± 8.64 , most of them (49.1%) had a middle level loneliness point. The Elders' Life Satisfaction Scale point average has been determined as 12.71 ± 6.8 and it has been learned that they have a middle level life satisfaction. In addition, positive correlation has been found between the old individuals' loneliness point averages and some socio-demographic and clinical specifications ($P < 0.05$).

Conclusion: In the study, most of the elders had middle leveled loneliness point and life satisfaction. In addition, loneliness point average were found higher on males, singles, primary school graduates, on people who had no children, who lived alone, who had a chronic disease and used a constant medicine. In terms of results that had been obtained, it has been suggested elders should be helped with their daily activities and increasing their communication with their environment to share their loneliness.

J48-L16

Improving Care Provided for Elderly Demented Patients Requiring Constant Observations in Acute Health

Capron Sandra

Melbourne Health Bank, Melbourne, Australia

Introduction: In elderly demented patients, deliberate self-harm, cognitive impairment, psychosis, confusion, agitation, risk of falls and absconding are risk factors that result in an additional nurse (Nurse Special) being employed to provide additional nursing resources to provide care and constant observation. This places fiscal and workforce demands in acute health settings. Between 2003 and 2008 the Royal Melbourne Consultation Liaison Psychiatry (CL) Nurse reviewed the care provided to every patient who required a "Special". This model increased dependency on the CL Nurse and didn't empower the Nurse in Charge to lead decision making including managing the cost of additional nursing resources.

Methods and Material: In early 2009 Royal Melbourne CL Nurse, Melbourne Health (MH) Bank Manager led by Executive Director Nursing (EDON) commenced a review of the systems in place regarding requesting and allocation a "Special". The review process involved:

1. A Steering committee led by EDON, benchmarking, and "Specializing" rounds by EDON, CL nurse and Bank Manager
2. Development of guidelines for ordering staff, and educational resources and in-services.
3. Workforce development to employ, train and monitor the quality of care provided by nurse specials.
4. Ongoing rounds to monitor compliance with policy, support decision making process for staff, attend to system issues as they arise and ensure the staff are appropriately skilled for care required.

Results

Shift of the review of patients who need to be "Specialled" by the Nurse in Charge instead of CL Nurse

- Increase quality of care
- Decrease costs
- Reduction of reported incidents
- Documentation audit results showed and improvement in all areas

Conclusion: Increase organisational awareness and nursing responsibility to manage at risk patients in acute health settings has substantially reduced costs and improved care delivery

Parallel Session K

K1-S9 Symposium

EASYcare: a standardized assessment for individual needs in health and social care

Goal: In this symposium we will inform about EASYcare assessment: what it is and what it is not, for which purposes it can be used, we will summarize international developments and the evidence base of this innovation in elderly care.

Overview: The first speaker, A. Persoon, describes and discusses EASYcare as a tool to improve older peoples lives through a better global assessment and improved response to their health and care needs.

The second speaker, L. Theunisse, addresses the competence training of the primary care nurses. Most characteristic in employing EASYcare is the problem analyses, in which one acquires comprehensive information of the older person, within a short time frame.

The third speaker, J. van Kempen, explores the possibilities of EASYcare as a source of information, which can be used to identify frail older people in primary care.

The fourth speaker, M. Perry, reports the results of a study on the contributions of an EASYcare-based Dementia Training Programme (DTP). This programme is designed to improve the recognition of dementia in primary care

EASYcare: recognizing needs in health and social care in vulnerable older people at home

Persoon Anke¹, Perry Marieke¹, Melis Rene¹, Philp Ian², Olde Rikkert Marcel¹

¹*Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands*

²*Sheffield Institute for Studies on Ageing, Sheffield, UK*

In this presentation we will describe and discuss EASYcare as a tool to improve older people's lives through a better assessment and response to their health and care needs. EASYcare focuses on 'at-risk' older people living at home or in homes for the elderly. It has been developed originally within the European Union, and is now being spread worldwide. All those with experience of using EASYcare reported that it was useful in identifying health and care needs, planning individual care and developing services and that the time and effort to implement EASYcare was about right. Dutch studies showed that EASYcare is an evidence based, efficient tool in diagnosing and guiding vulnerable older subjects.

The application of EASYcare works best in a collaboration between a general practitioner and a nurse or social care worker. In most cases, the assessment takes place at home through a home visit of the nurse. EASYcare consists of 14 domains which are important in recognizing health and care needs and it inventories the priorities of the older person as well. Experiences in using EASYcare showed that additional information from observation of the individual behavior and simple screening instrument contribute to the quality of the assessment. EASYcare differs from other Comprehensive Geriatric Assessment tools providing an early identification of health care needs. It helps practitioners in the primary health care to improve their abilities to identify at-risk groups of older people in primary care settings, assess their needs in the round and provide an effective response.

Present and future work of the EASYcare international network include cross cultural adaptation of the assessment instrument, validation work for use of EASYcare instrument in different care sys-

tems, development of an EASYcare international database for population comparisons of needs and outcomes of care.

Competence-based training on the job: preconditional for comprehensive EASYcare assessments

Theunisse Leny, Lenkens Marleen, Perry Marieke, Olde Rikkert Marcel, Persoon Anke

Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

In this presentation we will describe the competence-based training we have developed in employing the Dutch EASYcare assessment tool. Most characteristic in applying EASYcare is to acquire comprehensive information of the older person within a certain time and to draw a conclusion in order to make a plan of care. In the training of the nurses, both how to get the right information and how to analyse and reach a conclusion, are addressed. Not only the answers of the patient on the 39 assessment-items, important as well as the nurses' observations of the older person's behavior and his environment, the results of simple screenings instruments and information from family members. Our experience is that to gather the different types of information is yet difficult, but to combine the different types of information to a sound conclusion is advanced nursing. Apart from a thorough knowledge and understanding of vulnerable older people (geriatric giants, values, and social life), skills are needed in communication technique. Our experience is that during the gathering of the information, nurses come too quickly to a conclusion. Therefore, the most striking feature of the training in EASYcare is the individual coaching of the nurses after following a theoretical class. During the coaching hours, the nurse evaluates three patients which she had assessed in their health needs. Elements which are reflected on are the preparation of the home visit, the results of the home visit, the nursing diagnoses, discussion points concerning possible medical diagnoses for the general practitioner. For this, a standardized framework is used. So far we trained 150 nurses in this model, which we also applied in training 50 dyads of general practitioner and nurses. In conclusion, EASYcare is a highly valued geriatric assessment instrument and fit for primary care only after thorough competence-based training.

A validation study of a two step screening method for the identification of frail older people

Kempen Janneke van

Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

Introduction: Primary care for frail older people needs improvement. The first step in improving this care is to identify these frail older people. To accomplish this, systematic screening is necessary. So far, there is no efficient and validated method which enables primary care professionals to identify these frail older people. Therefore, the aim of this study is to develop and validate a pragmatic method for identifying frail older people in primary care.

Method and Materials: Based on the available information, general practitioners divide in the first step all people of 70 years and over registered in their practice into three groups: people who are definitely not frail, people who are definitely frail, and people of whom insufficient information is available. Of the latter two groups additional data will be collected by a nurse in the second step. This

second step is a comprehensive in-home geriatric assessment of the nature and severity of frailty. The assessment is based on the EASYcare geriatric assessment instrument and takes health as well as social care aspects into account.

For concurrent validation of this two step screening method we will perform a detailed geriatric assessment as reference standard ($N=560$; ≥ 70 years).

Results: The first general practitioners started in November 2009 with a pilot study of the two-step screening. In February 2010 the first general practitioners will start with the validation study. The first results of the pilot study will be expected mid-2010 and will be presented at the conference.

Conclusion: Because this two-step screening method for the identification of frail older people takes profit from information already available in the patient record, not every older person needs to be assessed completely. For this reason, we expect this method is more efficient and will be easier to implement in practice. This pragmatic method of screening enables primary care professionals to provide tailored interventions to frail older people.

An EASYcare based dementia training programme improves dementia diagnosis in primary care

Perry M, Draškovic I, Achterberg T van, Borm G, Lucassen P, Vernooij-Dassen M, Olde Rikkert M
Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

Background: Early diagnosis of dementia benefits both patient and caregiver. Nevertheless, dementia is under-diagnosed in primary care. We designed a multi-faceted EASYcare-based Dementia Training Programme (DTP) for dyads of general practitioners (GPs) and primary care nurses (PCNs) aimed at stimulating collaboration. We expect it to increase the number of cognitive assessments and dementia diagnoses and to improve the quality of primary dementia care.

Methods/Design: The DTP consists of two workshops, individual coaching, access to an internet forum, and a computerized clinical decision support system. Its aim was to improve dementia diagnosis and management, and to stimulate collaboration in primary care. The DTP's content was based on barriers to diagnosing dementia described in the literature and national dementia guidelines. DTP provided strict protocols for cognitive diagnostic work-up and task sharing and consultation between PCNs and GPs. The EASYcare instrument, a tool for geriatric function assessment, was an important element in these protocols. The effects of the DTP were studied in a cluster-randomised controlled trial. One hundred and five dyads of GPs and nurses participated; 74 in the intervention group and 31 in the control group.

Results: One hundred and five dyads of GPs and nurses recruited 428 patients; 283 by intervention dyads and 145 by control dyads.

Those patients did not show any differences in important baseline characteristics. Ten control group patients (7%) and 17 intervention group patients (6%) were already diagnosed with dementia before the start of the trial. Of the patients without a dementia diagnosis, 130 in the intervention group (49%) and 20 (15%) in the control group were newly diagnosed with dementia. ($P<0.001$)

An EASYcare-based dementia training programme helps overcoming barriers to diagnosing dementia

Perry M, Draškovic I, Achterberg T van, Lucassen P, Vernooij-Dassen M, Olde Rikkert M
Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands

Background: Dementia is under-diagnosed in primary care. To overcome this problem, we designed a multi-faceted EASYcare-based Dementia Training Programme (DTP) for fixed dyads of general practitioners (GPs) and primary care nurses (PCNs). The aim of this study is to explore how the DTP contributed to overcoming barriers to dementia detection and management.

