

## Discursive constructions of falls prevention

*Discourses of active aging versus old age as disease*

Evron, Lotte; Ulrich, Anita; Pedersen, Lene Tanggaard

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**21st  
NORDIC CONGRESS  
OF GERONTOLOGY  
Dilemmas in Ageing Societies**



**Abstracts and Program**  
Copenhagen, Denmark  
June 10th - 13th, 2012

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## Welcome colleagues and friends

On behalf of the Danish Society of Geriatrics, the Danish Gerontological Society, and the Nordic Gerontological Federation it is our great pleasure to welcome you to the 21st Nordic Congress of Gerontology in Copenhagen.

We have chosen Dilemmas in Ageing Societies as the congress theme in order to emphasize the need for dialogues and discussions in the extraordinarily complex field of ageing and society. Through the congress we share a context where ageing and old people are perceived as a very important and interesting field of knowledge that can be approached from various scientific angles. And they are. New results from both research and the development of practice are continuously produced, and we invite you to help us make the congress an arena where scientific questions are asked – and hopefully some of the questions answered. New research collaboration may take its initial steps through informal and formal talks and friendships may be founded. As we all know, ageing and gerontology is a lifelong business!

Some of you may be attending a gerontological congress for the first time, others will be experienced participants and presenters. Whether you are visiting Copenhagen for the first time in your life or have been here several times before we do hope that you will share the intellectual, cultural, and social aspects of this congress and the city – and that you will enjoy yourselves in the coming three days.

We thank our colleagues in the organising committee and the scientific committee, the congress bureau BDP – and last but not the least the generous sponsors of the congress.

We are looking forward to welcoming you face-to-face at the opening of the congress on Sunday June 10th!



Finn Rønholt  
*President of 21 NKG*



Christine E. Swane  
*Secretary General of 21 NKG*

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Opening speech

A 350 Year Young Woman  
- Vermeer’s Girl with a Pearl Earring

OP-1 10-06-2012, 17:00-18:30, Plenum 8/10 & Plenum 9/11

Keeper of Conservation, Director Jørgen Wadum  
*National Gallery of Denmark (SMK) & Centre for Art  
Technological Studies and Conservation (CATS)*

A rapidly increasing proportion of individuals in the Western world are  
For more than two centuries a girl with a pearl earring went unrecog-  
nised through history. It was only at the end of the 19th century that the  
beauty of the already considerably aged young woman was identified as  
having been painted by Johannes Vermeer (1631-1678).  
After recovery the girl went on show and for a good century she was  
cherished as the Mona Lisa of the North. How she kept her secrets and  
later was allowed to reveal them is the subject of this talk, told by  
someone who got to know her most intimate details. And it was only  
after her latest treatment in 1994 that the staggering beauty of the 350  
year young woman became fully appreciated.

# Programme Overview

Sunday June 10, 2012

Time	Plenum 8/10	Plenum 9/11
14:00 - 19:00	Registration is open at congress venue	
17:00 - 18:30	Opening ceremony	
18:30 - 19:30	Reception (Snacks and drinks)	
20:00 -	Optional dinner at Brew Pub	