Methods: DTP provided strict protocols for cognitive diagnostic work-up and task sharing and consultation between PCNs and GPs. The EASYcare instrument, a tool for geriatric function assessment, was an important element in these protocols. To study DTP's contribution to overcoming barriers in primary dementia care, two independent researchers interviewed a purposive sample of 10 GPs and 12 nurses who participated in a randomized controlled trial aimed at determining the effectiveness of the DTP.

Results: The barriers to dementia detection that participants considered as being overcome were the insufficient recognition of early dementia signs, insufficient knowledge, lack of adequate screening instruments, lack of comprehensive guidelines and negative attitudes towards diagnostic disclosure of dementia. According to the participants, the DTP made them realise, that making and disclosing an early dementia diagnosis is important. Most GPs considered themselves competent to make a dementia diagnosis and obtained positive disclosure experiences. Nurses believed that their abilities to pick up signs of early dementia improved. Barriers that were partly overcome were therapeutic nihilism and lack of time. Participants mentioned that after the DTP they were convinced that something could be done for dementia patients and their caregivers. However, some of them found it difficult to translate these changes into practice and felt that the time investment was large, despite of collaboration.

Conclusion: The DTP contributed to overcoming many barriers to dementia detection in primary care. To overcome the remaining barriers to the implementation of dementia guidelines, organisational and financial interventions may be required.

K2-S18 Symposium

Leadership and management role of the doctor of nursing practice in care of older persons in the USA

Goal: The purpose of this presentation is to examine the emerging role of the Doctorate of Nursing Practice (DNP) to fill a gap in the care of older persons in the United States with possible ramifications globally.

Overview: Nurses prepared at the DNP level with clinical, organizational, economic, and leadership skills are expected to significantly impact health care outcomes. The DNP was developed in response to the call for increased preparation for advanced practice healthcare professionals in order to meet the health care needs in the increasingly complex health care environment. Nurses prepared at the DNP level with clinical, organizational, economic, and leadership skills are expected to significantly impact healthcare outcomes.

Leadership and management role of the doctor of nursing practice in care of older persons in the USA

Kruschke Cheryl

Regis University, Denver Co, USA

Introduction: The purpose of this symposium is to examine the emerging role of the Doctorate of Nursing Practice (DNP) to fill a gap in the care of older persons in the United States. The DNP was developed in response to the call for increased preparation for advanced practice healthcare professionals in order to meet the health care needs in the increasingly complex health care environment. Nurses prepared at the DNP level with clinical, organizational, economic, and leadership skills are expected to significantly impact healthcare outcomes. This presentation will review and define the present nursing roles in care of older persons.

Methods and Materials: Historical research and a literature review of nursing roles in the care of older persons are presented to ascertain the background and need for the DNP. Quantitative and qualitative data collection was used to identify nurse sensitive outcomes and common nursing interventions provided to community-based older persons. Interviews of practicing DNPs were completed to obtain current practice perceptions of the DNP role.

Results: The results reflect the actual practice roles of nurses in the United States and the need for further leadership and management in the nursing care of older adults.

Conclusion: Nurses with a DNP are expected to demonstrate added service and abilities in providing quality care to older persons. While the impact of the role is not entirely clear, the DNP degree meets the need for expanding clinical competencies to address the changing healthcare system.

Leadership and management role of the doctor of nursing practice in care of older persons in the USA

Ernst Diane

Regis University, Denver Co, USA

Introduction: This second part of the symposium summarizes an outcomes research study investigating the effectiveness of monthly health promotion nursing clinics for community-dwelling, low-income older persons. The most frequently provided nursing interventions and resulting nurse sensitive outcomes are addressed.

Methods and Materials: Quantitative and qualitative data collection was used to identify nurse sensitive outcomes and common nursing interventions provided to community-based older persons in the clinics. The Nursing Intervention Classification (NIC) Survey

instrument developed by the Center for Nursing Classification & Clinical Effectiveness was completed by nurses for identifying the most common NICs provided. A Client Satisfaction Interview Instrument, chart audit, client interviews, and nurse interviews were used for determining whether or not there was evidence of nursing sensitive outcomes based on the Nursing Outcomes Classification (NOC) outcomes for community-dwelling older adults and the American Nurses Association (ANA) Community-based Nursing Quality Indicators.

Results: Study results revealed that the nursing clinics were effective in monitoring client health status and assisting clients in obtaining needed health and social service resources. The most frequently identified NICs provided at the clinics were several categories of client education, monitoring of vital signs, listening, counseling, screening, referrals, and assistance with negotiating the health care system. Nursing-sensitive outcomes were found in the clinics that related to client satisfaction and functional status along with components of self-care for instrumental activities of daily living, treatment behavior for illness and injury, and some areas of knowledge related to health behavior.

Conclusion: Nursing health promotion clinics for community-dwelling older adults are effective in linking low-income seniors with needed health services and assisting them to live independently. The DNP can be instrumental in providing leadership in the provision and coordination of nursing services in the community. While gaps in the availability of health programs for older adults exist, the DNP can serve as a cost-effective health care provider that can meet the needs of older persons in the community.

Leadership and management role of the doctor of nursing practice in care of older persons in the USA

Proksch Mary

Regis University, Denver Co, USA

Introduction: This third part of the symposium addresses the rationale and market need for the Doctor of Nursing Practice (DNP). Information includes historical development of the degree and how the DNP role is projected to deliver patient and population-focused high quality care that is interdisciplinary, evidence-based and cost effective.

Methods and Materials: A literature review of the Institute of Medicine Reports and guidelines from the American Association of Colleges of Nursing was completed. Nursing leadership and management roles in older persons' care were analyzed to determine the need for an expanded nursing role that provided a more holistic approach to care.

Results: The Institute of Medicine report in 2003 recognized the need for healthcare reform that would focus on interdisciplinary teams to provide evidence-based patient care. The DNP clinician is anticipated to take a leading role in direct care as well as providing care on the senior management level for older persons in a variety of settings.

Conclusion: DNPs are poised to address the need for interdisciplinary, evidence-based and cost-effective high quality care. They are expected to demonstrate added service and abilities in providing quality care to older persons.

Leadership and management role of the doctor of nursing practice in care of older persons in the USA

Stoeckel Pamella

Regis University, Denver Co, USA

Introduction: This final part of the symposium summarizes data collected from a qualitative research study of practicing Doctors of

Nursing Practice (DNP). The American Association of Colleges of Nursing (AACN) organization voted to mandate the DNP as the entry level degree for all new advance practice nurses by 2015. It is essential to have understanding of this new leadership role and how it will impact an aging population. The intent of this study was to ascertain current practice perceptions of the DNP role by practicing DNPs caring for older clients in order to determine the impact on the healthcare system.

Methods and Materials: Qualitative data was collected through a phenomenological research study. Eight practicing DNPs were participants. Questions asked of the participants focused on differences in role/practice as a DNP, how their new role impacted the older person, and what challenges they faced providing care to older per-

sons. Interviews were audiotaped and transcribed. Data was coded and themes derived.

Results: The results reflect themes based on the participants' perceptions that the evolving role of the DNP has the potential to positively impact healthcare outcomes of older persons. Challenges were identified as potential roadblocks. Participants shared the realities of being thrust into a leadership role that is in flux, but that has potential to make substantial difference in the care of older persons.

Conclusion: Nurses with a DNP are expected to demonstrate added service and abilities in providing quality care to older persons. While the impact of the role is not entirely clear, the DNP degree meets the need for expanding clinical competencies to address the changing healthcare system.

K3-468

Coping with disability and co-morbidity: a patient perspective

Smit Cees

VSOP, Hoofddorp, the Netherlands

A number of patients with chronic diseases have experienced a number of remarkable transitions in their lives. The most important transition is the one from no treatment at all to treatment becoming available, like in haemophilia or in HIV. Another transition is the one that during their lives they go from one disease to a number of diseases (co-morbidity) through the natural process of getting older or as a consequence of the side-effects of treatment.

These transitions can cause a number of problems. The first problem is the lack of co-ordination between medical specialists and paramedical staff. The second is polypharmacy – the use of multiple medications and as a consequence of these first two problems a third problem occurs which I prefer to address as the ‘fear’ factor.

The ‘fear’ factor can be described as a lack of control when you are not able to influence or check the treatment you receive.

When more and more older persons with chronic diseases will gradually transit to special care institutions for the elderly, more knowledge should be available in these institutions to deal with these new groups of patients. In this way, these patients will differ a lot from the group of elderly people who develop co-morbidity at a much older age.

Some of these issues will be addressed in this presentation, based on the personal experience of the presenter, who is also the (co-)author of several recent books on getting older with chronic diseases, like haemophilia and HIV.

K4-L13

Next level leadership

Irene van der Saag

Management Development Consultant de Baak, Management Centrum VNO-NCW, Driebergen, the Netherlands

Working as a nurse in care for older people is not only very rewarding. It poses many challenges: apart from establishing what it is exactly what your patient needs to maintain quality of life, you have to entertain good working relations with care professionals from other disciplines, partners and (extended) family. Also, you want to keep up with recent scientific research on your subject. And all of this, very often, in very limited time. How do you manage? How can you not only do your job, but also be a role model for others? Leadership has many aspects: it has not always, and not only, to do with managing others.

How many years have you been in the workforce? Nearly a decade? Longer? You have unique experience, and that is *valuable*. So, how do you envision the next few years? Are you looking for learning and inspiration to continue to grow – and to lead with passion?

Ways to develop. You have no doubt reflected on who you are as a leader; you know how vital it is to keep yourself focused. In ‘Next Level Leadership’ we’ll gain new insights for leading yourself, leading others – and for guiding entire organizations.

What to Expect. In ‘Next Level Leadership’ we’ll work with you to discover the leader you wish to become. We’ll guide you through the concepts behind evolving your leadership role. You are likely to leave this program feeling freshly energized to further develop your *self*.

K5-55

The construct validity of the Tilburg Frailty IndicatorGobbens Robbert¹, Assen Marcel van², Luijkx Katrien³, Wijnen-Sponselee Ria⁴, Schols Jos⁵¹*Rotterdam University of Applied Sciences, Rotterdam, the Netherlands*²*Faculty of Behavioural and Social Sciences, Tilburg University, Tilburg, the Netherlands*³*Department of Tranzo, Tilburg University, Tilburg, the Netherlands*⁴*Avans University of Applied Sciences, Breda, the Netherlands*⁵*Caphri, Department General Practice, Maastricht University, Maastricht, the Netherlands*

Introduction: In contrast to other measurement instruments, the Tilburg Frailty Indicator (TFI) is based on an integral definition of frailty, which focuses not only on physical frailty, but also on psychological and social frailty, and contains no components referring to multimorbidity and disability. The aim of this study was to assess the construct validity of the TFI.

Methods and Materials: A sample of community-dwelling individuals aged 75 years and older was randomly drawn from a register of the municipality in Roosendaal (the Netherlands). In this sample (N=245; 54% response rate) we investigated the construct validity of the TFI using established measures of frailty. The participants were first interviewed and physical measurements were performed on them by nursing students in a 6 month period. One week after the last interview, the TFI was completed by the respondents.

Results: With one exception the fifteen components of the TFI correlated as expected and significantly with other measures of frailty. Two frailty domains (physical, social) of the TFI correlated as expected with other frailty measures, demonstrating both convergent and divergent construct validity of the TFI. Evidence for the convergent validity of the psychological domain did not appear unequivocal, it did not correlate with the MMSE. The divergent validity of the psychological domain on the three other scales (CES-D, HADS-A, MAS) was good, since psychological frailty correlated more strongly with these three scales than the other two domains did.

Conclusion: This study demonstrates that the construct validity of the TFI is good, when performed in a sample of community-dwelling elderly. The results regarding the TFI’s validity provide strong evidence for an integral definition of frailty consisting of a physical, psychological, and social domain. We offer general practitioners, nurses, social workers, and other health care workers a user-friendly measurement instrument which embraces the complexity of frailty.

K6-99

How to measure and classify insomnia in elderly personsHellström Amanda¹, Hagell Peter², Fagerström Cecilia¹, Willman Ania¹¹*Blekinge Institute of Technology, Karlskrona, Sweden*²*University of Lund, Lund, Sweden*

Introduction: Since sleep is found to be a fundamental part in experiencing quality of life and health it is of importance that nurses and other health care personnel strive to improve sleep and prevent sleep disturbances. Insomnia, which is the most common form of sleep disturbances, has also been found to be related with cardiac disorders. Elderly people are especially vulnerable for poor sleep; prevention of sleep disturbances should be of regard when caring for older persons. The Minimal Insomnia Symptom Scale (MISS) is a three item screening instrument previously found to be psychometrically sound and capable of identifying insomnia in the general population (20–64 years). However, its measurement properties have not been stud-

ied in an elderly population. Our aim was to test the measurement properties of the MISS among people aged 65+ in Sweden.

Methods and Materials: Data from a cross-sectional survey of 548 elderly individuals were analyzed in terms of assumptions of summation of items, reliability and optimal cut-off score by means of ROC-curve analysis and compared with self-reported insomnia criteria. The items of MISS describes the major features of insomnia, i.e. difficulties initiating sleep, waking at night and not feeling refreshed by sleep. A total score ranging between 0 and 12 is calculated, where higher scores indicate more severe insomnia.

Results: Reliability was found to be 0.81. ROC analysis where MISS was compared with self-reported insomnia criteria (i.e. daytime sleepiness, not feeling refreshed by sleep, experiencing sleep difficulties). Optimal cut-off score was identified as ≥ 7 , and sensitivity 93%, specificity 84%.

Conclusions: Data support the measurement properties of MISS as an insomnia screening instrument among elderly persons and its brevity as well as the easy scoring system makes it appealing in clinical practice.

K7-305

Interrater reliability of the interRAI Acute Care

Wellens Nathalie¹, Van Lancker Aurélie², Gray Len³, Moons Philip⁴, Flamaing Johan⁵, Boonen Steven², Milisen Koen⁴

¹Center for Health Services and Nursing Research, Katholieke Universiteit Leuven, Leuven, Belgium

²University Hospitals Leuven, Leuven, Belgium

³Centre for Research in Geriatric Medicine, Brisbane, Australia

⁴Katholieke Universiteit Leuven, Leuven, Belgium

⁵Department of Geriatric Medicine, University Hospitals Leuven, Leuven, Belgium

Introduction: Aim was to examine the interrater reliability of the Flemish version of the interRAI Acute Care (interRAI AC), a comprehensive geriatric assessment tool that provides a holistic picture of complex and frail hospitalized older persons.

Methods and Materials: An explorative cross sectional study was conducted on three geriatric wards of a Belgian university hospital. Two trained raters independently completed the interRAI AC tool between 24 and 48 h after admission. One hundred patients, older than 75 years were assessed (mean age 84.5 ± 5.6 years; 45% female; main reason for admission general decline (19%), fall (15%), and pneumonia (10%)). Premorbid functioning was assessed by 69 items and functioning on admission by 41 items across nine domains (e.g. cognition, communication, mood and behavior, functional status, continence, nutrition, health conditions, skin condition, discharge potential) of the interRAI AC. Reliability was tested using observed agreement, kappa coefficients, and weighted kappa coefficients.

Results: The overall kappa mean value for items on nominal level was 0.78 (substantial). The overall weighted kappa mean for items on ordinal level was 0.80 (substantial). According to conventional cut-offs for interpreting kappa statistics, reliability was almost perfect ($\kappa \geq 0.1$) for 60% of all items, substantial ($0.60 < \kappa \leq 0.80$) for 26%, moderate ($0.41 < \kappa \leq 0.60$) for 10% and poor ($\kappa \leq 0.40$) for 4%. The mean observed agreement was 0.88. For 83% of the items the observed agreement was > 0.80 .

Conclusion: This study showed substantial interrater reliability for 96% of the interRAI Acute Care items. In addition to previous evidence (Carpenter *et al.* 2001, Gray *et al.* 2008), the results of the current study suggest that the interRAI AC holds promise as a reliable assessment tool and provides preliminary evidence that the Flemish version of the instrument is appropriate for clinical application in acute settings.

K8-69

Self-actualization of the elderly living in the nursing homes, a challenge for care providers!

Wälti-Bolliger Marianne¹, Fontaine Michel²

¹Haute Ecole de santé Arc, Delémont, Switzerland

²Haute Ecole La Source, Lausanne, Switzerland

Introduction: We intend to discover through an exploratory research how to define the phenomenon of 'self-actualization' of the elderly living in a nursing home and what kind of factors influence their life. The goal is to improve self-actualization in this particular context through pertinent care propositions and support.

Methodology: The qualitative design takes the form of an action research. It is carried out in a nursing home where 50 elderly are living and 70 persons are working in different sectors. At the beginning, understanding interviews are carried out with 19 residents and 11 collaborators. Five sessions of focus groups over a period of 10 months (2008–2009) are realized.

Results: One of the results is a better understanding of the phenomenon through: a definition, the description of symptoms, influencing factors as well as barriers but also facilitators of self-actualization and propositions of interventions. Another result is that the identification of personal needs and resources necessitates a phenomenological comprehensive approach of the residents in the nursing home. The key element of this model is a best practice promoting group. This group, composed by collaborators of the different sectors of activity of the institution, reflects its practice in regular meetings with the help of the PARIHS model. The PARIHS Model promotes EBN (Promoting Action on Research Implementation in Health Services).

Conclusion: The methodological design and the conceptual approach allow a deep examination of the complexity of the research topic. The results highlighted are in adequacy with the literature. A later study on broader scale is in development making it possible to validate the model suggested and to check if its use makes it possible to support a practice EBN and the self-actualization of the residents in nursing homes.

K9-74

The added value of a senior adult oncology program for elderly cancer patients in a general hospital

Demande Isabelle, Nes Marie-Claire van, Philippe Marianne, Schoumackers Agnès, Mottet Catherine, Demande Isabelle
CHR Citadelle, Liege, Belgium

Purpose of the Study: Coordination of care is essential to cancer treatment in the elderly so we brought together a mobile team consisting of a geriatrician, a nursing coordinator, two nurses (one experienced in geriatrics, the other in oncology), a dietician, a clinical pharmacist and a social worker.

The purpose of the study was to assess all new patients with cancer aged 65 years or more to establish their profile as fit, vulnerable or frail with a screening test and a comprehensive geriatric assessment (CGA) as needed based on the results of the screening. We report the follow-up of our first 190 patients since the start of the program 8 months ago.

Method: Physicians who see a new patient aged 65 or more with cancer call the mobile team through a unique phone number. The nurse does the G8 screening test to identify potential geriatric problems. If the score is 14 or lower, a CGA is completed by the various members of the team. The social network is defined through a genogram. Based on the findings of the CGA and the Charlson comorbidity index, the geriatrician determines the profile of the patient and makes recommendations to the treating physician.

Results: One hundred and ninety patients: 110 women – 80 men. Mean age: 79.3 years. Types of cancer: digestive system (54) – lung (46) – female genital tract (21) – breast (21) – genitourinary cancer (21) – hematologic (7) – other (20).

Conclusions: Half the patients referred were vulnerable. The main problems identified were malnutrition, declining functional status, depression and a poor social network, all factors that influence the tolerance of cancer treatment. These problems are amenable to improvement. The lack of social support has implications for compliance with therapy and the identification of oncological emergencies.

Provision of supportive and palliative care could be improved for frail patients.

K10-424

Transferring the acutely ill nursing home resident to acute care in hospital

Graverholt Birgitte¹, Nortvedt Monica W¹, Riise Trond², Jamtvedt Gro³, Ranhoff Anette Hylen⁴

¹Bergen University College, Bergen, Norway

²University of Bergen, Bergen, Norway

³Norwegian Knowledge Centre for the Health Services, Bergen, Norway

⁴Kavli Research Centre for Ageing and Dementia, Bergen, Norway

Background: The hazards of hospitalizing frail old people is well described in the literature. Still, the extent and characteristics of these transfers has previously not been studied in the Nordic countries. Our objectives for this study were to (1) determine the incidence rate of emergency hospitalizations among nursing home residents according to age and gender, (2) study diagnoses at discharge related to length of stay, in-hospital mortality and 30 days mortality for hospitalized nursing home residents.