Monday June 11, 2012

Time	Plenum 8/10	Plenum 9/11	Room 1	Room 2	Room 3/4	Room 12	Room 13
8:00 - 18:00	Registration is open at congress venue						
8-30 - 10:00	<b>Plenary lectures</b> Chair: Finn Rønholt  <b>K1 Differences in women and men's health and survival: Dilemmas that require action?</b> Prof. Kaare Christensen  <b>K2 Old Brain, New Demands on Information Processing: A Dilemma?</b> Prof. Lars Nyberg						
10:00 - 10:30	Coffee break in the exhibition area						
10:30 - 11:15	<b>State of the art</b> Chair: Kirsten Damgaard  <b>SA1 Dilemmas in the ageing bones.</b> Prof. Peter Schwarz	<b>State of the art</b> Chair: Christine Swane  <b>SA2 Clothing and the embodiment of age: Why do clothes matter?</b> Prof. Julia Twigg					
11:30 - 12:30	Oral session O1.1 <b>Geriatric patients I</b> Chair: Kirsten Damgaard	Oral session O1.2 <b>Home care and participation</b> Chair: Eigil Boll Hansen	Oral session O1.3 <b>Inter generations and family relations</b> Chair: Catharina Nord	Oral session O1.4 <b>Psychiatry, technology, BMI</b> Chair: Finn Rønholt	Oral session O1.5 <b>Cognitive functioning</b> Chair: Jon Snædal	Oral session O1.6 <b>Psycho-social well-being I</b> Chair: Boo Johansson	Oral session O1.7 <b>Falls, risk and prevention</b> Chair: Susanne Stabel Gren
12:30 - 13:45 Symposiums start at 12.45	<b>Norpharma Symposium - in plenary room 8/10</b> <b>Drug interactions and renal failure limit the choice of pain medication in the elderly, MD, PhD Kari Petri Laine, Chairman Finn Rønholt</b>  <b>Nutricia Symposium - in plenary room 9/11</b> <b>Nutritional options for treatment of sarcopenia, Prof. MD, PhD Tommy Cederholm &amp; Senior researcher Anne Marie Beck</b>						
Lunch in the exhibition area							

## Monday June 11, 2012

Time	Plenum 8/10	Plenum 9/11	Room 1	Room 2	Room 3/4	Room 12	Room 13
13:45 - 15:15	Symposium S1.1  <b>Reforming old age care across Europe: Comparing processes and strategies</b>  Chair: Viola Burau and Tine Rostgaard	Symposium S1.2  <b>Assessment, evaluation and experience of function, physical activity and exercise: A challenge in ageing and different contexts</b>  Chair: Astrid Bergland and Birgitta Langhammer	Symposium S1.3  <b>Better care for fragility fracture</b>  Chair: Anette Hylen Ranhoff	Symposium S1.4  <b>Constructing age-friendly communities: Comparative perspectives</b>  Chair: Chris Phillipson	Symposium S1.5  <b>Ageism – concepts and empirical results</b>  Chair: Per Erik Solem	Symposium S1.6  <b>The ethnic/migration lens: Expanding the gerontological imagination</b>  Chair: Sandra Torres	Symposium S1.7  <b>Social capital, neighbourhood and well-being of older adults</b>  Chair: Tine Poulsen
15:15 - 16:15	Coffee break in the exhibition area Poster session I						
15:15 - 17:30	<b>Geropsychology Scientific Meeting in room 16</b> <b>All psychologists attending the congress are welcome</b>						
16:15 - 17:30	Oral session O2.1  <b>Geriatric patients II</b>  Chair: Ólafur Samúelsson	Oral session O2.2  <b>Social and health care</b>  Chair: Sigurveig Sigurðardóttir	Oral session O2.3  <b>Images of ageing</b>  Chair: Myra Lewinter	Oral session O2.4  <b>Nutrition and vitamin status</b>  Chair: Anne Marie Beck	Oral session O2.5  <b>Inequality and health</b>  Chair: Charlotte Nilsson	Oral session O2.6  <b>Psycho-social aspect</b>  Chair: Knud Ramian	Oral session O2.7  <b>Hip fracture I</b>  Chair: Timo Strandberg
18:00 - 20:00	Welcome reception at the City Hall of Copenhagen						