Methods: This study was carried out in a suburban community in western Norway, and includes all emergency hospitalizations from the community's nursing homes (n38) over a 2-year period. A total of 2081 beds are offered in nursing homes in this region, with a range of 17–174 beds. We used a population-based observational design, where hospital data was electronically retrieved on all NHR that were transferred to hospital in case of acute illness over a 2-year-period (2007–2008). This represents a sample of 2451 cases of hospitalizations. The hospitalizations are linked to the national population register to investigate 30 days follow-up mortality.

Results: There was an overall mean annual admission rate of 0.62. More than half (53.9%) of the hospitalizations relates to diseases of the respiratory system (20.6%), diseases of the circulatory system (17.3%) and diagnoses related to injuries of external causes (16.0%). In parallel to this, there is high quality evidence that offer strategies to handle these same areas of practice within the nursing homes, as oppose to hospital.

Conclusion: Basic health statistics is the necessary basis to form health services that are tailored and of high quality. This study lays a foundation for developing evidence-based nursing strategies that are of benefit not only to the individuals involved, but to the different levels of health care involved when acute illness occurs.

K11-153

Pressure ulcers in elderly palliative care patients

Marinis Maria Grazia de¹, Piredda Michela¹, Hendrichova Ilona², Mastroianni Chiara², Casale Giuseppe², Esposito Giuseppe³, Castelli M², Surdo L², Mirabella F⁴

¹Campus BioMedico University, Rome, Italy

²Antea Formad, Rome, Italy

³Tor Vergata University, Rome, Italy

⁴Istituto Superiore di Sanità, Rome, Italy

Introduction: Elderly patients with chronic end-stage cancer are considered at high risk for pressure sore because of their clinical condi-

tion. However, there are insufficient data about pressure sore prevalence, whereas specific guidelines for their prevention and treatment in palliative care settings are not available. This study reports about data on pressure sore incidence and prevalence in a population of elderly patients cared for in an Italian palliative care service.

Methods and Materials: Descriptive study by retrospective analysis of 414 clinical records of elderly patients in a Rome palliative care service. The information retrieved from the clinical records referred to gender, age, diagnosis, KPS index at admission, length of stay and presence of pressure ulcers. Prevention was performed by adapting the recommendations of general guidelines to the palliative care priorities.

Results: The sample included 49.7% male and 50.3% female patients with a mean age of 74 years. All patients were suffering from oncological diseases. The prevalence of pressure ulcers during the study period was 22.9% and the incidence 6.7%. Of the patients who developed new pressure ulcers, 15 (53.5%) developed them in the last 6 days before death. Patients who developed pressure ulcers were significantly older (mean age 79.9 – ds=6.8 – years vs. 73.4 – ds=11.5 – years; $P<0.0001$) than those who did not develop them. The KPS Index scores and length of stay were significantly linked to pressure sore development.

Conclusion: Compromised physiological conditions of elderly in palliative care require careful attention on wound prevention and treatment in order to avoid further suffering. Results from this study showed that, in terminally-ill elderly patients low performance status, advanced age and length of stay were important risk factors for the development of pressure ulcers. These results supported the need to focus on pressure sore prevention and treatment in terminally ill elderly and define specific guidelines.

K12-393

Hospital based nurse led consultation teams: impact on pain management and palliative care

Rich Kimberly, Cole Linda, Jacobs Anastasia, Odeniyi Eytayo St. Luke's Episcopal Hospital, Houston, TX, USA

Introduction: It is well known that prevalence of pain increases with advanced age. Studies suggest that 25–50% of non-institutionalized elderly suffer pain and the number is higher amongst those in nursing homes. As a result of the growing number of older adult populations, the need for improved expertise in pain management and end-of-life care is essential. In response to this need, St. Luke's Episcopal Hospital developed two nurse led consult teams for pain management and palliative care.

Objectives: Describe the evolution of nurse led consultation teams which are uncommon in the acute care setting; Identify specialty training and certification needed for team members to expertly care for vulnerable populations such as the elderly; Discuss program development, operational issues, barriers to implementation and measurements of success for the two teams

Results: Success of these programs can be seen in the following areas: Consultations increased to each group to each (25% for palliative care from 2007 to 2009; 113% for pain management from 2007 to 2009); Reduction in symptoms (50% reduction in pain scores after pain management involvement); Reduction of 26% in cost per case for palliative care consultations. Physician acceptance of recommendations made;

Most importantly, increased satisfaction of patients and families in symptom management.

Conclusions: Further research is needed to measure the impact on patient and family satisfaction once clear care goals are established and periodically reviewed during the patient's hospital stay. By establishing distinct outcomes measures at different points, success and opportunities for achievement can be identified. Strong organizational nursing leadership that values nurses and focuses on personalized patient care has ensured the success and growth of these two unique advanced practice nurse led consultation services

and insured improved quality of care for older adults in the acute care setting.

K13-396

Elderly experiences with falls and reasons for (non) participation in fall prevention programmes

Nieweg Roos¹, Bailey Ajay², Hutter I²

¹Hanze University of Applied Sciences, Groningen, the Netherlands

²Population Research Centre, University of Groningen, Groningen, the Netherlands

Introduction: In the province of Groningen it is estimated that fall injuries cost €15 million per year. Each year 1350 elderly (≥75 years of age) per 10 000 inhabitants of Groningen experience a fall and one in 18 women of 85 years and older needs treatment in an Emergency Room (CBS, 2001–2005). Healthcare professionals concluded that elderly in this province don't attend fall prevention programmes even though they are available and evidence (Cochrane, 2008) shows that a population-based approach to the prevention of fall-related injury is effective. The international literature shows that elderly have various reasons for not attending; do these apply to Dutch elderly?

Theory, Methods and Materials: Seven focus groups with 39 participants (age 75–92 years) were organised in a cosy, home-setting in the city of Groningen. Participants were independent living and had experienced at least one fall in the past years. They were recruited via snowball sampling.

Results: The preliminary results of the study reveal that elderly change their behaviour to prevent falling again and to increase their sense of safety in general in order to maintain their independence. They act more cautious, use appliances (walking canes, banisters etc.), wear warning devices, remove in-home obstacles (rugs, cords), and exercise to keep up their physical condition. Furthermore elderly invest in their social network to increase support. Some find it difficult to keep up these behavioural changes. Only one participant was aware of the existence of fall prevention programmes in Groningen; the others did not. Some would consider attending a prevention programme if it was, for example, easy accessible and if they could go with familiar people. Others stated they would not have the time, because time is spent on housekeeping and they did not want to commit themselves.

K14-50

Health and living situation of community-dwelling persons over 80 in Switzerland: preliminary results

Imhof Lorenz¹, Naef Rahel¹, Hoefliger Jeannette², Trechsel Brigitte², Wellauer Roland², Mahrer-Imhof Romy¹

¹Zurich University of Applied Sciences, Winterthur, Switzerland

²Division for Long-Term and Home Care, City of Winterthur, Winterthur, Switzerland

Introduction: To date, little empirical data are available about their particular health and living situation of persons over 80, their lay support system, and the factors that determine their ability to stay at home. The goals of the study were to identify the living situation and health status of this age group, as well as to assess their support system and need for home care.

Methods: Baseline data of a community-based nursing intervention study enrolling persons over the age of 80 years and their family members and including counselling sessions with advanced practice nurses was used for descriptive data analysis. The data set included living situation, health status, self-reported health challenges and perceived changes, and lay support system.

Results: Participants ($n=410$) were community-dwelling persons with a mean age of 85 ± 4 years, of which 74% ($n=307$) were women. The majority (83%, $n=340$) had 13 or less years of education, and 63% ($n=262$) held a professional degree. Health situations in general were more or less stable over the preceding months (50 ± 17 , 0=much better, 100=much worse), and 61% rated their health as good to excellent on five-point Likert scale. Reported health issues included pain, sleeplessness, mobility, forgetfulness and incontinence. The lay support system consisted on average of 6 ± 5 family members and 7 ± 15 other persons. The majority of participants (79%) felt that they could rely on their social support system when needed.

Conclusions: Despite considerable health challenges, almost two third considered their health as good to excellent. Persons had large support systems and felt that they would receive adequate support when needed. Health needs concern management of pain, sleeplessness and incontinence, enhancement of mobility and fall prevention. The insights gained from this nursing study will provide a valuable data base to plan and ensure future nursing care in the community that supports independent living at home.

K15-406

The bumpy road to finally get diagnosed with depression in old age

Kumpfmüller Magdalena, Linhart Monika

University of Vienna, Vienna, Austria

Introduction: Depression in old age often remains undiagnosed or will be diagnosed late. Therefore it is necessary to learn more about the life situation of older people suffering from depression so that health care professionals and especially home care nurses could smooth the way to diagnosis and appropriate treatment before the suffering becomes unbearable. Thus the aim of this pilot study was to uncover the process older people are going through until they are finally diagnosed with depression and to reveal facilitators and inhibitors of this process.

Method: This qualitative study explored the experiences and perceptions of older Austrians living at home, which had been diagnosed with depression just weeks ago. Eight women and two men, aged 70–84, were interviewed using open ended, semi-structured questions.

Results: Findings showed four main categories that all play a decisive role: 'triggers' addresses events that either can initially lead to depression in old age or intensify already existing latent symptoms, 'consequences' describes different implications the depressions symptoms could have on the quality of life and the well being of those affected, 'strategy' summarizes both the negative and positive coping strategies utilized, and, finally, 'social environment' encompasses all incidents with family and friends which had either a positive or negative influence on the mental health status.

Conclusion: The findings underscore the complex nature of the process of 'finally getting diagnosed with depression in old age', illuminating the need for increased health professional knowledge and understanding of symptom experience and latent suffering of older people with potential – yet – undiagnosed depression. Preventive measures like awareness of and knowledge about symptoms and diagnostic means could not only ease the suffering but also enable clinicians like home care nurses to shorten the bumpy road to diagnosis and treatment of those old people affected by a late life depression.

K16-101

Fatigue among older patients with first ever stroke in the acute phaseLerdal Annars¹, Bakken Linda¹, Lee Kathryn², Finset Arnstein³, Kim Hesook¹¹Buskerud University College, Drammen, Norway²University of California San Francisco, San Francisco, USA³University of Oslo, Oslo, Norway

Introduction: The aim of this study was to explore relationships among socio-demographic variables, depression, independence in activities of daily living (ADL), sleep quality, physical functioning, and fatigue during the acute phase of stroke, and to test whether older stroke patients differ in levels of fatigue from younger stroke patients.

Methods and Materials: Data were collected from face-to-face interview and patient's medical record. The sample included 92 patients ≥ 60 years with first-ever stroke admitted to two hospitals in Norway in 2007 and 2008. Fatigue was measured with the Fatigue Severity Scale (FSS), depressive symptoms with the Beck Depression Inventory version II, independence in ADL-P with the Barthel Index and sleep quality with the Pittsburgh Sleep Quality Index. Patients who reported fatigue for more than 3 months before the stroke were defined as having prestroke fatigue. For the second research question, level of fatigue in the sample was compared with 23 younger stroke patients admitted to the hospital during the same time period.

Results: A multivariate analysis showed that high fatigue was associated with lower physical functioning, more depressive symptoms, and prestroke fatigue. A bivariate analysis showed that the sample of patients who were 60 years and older had lower mean fatigue scores than those who were younger. This relationship was still statistically significant after controlling for level of physical functioning, sleep quality, depressive symptoms and prestroke fatigue.

Conclusion: In the sample of stroke patients 60 years and older, the younger patients had less fatigue. When those who were 60 years of age were compared with the 23 younger stroke patients, the younger patients had a higher level of fatigue. Since fatigue in stroke patients may impact the patient's ability to participate in the rehabilitation process, nurses should pay particular attention to fatigue and its co-existing factors during the acute phase.

K17-179

Active social participation and depression among older personsGrav Siv¹, Hellzen Ove¹, Stordal Eystein²¹Nord-Trøndelag University College, Namsos, Norway²Department of Psychiatry, Hospital Namsos, Namsos, Norway

Topic

Introduction: The aim of this PhD study is to gather evidence based information that will make it possible to develop clinical intervention for elderly seeking help for depressive symptoms. Phase one describes and investigates incidence and coherence focusing on depression, personality, social support, social trust and social participation among the generally elderly population.

Methods and Materials: Data were drawn from the third wave of The Nord-Trøndelag Health Study (HUNT) in Norway, one of the world's largest population surveys, gathering data during three periods. Nord-Trøndelag County is one of 19 counties in Norway, containing 3% of the Norwegian inhabitants. In brief, all residents of Nord-Trøndelag County in Norway aged 20 or more years were invited to participate in the study, total 94 194. Of those eligible 50 839 participated in the study (54%).

Results: Preliminary results show that in age group 60–69, 9.9% have a depression among they who have a valid HADS, 13.2% in age group 70–79 and 17.3% in age group 80–89 have a depression. 94.4% in age group 60–69, 92.1% in age group 70–79 and 89.8% in age group 80–89 have friends that can help them when they need them. On average 10% in the age groups have no friends they can speak to confidentially. Preliminary results show even that the incidence of introversion and neuroticism rises with age in the three highest age groups compared whit the younger age groups. Social trust decreases with age, 56.4% in age group 80–89 have no social trust.

Conclusion: The study will provide a basis for understanding of older persons in different ways. This will give nurses information to promote a more holistic health care, which also may help to reduce admission rates. Preliminary findings indicate that active social participation is a preventive measure against depressive symptoms.

Parallel Session L

L1-S1 Symposium

(Help me to) make my day

Goal: The goal of the symposium is to present the Laurens experience and philosophy on the near future of elderly care, focusing on three crucial aspects that have a direct impact on content and organisation of long term care: the stimulation of empowerment, the stimulation of dignity and self-management capacities of all older persons and the establishment of real interaction of older persons with (care) professionals in the care process.

Overview: Laurens will present the results they have achieved on the above mentioned aspects within three different themes:

- 1 Palliative terminal care;
- 2 Geriatric rehabilitation;
- 3 Elderly homes and neighbourhood projects.

The Laurens philosophy and experience on innovative long-term care for older persons

Woensel Marcel van, Baar Frans, Balen Romke van
Laurens housing welfare services and care, Rotterdam, the Netherlands

To Laurens crucial aspects in innovative long-term care for older persons are the stimulation or behold of empowerment, dignity and selfmanagement capacities of all older persons, interaction of older persons with (care) professionals and providing a supportive environment to this process. Laurens will present the results they have achieved on these aspects.

Palliative Terminal Care: People who stay in Cadenza are in need of complex care. Cadenza provides the space and possibilities to live the last phase of their live in a way that fits with who they are as persons and with their lifestyle. The care and services that are provided are an excellent example of emotion oriented care in combination with outstanding medical/technical care. Cadenza is part of 'Stichting Leerhuizen Palliatieve Zorg', a national education and research programme started by Laurens.

Geriatric Rehabilitation: Laurens Antonius Binnenweg (AB) developed a rehabilitation unit with a therapeutical climate, inviting and supporting people to do everyday things (getting out of bed and dressed, eating, reading) themselves as part of their rehabilitation programme. In 2009 AB opened one of the first geriatric rehabilitation 'outdoorclinics' in the Netherlands, providing people a possibility to go home after hospital admission and recover there while still following a tailored interdisciplinary rehabilitation programme.

Home and Care Facilities: Laurens Mekan or Laurens Prinsenhof provide facilities that are open to the neighbourhood, like little shops, restaurants or activities like music nights, workshops, games or playing cards. In both places the professional worker gets another role: instead of providing activities, they coach volunteers to do the work. Voluntary work is of course essential to lower the costs of activities. To Laurens the evidence that this way of working stimulates ownership and own responsibility of volunteers to achieve interaction and participation throughout the neighbourhood is more important.

Self management and volunteers: solutions for neighbourhood projects

Woensel Marcel van
Laurens housing, welfare care, Rotterdam, the Netherlands

Introduction: Elderly homes and nursing homes often make their services and accessible for people outside their homes. Participation

projects to stimulate the interaction between these groups are not rare, but projects have a temporary character and finances are limited. Laurens considered alternative ways to reach this goal. How to make use of capacities older people (still) have, how to involve voluntary workers and stimulate them to make themselves less dependent of neighbourhood projects with limited and temporary budget? Laurens Mekan is one of these examples.

Methods: In order to continue a neighbourhood project in Laurens Mekan, a costs reduction was needed. We interviewed residents, outside participants, as well as Laurens managers and local partners like housing corporation, city, and welfare organization about their experiences. These interviews were analysed on positive and negative aspects of Mekan and on how to develop a sustainable project.

Results: All parties confirmed that the wellbeing of all participants in the project did improve, supporting the Laurens vision that wellbeing of (older) people, regardless of their health care status, depends crucially on participating in society and neighbourhood. To reduce costs, we started to coach voluntary workers to organize activities themselves, thereby stimulating ownership and own responsibility of people for interaction and participation in their neighbourhood.

Conclusion: Laurens redefined the role of professional workers in neighbourhood activities, professional workers coaching volunteers and monitoring the needs of the older people. Laurens and Laurens workers are active participants in neighbourhoods and nursing homes alike. The growing commitment, the ownership and participation of partners and people in the neighbourhood results in a greater interaction between the neighbourhood and older persons in the elderly homes and nursing homes. It also results in activities that are embedded in the participating organisations.

Innovations in geriatric rehabilitation of frail older people

Balen Romke van
Laurens housing, welfare care, Rotterdam, the Netherlands

Introduction: In the Netherlands, geriatric rehabilitation of frail elderly patients after discharge from hospital takes place on rehabilitation wards of nursing homes. Because of plans for changing financing, we were required to explore the amount of patients, length of stay, discharge destination, patient characteristics, recovery of function and intensity of therapy. Based on the results of research Laurens Antonius Binnenweg developed a therapeutic climate for intramural rehabilitation and an outpatient-based geriatric rehabilitation program.

Methods: In 2007, 128 nursing homes in the Netherlands registered patients ($n=3590$) who were discharged in the previous 3 months after rehabilitation with a maximum stay of 6 months. Moreover, in 11 nursing homes participating in the Nursing Home University Network Zuid -Holland (Antonius Binnenweg being one of them), patients ($n=320$) were followed from admission until discharge or 4 months after admission. Total results were compared with results of Antonius Binnenweg.

Results: Twenty seven thousand patients were admitted in 2007 for geriatric rehabilitation of which 60% could be discharged to home after a stay of on average 2 months. Ten percent died and the rest (30%) were discharged to old people's homes and nursing homes for permanent stay. 93% of all patients were admitted from hospital after a median stay of 14 days. Antonius Binnenweg results did not differ from total results.

Discussion: Relevant for Antonius Binnenweg: the average stay in hospital and nursing home is still long, 60% of patients were discharged home without a proper after-care program and the amount of therapy hours is not sufficient. Therefore a therapeutic climate was developed in which patients are stimulated to rehabilitate themselves in groups to improve compliance and to augment therapy hours. Secondly, an outpatient geriatric rehabilitation clinic was started to rehabilitate patients living at home. As a consequence, hospital and nursing home stay shortens and can possibly be prevented. Also, rehabilitation at home is known to be more effective.

Programming for palliative care: the role of the teaching and learning centre palliative care

Baar Frans

Laurens housing welfare care, Rotterdam, the Netherlands

Introduction: Laurens has gathered extensive experience with Palliative Care patients since 1977. Today Laurens has several designated Palliative Care beds, where on average 400 patients yearly die (of the in total 1500). The challenge is to update Care knowledge and to expand to more complex care patients.

Methods: In 2004 the Leerhuizen Palliatieve Zorg were founded (Learning and Teaching Centre Palliative Care). This centre organizes courses, based in daily clinical practice of the palliative care units and on national guidelines. This centre has close ties with the regional 'Netwerk Palliatieve Zorg Rotterdam', the Rotterdam Uni-

versity of applied science and the Erasmus University. 'Leerhuizen' has three goals: (1) to improve Palliative Care within Laurens and other organizations through development, education and research (2) to train clinicians to become clinical teachers and trainers and (3) to build a Network of Education Palliative Care Centers, based on clinical excellence in daily care for patients. A Palliative Care program has been developed, that will be implemented in the coming years in Laurens locations and other care houses. This implies education of professionals and managers, implementation of guidelines and, training and working of Palliative Care Consultants, Care for the (professional) Carers, audit en evaluation of the experiences of patients, relatives and the professional care giving programs.