## Tuesday June 12, 2012

Time	Plenum 8/10	Plenum 9/11	Room 1	Room 2	Room 3/4	Room 12	Room 13
8:00 - 18:00	Registration is open at congress venue						
8:30 - 10:00	Symposium S2.1  <b>Policy, research and practice in the care of elderly people with complex health problems and severe needs. Experiences in the Nordic countries</b>  Chair: Lennarth Johansson and Mats Thorslund	Symposium S2.2  <b>Provision of assistive technology to support cognitive functioning in persons with dementia, and to reduce the care burden for family carer</b>  Chair: Torhild Holthe	Oral session O3.1  <b>Migration</b>  Chair: Anne Leonora Blaakilde	Symposium S2.3  <b>Ageing in small rural communities: Dilemmas for western countries</b>  Chair: Jeni Warburton	Symposium S2.4  <b>Life course in a cultural and psychological perspective</b>  Chair: Christine E. Swane	Symposium S2.5  <b>Measuring outcomes of long-term care: Experiences from Europe</b>  Chair: Tine Rostgaard	Symposium S2.6  <b>Sarcopenia</b>  Chair: Anette Hylen Ranhoff
10:00 - 10:30	Coffee break in the exhibition area						



Tuesday June 12, 2012

Time	Plenum 8/10	Plenum 9/11	Room 1	Room 2	Room 3/4	Room 12	Room 13
10:30 - 11:30	Oral session O4.1  <b>Medication</b>  Chair: Carsten Hendriksen	Oral session O4.2  <b>Professional care workers</b>  Chair: Hanne Marlene Dahl	Oral session O4.3  <b>Death and dying</b>  Chair: Peter Öberg	Oral session O4.4  <b>Informal care giving I</b>  Chair: Gerdt Sundström	Oral session O4.5  <b>Depression</b>  Chair: Hanne Pedersen	Oral session O4.6  <b>Physical exercise I</b>  Chair: Minna Mänty	Oral session O4.7  <b>Rehabilitation</b>  Chair: Jette Thuesen
11:45 - 12:45	Oral session O5.1  <b>Dementia care I</b>  Chair: Marianne Schroll	Oral session O5.2  <b>Quality of home care services</b>  Chair: Tine Rostgaard	Oral session O5.3  <b>Lifelong learning</b>  Chair: Britt Slagsvold	Oral session O5.4  <b>Informal caregiving II</b>  Chair: Anneli Sarvimäki	Oral session O5.5  <b>Preventive home visits</b>  Chair: Kirsten Avlund	Oral session O5.6  <b>Physical exercise II</b>  Chair: Nina Beyer	Oral session O5.7  <b>Hip fracture II</b>  Chair: Karen Andersen-Ranberg
12:45 – 14:00 <b>Symposiums start at 13.00</b>	<p><b>Grünenthal symposium - in plenary room 8/10</b></p> <p><b>MOR-NRI*- MORE THAN MEETS THE EYE</b></p> <p><b>Tapentadol for the treatment of severe chronic pain.</b></p> <ul style="list-style-type: none"> <li>• Challenges in assessing and managing chronic pain in the elderly, Professor, Dr. med. Ralf Baron</li> <li>• Pain mechanism and the role of age, Professor Lars Arendt-Nielsen:</li> </ul> <p><b>Edwards symposium - in plenary room 9/11</b></p> <p><b>The Forgotten Epidemic: -</b></p> <p><b>Severe Aortic Stenosis TAVI a Novel Treatment Option, Introduction: Mika Laine</b></p> <ul style="list-style-type: none"> <li>• Aortic Stenosis Prevalence in the Elderly Population, Dr Mika Laine</li> <li>• What is Transcatheter Aortic Valve implantation (TAVI), Dr Gry Dahle</li> <li>• TAVI a Danish invention: From Son to Father, Dr Henning Andersen</li> </ul>						
	Lunch in the exhibition area						
14:00 - 15:00	Oral session O6.1  <b>Dementia care II</b>  Chair: Elizabeth Rosted	Oral session O6.2  <b>Long term care</b>  Chair: Morten Balle Hansen	Oral session O6.3  <b>Home, housing &amp; environment</b>  Chair: Eigil Boll Hansen	Oral session O6.4  <b>Nursing home residents</b>  Chair: Eva Algreen-Petersen	Oral session O6.5  <b>Oldest old</b>  Chair: Bernard Jeune	Oral session O6.6  <b>Physical capacity in later life</b>  Chair: Anette Ekmann	Oral session O6.7  <b>Social life and participation</b>  Chair: Mette Andresen
15:00 -16:00	Coffee break in the exhibition area Poster session II						