Results: Since 2004 we have increased quality of care for terminal patients by implementing an intense format of cooperation, the participation in the regional Network Palliative Care Rotterdam, the opening of a day clinic and a day care centre in Cadenza. The palliative Care units have received the National Certificate Palliative Care. Furthermore there are professional caregivers who have become clinically based trainers and teachers.

Discussion: The Palliative Care program and the model of Leerhuizen Palliatieve Zorg are successful examples of improving and expanding knowledge on palliative care based on the combination of professional and organizational experiences. This working method can be useful also for other areas in long term care.

L2-S19 Symposium

Malnutrition, pressure ulcers, and falls: a joint venture to improve patient safety

Schols Jos

Maastricht University, Maastricht, the Netherlands

Goal: Care problems never exist on their own; they are often inter-related. To improve patient safety, all care problems have to be tackled. Therefore this symposium aims to address the relationships between individual care problems like malnutrition, pressure ulcers, and falls in the care homes.

Overview: Malnutrition, pressure ulcers and falls are major care problems, especially in frail elderly people, which cause a great deal of discomfort for patients. Prevention of these care problems should be important patient safety issues. Literature suggests that malnutrition on the one hand can be a risk factor for falls and on the other hand falls may also induce malnutrition. Furthermore, literature suggests that malnutrition is an intrinsic risk factor for the development and healing of pressure ulcers. However, these relationships have not been extensively studied. The studies included in this symposium aim to investigate these relationships in elderly patients in care homes by using data of the National Prevalence Measurement of Care Problems (in Dutch: LPZ). LPZ started in 1998 and annually incorporates the measurement of these care problems. The findings of the included studies stress the importance of adequate nutritional care in frail elderly people. Since malnutrition in potential is a reversible risk factor for pressure ulcers and falls, early identification and if necessary improvement of nutritional status is very important.

The relationship between malnutrition parameters and pressure ulcers in care homesMeijers Judith¹, Shahin ESM², Tannen A³, Halfens RJG¹, Dassen T³, Schols Jos¹¹*Maastricht University, Maastricht, the Netherlands*²*Suez Canal University, Port Said, Egypt*³*Charité, Universitätsmedizin, Berlin, Germany*

Introduction: Pressure ulcers (PU) have been described as one of the most costly and physically debilitating complications in the 20th century. Whether a patient develops PU depends on both extrinsic and intrinsic factors. Nutritional status is one of the intrinsic factors of PU development that can be readily influenced. Although malnutrition is considered to be one of the intrinsic risk factors, more evidence is needed. This study aims to investigate this relationship between malnutrition parameters and PU in patients admitted to German nursing homes on a large scale.

Methods and Materials: A cross sectional study was performed in April 2007 in care homes in Germany. A standardised protocol (including a questionnaire+standardised measurements) was used with questions regarding patient demographics, PU characteristics (site, grade, duration) and malnutrition parameters measurements. Pressure Ulcers were assessed using the Braden Scale. Malnutrition was assessed by low Body Mass Index (BMI), undesired weight loss and insufficient nutritional intake.

Results: Two thousand three hundred and ninety-three patients from 29 care homes participated in the study. Pressure ulcers in care home patients were significantly ($P<0.01$) related with undesired weight loss (5–10%). Moreover low nutritional intake and low BMI (<18.5) was also significantly related to PU in nursing homes.

Conclusion: There is a significant relationship between malnutrition parameters like undesired weight loss, BMI <18.5 and low nutritional intake and pressure ulcers. The results of this article confirm the relationship between PU and malnutrition parameters and therefore stresses the importance of adequate nutritional care in PU (prone) patients. Since malnutrition in potential is a reversible risk factor for wounds (PU), early identification and management of it is

very important. In 2009 this relationship will also be studied in Dutch care homes the increase the body of evidence. These data will also be presented at the WENR in October.

Measuring health care problems to improve patient safety

Halfens RJG, Meijers Judith, Neyens Jacques, Nie Noemi van, Schols Jos

Maastricht University, Maastricht, the Netherlands

Introduction: Getting attention is important in changing professional behaviour, and confronting healthcare professionals with the outcome of the care they provided is likely to be the strongest key to getting attention. This is the main goal of the Dutch national prevalence study on healthcare problems (LPZ), which measures annually (since 1998) the prevalence, prevention, treatment and quality indicators of specific care problems: pressure ulcers (PU), malnutrition, incontinence, inter-trigo, falls and restraints in different health care settings. In this abstract we will focus on the care problems in Dutch care homes.

Methods and Materials: The LPZ is an independent cross-sectional, multi-centre and multilevel prevalence study that includes more than 20,000 patients per year from care homes. The measurement involves general and specific questions about the prevalence, prevention, treatment and management of care problems on institutional level, ward level, and patient level. The LPZ provides participating institutions with relevant and benchmarking information that enables them to take any specific measures necessary in order to improve their quality of care.

Results: Prevalence rates of pressure ulcers over the years show a clear decline. Prevalence rates of malnutrition remain high (23%) but are also declining. Prevalence rates of incontinence have been declining enormously from 80 to 58%. A small decline can be seen in the rates of falls (11.3–10%) and restraints (25–20%), but falls and restraints have been national measured only since 2007.

Conclusion: In the past few years, the prevalence rate of pressure ulcers, incontinence, malnutrition, falls and restraints have declined, indicating that awareness of the problem might be a very important factor in changing these prevalence rates. Care problems never exist on their own; they are often interrelated. To improve patient safety all care problems have to be tackled. Therefore LPZ also aims to study the relationships between individual care problems.

Relationships between malnutrition and falls in elderly patients in Dutch care homesNeyens Jacques¹, Halfens RJG¹, Spreeuwenberg Marieke², Meijers Judith¹, Luiking Yvette³, Verlaan Sjoers³, Schols Jos¹¹*Maastricht University, HMLS, Maastricht, the Netherlands*²*South University, Heerlen, the Netherlands*³*Danone Research, Wageningen, the Netherlands*

Objectives: Malnutrition and falls are major care problems, especially in frail elderly people. Prevention of malnutrition and falls should be important patient safety issues. Literature suggests that malnutrition can be a risk factor for falls and how falls may induce malnutrition. However, these relationships have not been extensively studied. This study aims to investigate the relationships between malnutrition and falls in elderly patients in Dutch care homes

Research Methods & Procedures: This study is part of the National Prevalence Measurement of Care Problems of Maastricht University. This is an independent cross-sectional, multi-centre/level, prevalence study (including a questionnaire+standardised measurements).

Results: Six thousand nine hundred and eighty one care home residents, 65 years or older, participated in this study: 4,127 in nursing

homes (59.1%), and 2,854 in homes for the elderly (40.9%). In this population, falls were significantly related with malnutrition ($P<0.01$) when using a multivariate logistic regression analysis. Further research showed that nutritional interventions (e.g. energy (protein) enriched diet, energy enriched snacks provided between meals, supplementary oral nutrition) in the malnourished group decreased the fall rate.

Conclusion: There is a significant relationship between malnutrition and falls. In case of malnutrition, nutritional interventions decreased the fall rate in the malnourished group. Future research should look into the mechanism of malnutrition that increases the fall risk, and into the type of nutritional intervention that decreases the fall risk. The results of this article add new evidence for the relationship between malnutrition and falls. Therefore, these findings stress the importance of adequate nutritional care in frail elderly people. Since malnutrition in potential is a reversible risk factor for falls, early identification and management of nutritional status is very important.

Factors associated with malnutrition in German nursing home residents

Palm Rebecca¹, Reuther Sven¹, Mayer Herbert¹, Meijers Judith², Bartholomeyczik Sabine¹

¹University Witten/ Herdecke, Witten, Germany,

²Maastricht University, Maastricht, the Netherlands

Introduction: Nutritional deficiencies have been shown to be associated with poor health outcomes like higher pressure ulcer and falls rates and increased hospitalizations. Until now, less is known about the factors associated with malnutrition in German nursing homes and which factors have an impact on the nutritional status of the elderly. The aim of this study is to analyse which resident-related factors and care interventions are associated with malnutrition in German nursing homes.

Methods and Materials: In 2008 and 2009 two cross-sectional multicentre studies were performed in 65 German nursing homes. Four thousand seven hundred and seventy eight residents living in these nursing homes participated in the study. A standardised questionnaire which was developed and tested in the course of a doctoral thesis in the Netherlands was used to assess nutritional status (BMI, undesired weight loss and intake e.g.), nutritional care interventions and quality instruments.

The predictors that will be tested in the multivariate model are based on identified risk factors in univariate analyses. A multivariate logistic model will be estimated to calculate the Odds Ratios.

Results: According to the definition of malnutrition 26.1% of the residents may be considered as malnourished. 14.1% of the residents

have a BMI<20, 6.3% show an unintentional weight loss of 6 kg in the previous 6 months and 5.8% of 3 kg in the previous month. No nutritional intake for 3 days are found at 3% of the residents and 4.6% of the residents have a reduced intake for more than 10 days. The results of the analysis of the multivariate regression model will be expected in May 2010.

Conclusion: The results can be used to identify residents at risk and to develop specific interventions to improve the nutritional status of the residents. Furthermore a deeper understanding of malnutrition is gained.

L3-475 Symposium

Think local, act local

Enden, Eline van den

Thuiszorg Rotterdam, Rotterdam, the Netherlands

Introduction: Thuiszorg Rotterdam is a traditional home-care organisation with 12,000 clients in Rotterdam en Schiedam. A government promoted market-oriented health system has in the past 10 years led to a dominant focus on costs. Professionals and clients alike are longing for the old days, when professionals had a more personal relationship with their patients. In order to bring back this personal relationship, Thuiszorg Rotterdam developed a new corporate strategy, based on the needs of customers, professionals, insurers, municipality, GP's and hospitals. The focus shifts to the relation between customer and professional. The new concept is called 'Thuis in de buurt' ('At home in the neighbourhood'). Three major aspects of our new approach will be highlighted.

1 Corporate training

To realize the necessary change of culture, habits and behaviour, an organisation-wide training programme has been developed. At the symposium an insight will be given into the basis principles of this programme, and the way it has been implemented.

2 Testimonial visiting nurse

How does the corporate principle Think Local, Act Local work out in the daily practice of a visiting nurse? One of the visiting nurses of Thuiszorg Rotterdam will show you.

3 Research

It is just as important for a home-care organisation as it is for instance for a hospital to be closely connected to research programmes, not to miss out on new scientific data and developments. Also, relevant developments in practice can lead to new research. Therefore, Thuiszorg Rotterdam in 2010 has introduced a lectureship Home Nursing Care at the Rotterdam University for Applied Sciences (Hogeschool Rotterdam). The newly appointed lecturer will explain the main tasks and goals of this lectureship.

L4-S28 Symposium**Assisted living and urban faces towards future care and architecture**

Bakker Sikko

Manager of the program Assisted Living, municipality Rotterdam, Rotterdam, the Netherlands

Goal of Symposium: The focus on old systems of organizing care for older persons in the city can be changed, making use of innovative architecture and assisted living areas. Innovative research towards mobility, lifestyles and architecture can change the way buildings and social infrastructures for the future are created.

People can develop more value towards

1 The existing care consumer and fundamental motivations: related towards activities for district nurses

2 Life long personal mobility in assisted urban environments: rooms become homes, canteens become restaurants, etc.

3 New cure care community center: all patients a room for their own and gardens integrated, the further from the centre; the less urgent and demanding need for care.

Overview: The municipality of Rotterdam is strategically focusing on how to organize care and prevention activities more locally in the neighbourhoods in the future, the 'assisted living' neighbourhoods. Therefore a study program and knowledge center started in 2008 where assisted living developments are part of a central pilot program to establish 15 assisted living areas. The studies in mobility, lifestyles and architecture are increasingly important to reach changes in the environments of the elderly and people with a disability. Nursing activities can be more integrated for the future demand in care where the position of district nurses can be increased with smart mobility solutions in the neighbourhood.

Assisted living: lifestyle and care: a new focus for district nurses

Hagen Gert Jan, Ruizing Marieke

SmartAgentCompagny, Amersfoort, the Netherlands

Introduction: The consumer of care of today can hardly be compared with the patient of the past. He/she is more demanding, in general very well informed and wants to be satisfied instantly. More and more Care companies need to gather knowledge of 'the consumer'. 'The care consumer' as such however doesn't exist. Psychographic segmentation of care-consumers visualises the demands of different groups and offers a guideline in improving operations and delivering of care.

Method: SmartAgent has developed a segmentation model to describe the demands of different psychographic groups of care-consumers, related to care, housing, services and communication. The model offers a framework to understand consumers at the 'deepest' level (consumers' fears, beliefs and values), thus providing an understanding of the fundamental motivations which drive consumers (future) decisions. The research is executed for municipalities, care-organisations and housing corporations in the Netherlands in the period 2001–2009. Two axes divide the map. The sociological axis (ego vs. group oriented) is found to be the most important and explanatory dimension. It indicates how a person in a specific market relates to the social environment. The second axis represents the psychological dimension (introverted vs. extroverted). The result is a four-quadrant map in which the consumer segments can be placed and understood, each segment demonstrating unique needs, motivations and products or services and communication requirements.

Conclusions: Knowledge of both consumers attitude and the whereabouts of the different consumers make it possible to differentiate in the way care is geographically organised and delivered. In some areas it is important to focus on social connectivity (district-nurse as a friend), in others it is more important to focus on care supporting the dynamic lifestyle (districtnurse as a pro). In some the

focus of care should be more service-oriented (districtnurse as an employee), while in others the focus lies on recognition (district-nurse as a medical expert).

Assisted living: embedding the decentralized care taking facility has to be assisted by urban environments and life long personal mobilityTrienekens Otto¹, Hoeven Frank van der²¹*De Veldacademie, Rotterdam, the Netherlands*²*TU Delft, Bouwkunde, Delft, The Netherlands*

Introduction: Elderly care in the Netherlands has for decades concentrated old people in large scale institutions. Care taking and nursing took place with an industrial efficiency, not seldom disregarding the ambitions and desires of individual residents. This trend is about to be broken. Recent initiatives envision to dissolve the large institutions by providing tailor made assistance at neighbourhood level. Imagine a situation in which the traditional care taking facility is spread out over a regular neighbourhood.

Rooms become homes, corridors become streets and canteens become restaurants. The way the neighbourhood is designed and managed will undergo radical change and the way care and assistance is provided with it.

By making use of new techniques such as GPS-Tracking, TU-Delft, the Municipality of Rotterdam and Veldacademy collaborate in order to understand and design this new reality. Thirteen reports (from international students, lectures) are published in the program assisted living Rotterdam for development of a assisted living area in the neighborhood Oud Charlois. One of the reports will be highlighted at the symposium:

Cultural Identity by Sayali Jadhav and Thao Pham

We carried out interviews in the area to get a review of what and how people feel about their own neighborhood. We also did some research in terms of needs and demands of the elderly. In this area there is a large diversity in cultures and also a lot of social issues to deal with. Due to these problems people were reluctant to make use of public spaces. Hence our strategy is to encourage the participation of elderly in public space. For this we chose to develop the central axis and make stronger connections with the neighborhoods.

Inside-Out in assisted living: a new cure care community centreOuburg Jarrik¹, Bremmer Paulien Bremmer², Talstra Marije³, Dols John³¹*Office Jarrik Ouburg, Amsterdam, the Netherlands*²*Paulien Bremmer Architecten, Amsterdam, the Netherlands*³*Twynstra Gudde, Amersfoort, the Netherlands***A new typology**

The qualities and size of the park-like setting, the monumental existing building, the public space (or lack thereof) and the shift in healthcare towards more patient-oriented facilities have inspired us to create a new hospital typology:

Inside – Out: All patients will have a room with their own front door located on the terraced gardenfloors of the hospital. The classical experience of a hospital visit with its long and anonymous corridors that make one experience these buildings a massive monolith will be replaced by a walk through a parklike environment to your relative's private room.

Outside – in: The outpatient wards. The outpatient wards are divided into target groups. Each ward has its own entrance, each of which is easily identifiable from outside. Every ward is connected to a specific part of the landscape design. Oncology is located at the bamboo-forrest, Heart and Lungs at the rosegarden etc. The outpatient wards are very flexible. Thanks to their set-up, the wards can

easily grow or shrink in size. It is a simple matter of changing the interior boundaries. There is sufficient 'breathing space' inside the building.

Care Homes: The single rooms can also be used for continuous occupation by those that need round-the-clock care. An apartment befitting your situation can easily be created through linking several rooms together. Nursing, care and other support services are available at all times.

Community: a cultural centre for the neighbourhood. The old building houses various offices that are not strictly needed in the core of the hospital. The building also serves as a cultural centre with shops, facilities such as a day nursery, senior club and primary health care, such as GPs and dentists. The building may also include a number of protected houses, for those who wish to have care and support at hand when they need it.

L5-S22 Symposium**Pain in residents with dementia: assessment and treatment**

Zwakhalen SMG

Maastricht University, Maastricht, the Netherlands

Goal & Overview: Pain assessment and its management in nursing home residents with dementia is a complex challenge. Study findings demonstrate that pain is undertreated among dementia patients. Key questions therefore to resolve are: how to recognize and treat pain adequately in dementia patients? Insight is essential to improve care of the demented elderly and contribute to optimal treatment. This symposium presents findings from four recent studies conducted in the Netherlands and Belgium. Latest findings in the field of pain and dementia will be presented from different perspectives.

Interventions after diagnosing pain in nursing home residents with dementia

Zwakhalen SMG, Hof CE van 't, Hamers JPH

Maastricht University, Maastricht, the Netherlands

Introduction: The availability of pain scales (e.g. PACSLAC) means an important step forward towards adequate treatment. This study aimed to inventory nursing interventions that were addressed after scoring pain using an observational pain scale (PACSLAC-D). Furthermore this study aimed to evaluate the experiences of nursing staff on clinical utility.

Methods and Materials: Residents of a psycho-geriatric ward ($n=40$) were invited to participate in this study. During a 6 week period pain was measured two times a week during morning care using PACSLAC-D. Interventions undertaken as a result of a pain score (PACSLAC-D ≥ 4) were inventoried on a datasheet. After a 3 and 6 week implementation period experiences of nursing staff on clinical usefulness were evaluated.

Results: Twenty-two residents with a mean age of 80 (SD 8.6) years were included in this study. Mean MDS-CPS score was 5 (SD 1.2) indicating that most residents were severely impaired. Scoring compliance was high. Of all scheduled assessments, 90% were eventually completed. In total, PACSLAC-D was scored 264 times during the 6 week period. Overall mean pain score was 2.2 (SD 2.8; range 0–17). During 60 times PACSLAC-D score was ≥ 4 . Completed data-sheets ($N=39$) by nursing staff showed that 17 of 60 pain scores did not result in any intervention at all. Most interventions undertaken consisted of a non pharmacological approach ($N=19$). Evaluation indicated that the PACSLAC-D was user-friendly. However, nursing staff reported that a behavioural pain scale solely would not be sufficient to determine pain.

Conclusion: Although there was a high compliance (over 90%), this study demonstrates that nurses did not frequently report the use of a pain relieving intervention. The study findings confirm that there is a need for pain scales. However the implementation of scales in daily clinical practice suggests that scales need to be embedded in an educational program that focuses on several aspects of pain and its management.

Assessing chronic pain in residents with dementia

Nispen tot Panneerden SC van, Zwakhalen SMG, Candel MJJM, Hamers JPH, Curfs LMG, Berger MPF

Maastricht University, Maastricht, the Netherlands

Introduction: One of the behavioral assessment tools is the 'Pain Assessment Checklist for Seniors with Limited Ability to Communicate' (PACSLAC). Nursing personnel consider the Dutch version of the PACSLAC to be a useful assessment tool to register pain in older

persons with dementia. Previous studies focused primarily on acute pain. The aim of this study was to determine whether the items in the Dutch refined version of PACSLAC can be used to register chronic pain as well.

Methods and Materials: This study included 339 residents of 10 nursing homes. Nursing personnel observed residents during rest and Activities of Daily Life (morning care). ADL was chosen as a moment of observation, since morning care is assumed to induce chronic pain. After both observation moments, nursing personnel filled in the Dutch refined version of PACSLAC to measure pain and the MDS-CPS to evaluate the level of cognitive impairment. The psychometric properties of the pain items were tested with classical test theory and item response theory. Item response theory was used to detect biased items by testing for differential item functioning. Exploratory and confirmatory factor analysis was applied to determine the factor structure of applied scale items.