## Tuesday June 12, 2012

Time	Plenum 8/10	Plenum 9/11	Room 1	Room 2	Room 3/4	Room 12	Room 13
16:00 - 17:30	Symposium S3.1  <b><i>Dementia diagnostics in memory clinics in the Nordic and Baltic countries</i></b>  Chair: Anette Hylen Ranhoff	Symposium S3.2  <b><i>Critical perspectives in need assessment practice(s) in elderly care</i></b>  Chair: Sandra Torres	Symposium S3.3  <b><i>Evaluation of orthogeriatric services in Nordic and Baltic countries</i></b>  Chair: Helgi Kolk	Symposium S3.4  <b><i>Family carers in the welfare state</i></b>  Chair: Tove Lindhardt	Symposium S3.5  <b><i>entenarians in the past and present</i></b>  Chair: Bernard Jeune	Symposium S3.6  <b><i>Fatigue in older adults</i></b>  Chair: Kirsten Avlund	Oral session O7.1  <b><i>Social life</i></b>  Chair: Anna Siverskog
19:00 -	Congress Dinner						

## Wednesday June 13, 2012

Time	Plenum 8/10	Plenum 9/11
8:00 - 13:00	Registration is open at congres venue	
9:00 - 10:30	<b>State of the art</b> Chair: Nina Beyer  <b><i>SA 3 Dilemmas in behaviour and physical activity in a gender perspective</i></b>  Prof. Roger Fielding  <b><i>SA5 Social inequality in ageing</i></b>  Prof. Mats Thorslund	<b>State of the art</b> Chair: Tove Lindhardt  <b><i>SA4 Trends in ageing and challenges for the provision of care for older people</i></b>  Senior Lecturer Virpi Timonen  <b><i>SA6 Dilemmas in family care</i></b>  Prof. Mike Nolan
10:30 - 11:00	Coffee break in the exhibition area	
11:00 - 12:30	<b>Plenary lectures</b> Chair: Christine Swane Sohlberg Nordic Price Lecture Andrus Viidik Lecture	
12:30 - 13:00	Closing Ceremony	

# General Information

**Venue**

Scandic Copenhagen  
Vester Soegade 6  
DK - 1601 Copenhagen V  
Tel: +45 3375 7125

**Opening ceremony & reception**

17.00 – 18.30, the opening ceremony will take place at the congress venue. The reception will take place in the same location after the opening ceremony and continue until 19.30.

**Optional dinner**

June 10th at 20.00.  
Address: Brew Pub, Vestergade 29, DK-1456 Copenhagen K.  
Walking distance from the venue.  
Tickets can be obtained at the congress hospitality desk. Please note transfer is not included for this event.

**City Hall reception**

June 11th at 18.00.  
Address: Rådhuspladsen 1, DK-1550 Copenhagen V.  
Walking distance from the venue. Tickets can be obtained at the congress hospitality desk.  
Please note transfer is not included for this event.

**Congress dinner**

June 12th at 19.00.  
Address: Bredgade 28, DK-1260 Copenhagen K.  
Tickets can be obtained at the congress hospitality desk.  
Please note transfer is not included for this event.

**Breaks**

Coffee, tea and refreshments are served during coffee breaks in the exhibition area.

**Lunches**

Lunch is included on Monday 11th of June and Tuesday 12th of June.

**Congress badges**

Your personal badge is your entrance ticket to all sessions and you are asked to wear it throughout the congress. Should you misplace your badge, a replacement badge can be obtained at the congress hospitality desk.