Results: Of the 339 nursing home residents, 256 were female and 83 were male. All residents were between 67 and 98 years of age, with a mean age of 84. Fifty-seven percent of the nursing home residents had a severe to very severe degree of dementia (MDS-CPS score of 5 or 6). Preliminary results indicate that slightly different items were used to register chronic vs. acute pain. On the basis of the analyses in the current study, a different set of items was selected to register chronic pain than the items in the Dutch refined version of PACSLAC.

Conclusion: It seems that chronic pain is expressed through different facial expressions and behavioral cues than acute pain.

Pain observation by means of a digital scaleMaesschalck L de¹, Leysens G², Bonroy B³, Schiepers P⁴, Miljkovic D⁴, Wils M⁵, Vanrumste B³, Vasileios E⁴, Berckmans D⁴, Triau E⁵¹*Geel, Belgium*²*K.H.Kempen University College, Lier, Belgium*³*MOBILAB, K.H. Kempen University College, Geel, Belgium*⁴*M3-Biores, K.U. Leuven, Leuven, Belgium*⁵*De Wingerd woon- en zorgcentrum, Leuven, Belgium*

Introduction: Pen-paper observational scales have proven to be useful to assess pain in severe demented elderly, but also have a lot of disadvantages. Their usability is often limited, they are time-consuming because of their length, difficulties in calculating scores, and post processing required to evaluate the pain evolution. Also the timing and timing patterns of the indicators could be very valuable to pain assessment, but cannot be grasped using pen-paper assessment instruments.

Methods and Materials: A digital scale was developed for data collection in the PAINVISION-project. In this pilot study facial images of a bedside two-camera system were linked to the pain scores of the digital device (a tablet PC with a touch screen) carried out by a nurse. The Pain Assessment Checklist for Seniors with Limited Ability to Communicate, the Discomfort Scale – Dementia of Alzheimer Type, and the Faces Pain Scale Revised were used as input. After an informed consent was signed by a relative, two nurses tracked nineteen bedridden patients, with limited ability to communicate, for 6 random days, in which six assessment sessions were performed. The usability was more concrete evaluated by ten other professional caregivers of this geriatric centre, via the 'think aloud method' and a questionnaire.

Results: The digital device allows the nurse to record facial indicator events, such as frequency and duration, as they occur in real time. The scores are calculated automatically. The ten professional caregivers stated that the tool was easy to learn. After the second measurement their assessment time was reduced with approximately 50%, the number of detected manipulation errors was up to four times lower, and the general satisfaction has significantly increased.

Pain assessment in severe demented elderly based on facial expression

Leysens G¹, Noben A², Maesschalck L de¹

¹*K.H.Kempen University College, Lier, Belgium*

²*K.U.Leuven, Leuven, Belgium*

Introduction: Pain is an important and underestimated aspect at elderly with dementia, especially when their communication skills deteriorate. Moreover, the risk of under treatment increases with the progression of dementia, despite of the increasing pharmacological possibilities and interest in pain. Facial expression can be considered as a reflection of the real, authentic pain experience. Elderly with cognitive limitations are less socially inhibited to express pain non-verbally. Therefore observation of facial expression seems an interesting pain indicator for nurses, leading to a more accurate pain assessment, which is a must for this group of patients.

Methods and Materials: The PAINVISION-project is a pilot study to set up a low-cost vision system that can continually identify pain in real-time by means of facial pattern recognition techniques. This

study took place in a specific geriatric centre, and was approved by a medical ethical committee. Nineteen bedridden demented elderly with limited ability to communicate directly, were included. In six assessment sessions images of the patient's face were recorded by a new bedside two-camera system, linked to pain scores of a digital device (a tablet PC with a touch screen).

Results: At the moment, further data collection and processing is carried out to identify the most specific facial pain indicators. All results would be available in May 2010.

Conclusion: If indeed specific facial expressions contain sufficient pain information for the observer, a short and thus time efficient observational pain scale can be developed for patients who cannot express their pain verbally anymore. These findings hopefully stimulate nurses to perform more frequent pain measurements on patients with limited ability to communicate to increase the accuracy of the pain evolution. A more adequate treatment can be provided with the knowledge of a more accurate pain level, and thus improving quality of life.

L6-S24 Symposium

Positive aspects of family care

Goal: To present an overview of research on the positive aspects of informal caregiving for older persons. The aim is to enhance existing theories on caregiving and to give insight and methods that may be used to improve professional education.

Overview: The first presentation (Positive aspects of care giving: a survey amongst family caregivers) focuses on positive aspects of caregiving of older adults in the general population: expectations, rewards, pride and challenges.

The second presentation (Positive experiences with family care: Syrian-Orthodox vs. Dutch family caregivers) deals with the results of qualitative data (interviews and observations) from two specific populations: Syrian-Orthodox and Dutch family care givers.

Finally, in the third presentation (Family care in a residential home: expectations and beliefs of different stakeholders), we describe family caregiving in a specific formal care context.

All three presentations provide insight in the role of positive caregiving aspects in general caregiving theories. Furthermore, the results may be used to elaborate on the role of care professionals in the context of family care of older adults at home or in a residential setting

Positive aspects of care giving: a survey amongst family caregivers

Smits Carolien¹, Garretsen Marcel²

¹*Windesheim University of Applied Sciences, Zwolle, the Netherlands*

²*Steunpunt Informele Zorg, Hengelo, the Netherlands*

Introduction: Strikingly, most of the attention of researchers addresses aspects of burden and depression in the family caregiver, rather than positive experiences. A multitude of preventive interventions have been developed and implemented. For most of these interventions, however, evidence of their effects on the perceived burden of the caregiver is limited. In order to improve any help to family caregivers research is needed on what makes them tick: How do they evaluate the care that they provide; what makes them proud and how do they manage?

Methods and Materials: Family caregivers ($n=300$) who were members of a Regional Caregiver Support Council in the east of the Netherlands received a questionnaire including questions on the care giving situation, the care provided, and the positive and negative aspects of care giving. All caregivers addressed provided care for older persons. In 150 cases the caregivers supported a person with dementia.

Results: One hundred seventy-five caregivers returned the questionnaire. A considerable number of the respondents experience some physical and financial problems and report aspects of care giving burden. Most caregivers, however, indicate that they are happy and satisfied with their lives and the care that they give. They also rate their care giving skills highly. The positive aspects involve the fact that the caregivers are able to give care and that this ensures that couples can still live together, the emotional reward and gratitude of the elderly person, the love and improved relationship.

Conclusion: Most of the family caregivers are mentally well, despite physical and financial problems and aspects of care giving burden. Many caregivers are satisfied with their life, their care giving activities and competencies. Professional support must take note of the satisfaction and pride of family caregivers. Theories on support may increase their validity by incorporating these positive aspects of care giving.

Positive experiences with family care: Syrian-orthodox vs. Dutch family caregivers

Groen-van de Ven Leontine, Prins Kim, Talen Jiska, Wemer Martine, Smits Carolien

Windesheim University of Applied Sciences, Zwolle, the Netherlands

Introduction: The present study aims to explore and compare the experiences of Syrian-orthodox family caregivers and Dutch family care givers with respect to positive experiences of care giving. Syrian-Orthodox people live in diaspora around the world, about 15 000 of them reside in the Netherlands.

Methods: Trained community key-persons and students interviewed 15 Syrian-orthodox family care givers and 15 Dutch family care givers using semi-structured interview lists. Interview topics included, the care giving situation; the caring network; and personal care giving qualities, experiences and motivations. Respondents commented on the intermediate results in member check meetings. Interviews were translated in Dutch (when necessary) and transcribed verbatim.

Results: Both Syrian-orthodox and Dutch caregivers experience the care giving situation as self-evident stemming from reciprocity in the relationship with parents and partners. For Syrian-orthodox caregivers expectations towards community and religion also function as motivators. Motivators for Dutch caregivers are having a close relation with the older person living nearby, and care giving experience. Syrian-orthodox caregivers experience feelings of pride and a sense of meaning through their care giving activities. Negative experiences for both groups involve lack of time and energy, feelings of guilt, the confrontation with the suffering or deterioration of the older person and the physical or psychological burden of being the main caregiver.

Conclusion: Syrian-orthodox and Dutch caregivers have similar positive and negative experiences with family care, however their views on their role as a caregiver differ. Because of the expectations towards, especially, women within the Syrian-orthodox community to care giving, family care is an important part of their lives leading to a sense of meaning and pride. Care professionals should incorporate the above in their communication with different family caregivers. This implies skills that deserve more attention in the training of professionals.

Family care in a residential home: expectations and beliefs of different stakeholders

Jukema J, Arends M, Kolk M van der

Windesheim University of Applied Sciences, Zwolle, the Netherlands

Introduction: The goal of this study is to explore and clarify the opinions of different stakeholders in a long-term care facility. Our research question reads: What expectations and beliefs on family care are held by different stakeholders in a long-term care facility?

Methods: For this single case study in a residential home for older persons, two research-assistants (BScN students) collected data by means of participant observations (during 3 weeks) and thirteen semi-structured interviews. This included interviews with two older persons permanently living in a residential home, three relatives, a volunteer, three nurse assistants, two nurse managers, a social worker and a chaplain.

Results: For some relatives the care provided by family members is out of the question 'we are visitors', for others this care is 'very helpful, the nurses are so busy.' Some nurse assistants experience further involvement of relatives as a loss of their professional status. Communication between relatives and nurse assistants is felt to be necessary to exchange expectations and beliefs. Relatives express a lack of communication, especially in relation to nurse assistants.

Cooperation between staff and relatives enhances the willingness of family members to contribute to the care of their relatives.

Discussion: Care provided by relatives is not self-evident. Different expectations and beliefs among stakeholders are not expressed and remain therefore unknown. Beliefs and expectations of nurse assistants and relatives are influenced by traditional views on residential

care. In order to expand existing knowledge on the contribution of relatives to care in institutions further research is necessary. Shared decision making by older residents, relatives and professionals may benefit from tools supporting communication processes on the provision of care by various stakeholders.

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