**Registration-hospitality desk opening hours**

Sunday June 10th from 14.00 until 19.00  
Monday June 11th from 8.00 until 18.00  
Tuesday June 12th from 8.00 until 18.00  
Wednesday June 13th from 8.00 until 13.00  
Telephone / mobile: Berrit + 45 2635 1415

# Programme

Programme

Sunday June 10, 2012

14:00-19:00	Registration - Hospitality Desk Open	
17:00-18:30	Opening Ceremony	Plenum 8/10 & 9/11
	<b>Opening Speech: A 350 Year Young Woman - Vermeer's Girl with a Pearl Earring</b> Keeper of Conservation, Director Jørgen Wadum <i>National Gallery of Denmark (SMK) &amp; Centre for Art Technological Studies and Conservation (CATS)</i>	
18:30-19:30	Reception (Snacks and drinks)	
20:00	Optional dinner at Brew Pub Restaurant	

Monday June 11, 2012

08:00-18:00	Registration - Hospitality Desk Open	
08:30-10:00	Keynote Presentations	Plenum 8/10 & 9/11
	Chair: Finn Rønholt  <b>K1-1 Differences in the health and survival of women and men: Dilemmas that require action?</b> Professor Kaare Christensen <i>The Danish Aging Research Center, University of Southern Denmark</i>  <b>K2-1 Old Brain, New Demands on Information Processing: A Dilemma?</b> Professor Lars Nyberg <i>Departments of Radiation Sciences and Integrative Medical Biology, Umeå University</i>	
10:00-10:30	Coffee Break in the exhibition area	
10:30-11:15	States of the Art Lecture	Plenum 8/10 & 9/11
	Chair: Kirsten Damgaard  <b>SA1-1 Dilemmas in the ageing bones</b> Professor Peter Schwarz <i>Glostrup hospital</i>	
	Chair: Christine Swane  <b>SA2-1 Clothing and the embodiment of age: Why do clothes matter?</b> Professor Julia Twigg <i>University of Kent</i>	
11:30-12:30	Oral Session 1.1 - Geriatric patients I	Plenum 8/10
	Chair: Kirsten Damgaard	
11:30-11:45	<b>O1.1-1 Barriers to a person-centred care for older patients with cognitive impairment in acute care.</b> RNT, MSc, PhD student Anita Nilsson <i>Umeå universitet</i> RNT, Professor Birgit H. Rasmussen, RN, Associate Professor David Edvardsson	

11:45-12:00	<b>O1.1-2 Metabolic syndrome and associated factors among South Korean Older adults</b> Professor Seung-youn Hong <i>Kangnam Univ</i>	
12:00-12:15	<b>O1.1-3 Orthostatic hypotension - significance of measurement duration in geriatric Inpatients</b> MD Heidi Pedersen <i>Gentofte Hospital</i> MD, PhD Jesper Petersen, MD, PhD Marianne Kirchhoff	
12:15-12:30	<b>O1.1-4 Similarities and differences in characteristics in elderly patients admitted to an acute geriatric unit, an orthogeriatric unit and a department og geriatric psychiatry</b> Mette Irene Martinsen <i>Diakonhjemmet hospital</i> Kari Midtbø Kristiansen, Marianne Dahl, Anette Hylen Ranhoff, Thomas Svendsen, Bernhard Lorentzen, Ludvig Fjeld Solheim	
11:30-12:30	Oral Session 1.2 - Home care and participation	Plenum 9/11
	Chair: Eigil Boll Hansen	
11:30-11:45	<b>O1.2-1 Older volunteers help improve quality of life through out-of-home activity intervention among older people with severe mobility limitations: a randomized controlled trial.</b> Professor Taina Rantanen <i>Gerontology Research Center and Department of Health Sciences, University of Jyväskylä</i> PhD Merja Rantakokko, MSc Irma Äyräväinen, MSc Hannele Khalil, Ms Sini Honkala, MSc Johanna Eronen, Tiina-Mari Lyyra, PhD Marja Vaarama	
11:45-12:00	<b>O1.2-2 Help to self-help as principle and as everyday practice</b> Dr. Leena Eskelinen <i>AKF</i> Eigil Boll Hansen, Hanne Marlene Dahl	
12:00-12:15	<b>O1.2-3 The outcome of focusing on a principle of help to self-help in the provision of home care</b> Dr. Eigil Boll Hansen <i>AKF, Danish Institute of Governmental Research</i> Dr. Leena Eskelinen, Professor Hanne Marlene Dahl	
12:15-12:30	<b>O1.2-4 Active citizenship and service voucher for the elderly</b> Kirsi Kuusinen-James <i>The Centre of expertice onn social work, Verso</i>	
11:30-12:30	Oral Session 1.3 - Inter generations and family relations	Room 1
	Chair: Catharina Nord	
11:30-11:50	<b>O1.3-1 Intergenerational relations materialized</b> Dr. Catharina Nord <i>Linköping university</i>	
11:50-12:10	<b>O1.3-2 The materialized connection of objects to other generations for elderly people living at home who are reducing their material room in old age</b> Dr. Åsa Larsson <i>Linköpings niversitet</i>	
12:10-12:30	<b>O1.3-3 Cherished objects as materialized links between generations</b> Anna Whitaker <i>National Institute for the Study of Ageing and Later Life, Dep. of Social and Welfare Studies</i>	

11:30-12:30	Oral Session 1.4 - Psychiatry, technology, BMI	Room 2
	Chair: Finn Rønholt	
11:30-11:45	<b>O1.4-1 Active outdoor in inpatient geriatric psychiatry - experiences and data from development of a model</b> Dr. Marianne Thorsen Gonzalez <i>Diakonhjemmet University College</i> RN Marianne Larsen, PT Lara Mishler, MHSc Kari Midtbø Kristiansen	
11:45-12:00	<b>O1.4-2 Quality registry in The Viken Research Network for Geriatric Psychiatry</b> MSc Kari Midtbø Kristiansen <i>Diakonhjemmet Hospital</i> MD/Head of dep. Bernhard Lorentzen, MSc/Head of dep. Bodil McPherson, Head of dep. Terje Røst, Psych. Helene Skancke, Professor Knut Engedal, MD Inger-Marie Tjernæs, Head of unit Trude Teigene	
12:00-12:15	<b>O1.4-3 Sticks – Innovative Concepts for Memory Support, Reminiscence and Health Promotion</b> Professor Antti Karisto <i>Department of Social Research, University of Helsinki</i> MA Päivi Kuosmanen, PhD Helinä Melkas, PhD Satu Pekkarinen, PhD Raisa Valve	
12:15-12:30	<b>O1.4-4 Body Mass Index and Survival in the Very Old</b> Dr. Anna Dahl <i>Department of Medical Epidemiology and Biostatistics, Karolinska Institutet</i> PhD Elizabeth Fauth, PhD Marie Ernsth-Bravell, PhD Denis Gerstorf, PhD Nilam Ram	
11:30-12:30	Oral Session 1.5 - Cognitive functioning	Room 3/4
	Chair: Jon Snædal	
11:30-11:45	<b>O1.5-1 Functioning over time in persons with MCI</b> PhD student Annicka Hedman <i>Karolinska Institutet</i> PhD, Professor Louise Nygård, Associate professor, Professor Ove Almkvist, PhD, Associate professor Anders Kottorp	
11:45-12:00	<b>O1.5-2 Evidence of sleep apnea in MCI/Mild dementia</b> Dr. Jon Snaedal <i>Geriatric Department, Landspítali University Hospital</i> PhD Kristin Hannesdóttir, Prof Thorarinn Gislason, PhD Annie Arvidsson, Atli Josefsson	
12:00-12:15	<b>O1.5-3 Occupational and Leisure Time Engagement at Midlife and Cognitive Functioning in Advanced Old Age</b> Dr. Ross Andel <i>University of South Florida</i> Merrill Silverstein, Ingemar Kareholt	
12:15-12:30	<b>O1.5-4 The joint association of physical activity and BMI in mid-life with cognitive function in late life</b> Dr. Milan Gudjonsson <i>Landspítali University Hospital, Gerontological Research Institute</i> MD Sigurbjorn Bjornsson, MD Bjorn Eirnarsson, MD Jon Snaedal, PhD Jane Saczynski, PhD Thor Aspelund, MD Vilmundur Gudnason, MD Tamara B. Harris, PhD Lenore J. Launer, MD Palmi V. Jonsson	
11:30-12:30	Oral Session 1.6 - Psycho-social well-being I	Room 12
	Chair: Boo Johansson	
11:30-11:45	<b>O1.6-1 A Five-Year Panel Study of Relationships between Subjective Age and Mental Wellbeing in the Second Half of Life</b> Marijke Veenstra <i>NOVA</i> Svein Olav Daatland, Astri Syse	

11:45-12:00	<b>O1.6-2 The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: A cross sectional study</b> Associate Professor Hege Bøen <i>Diakonhjemmet University College, Department of Nursing and Health</i> Professor emeritus Odd Steffen Dalgard, Professor Espen Bjertness	
12:00-12:15	<b>O1.6-3 Older persons with borderline mental disorders: risk factors in North of Russia</b> Professor Andrey Soloviev <i>Northern State Medical University</i> Professor Irina Novikova, Victor Mestechko	
12:15-12:30	<b>O1.6-4 Shifts of normal aging phenotypes between young old and old -old.</b> Dr. Yasuyuki Gondo <i>Osaka University Graduate School of Human Sciences</i> Mr. Takeshi Nakagawa, Miss Yoshiko Ishioka, Dr. Madoka Ogawa, Dr. Kei Kamide, Dr. Kazunori Ikebe, Miss Yukie Masui, Dr. Mishiyo Takayama, Dr. Yasumichi Arai, Dr. Ryutaro Takahashi	
11:30-12:30	Oral Session 1.7 - Falls, risk and prevention	Room 13
	Chair: Susanne Stabel Gren	
11:30-11:45	<b>O1.7-1 Discursive constructions of falls prevention: discourses of active aging versus old age as disease</b> PhD-Student Lotte Evron <i>Department of Communication and Psychology, Aalborg University</i> Dr. Anita Ulrich, Professor Lene Tanggaard	
11:45-12:00	<b>O1.7-2 Predictive validity and cut-off scores in four diagnostic tests for falls – a study in frail older people at home</b> <b>PT, MSc, PhD student Ulrika Möller Olsson</b> <i>Lund University</i> RN, PhD, Associate Professor Ulf Jakobsson	
12:00-12:15	<b>O1.7-3 Fear of falling and coexisting sensory difficulties as predictors of mobility decline in older women</b> Anne Vlljanen <i>University of Jyväskylä, Department of Health Sciences, Gerontology Research Center</i> PhD Jenni Kulmala, PhD Merja Rantakokko, MD, PhD Markku Koskenvuo, MD, PhD Jaakko Kaprio, PhD Taina Rantanen	
12:15-12:30	<b>O1.7-4 Title: Fall-related information seeking behavior among elderly internet-users</b> Marjan Askari <i>AMC</i> S Eslami, S Medlock, S de Rooij, A Abu-Hanna	
12:30-13:45	Norpharma Symposium	Plenum 8/10
	Chair: Finn Rønholt	
	<b>Drug interactions and renal failure limit the choice of pain medication in the elderly</b> MD, PhD Kari Petri Laine	
12:30-13:45	Nutricia Symposium	Plenum 9/11
	<b>Nutritional options for treatment of scarpopenia</b> Prof. MD, PhD Tommy Cederholm & Senior Researcher Anne Marie Beck	
12:30-13:45	Lunch in the exhibition area	

13:45-15:15	<p>Symposium Session 1.1 - Reforming old age care across Europe: Comparing processes and strategies</p> <p>Chair: Viola Bureau and Tine Rostgaard</p> <p><b>S1.1-1 Reform strategies in home care for elderly in Europe</b> Professor Tine Rostgaard <i>University of Aalborg</i></p> <p><b>S1.1-2 Developments of home care policies in Ireland</b> Profesor Virpi Timonen <i>Trinity College Dublin</i></p> <p><b>S1.1-3 Reforms of long-term care policies in EU countries: an interpretation</b> Professor Costanzo Ranci <i>Polytechnic of Milan</i> Associate Professor Emmanuele Pavolini</p> <p><b>S1.1-4 Reforming old age care across Europe: comparing processes and strategies</b> Dr Viola Bureau <i>University of Aarhus</i> Prof Dr Hanne Marlene Dahl</p>	Plenum 8/10
13:45-15:15	<p>Symposium Session 1.2 - Assessment, evaluation and experience of function, physical activity and exercise: A challenge in ageing and different contexts</p> <p>Chair: Astrid Bergland and Birgitta Langhammer</p> <p><b>S1.2-1 Applicability and Effects of Physical Exercise among Older People With Dementia in Residential Care Facilities</b> PhD Erik Rosendahl <i>Umeå University</i> PhD Håkan Littbrand, PhD Michael Stenvall</p> <p><b>S1.2-2 Progressive resistance training for women 90+</b> Phd Student Gro Idland <i>Oslo University College</i></p> <p><b>S1.2-3 The reliability and validity of clinical walking speed measurements in elderly people: a systematic review</b> PhD Elisabeth Rydwik <i>Karolinska Institutet</i> PhD A Bergland, PhD, Senior researcher L Forsén, PhD K Frändin</p> <p><b>S1.2-4 The Efficacy of Counseling and Progressive Resistance Home- Exercises on Adherence, Health- Related Quality of Life and Function after Discharge from a Geriatric Day-Hospital</b></p> <p>Msc Therese Brovold <i>Oslo and Akershus University College</i> Professor Dawn Skelton, Professor, PhD Astrid Bergland</p> <p><b>S1.2-5 Prolonged strength training after hip fracture: a randomized controlled trial</b> PhD H. Sylliaas <i>Oslo and Akershus University College</i> phd.student T Brovold, Professor TB Wyller, Professor A Bergland</p>	Plenum 9/11
13:45-15:15	<p>Symposium Session 1.3 - Better care for fragility fracture</p> <p>Chair: Anette Hylen Ranhoff</p> <p><b>S1.3-1 The best repair of fragility fractures - a few aspects</b> Professor, overlæge, Dr.med. Jes Bruun Lauritzen <i>Bispebjerg Hospital, University of Copenhagen</i> Polymere chemist, cand scient Sune Lund Sporning, consultant, PhD, Clinical Biochemistry Henrik Jørgensen, Research nurse Troels Riis, Head of orthopaedic department Benn Duus</p>	Room 1

	<p><b>S1.3-2 Medical care for older hip fracture patients</b> Professor MD Anette Hylen Ranhoff <i>Diakonhjemmet hospital</i> Nurse Mette Martinsen, Ludvig F. Solheim</p> <p><b>S1.3-3 No difference in anticholinergic activity in CSF and serum between hip fracture patients with and without delirium</b> MD Leiv Otto Watne <i>Oslo University Hospital</i> MD, PhD student Roanna J Hall, MD, PhD student Bjørn Erik Neerland, Professor MD, PhD Johan Ræder, MD, PhD Frede Frihagen, Professor, PhD Espen Molden, Professor MD, PhD Alasdair MJ MacLulich, Professor MD, PhD Torgeir Bruun Wyller, MD, PhD Vibeke Juliebø</p> <p><b>S1.3-4 Secondary prevention of falls and fractures - an update</b> Professor Timo Strandberg <i>Universities of Helsinki and Oulu</i></p> <p><b>S1.3-5 Putting up a holistic integrated service for older patients with fragility fractures</b> MD Maria Nuotio <i>Seinajoki Central Hospital</i></p>	
13:45-15:15	<p>Symposium Session 1.4 - Constructing age-friendly communities: Comparative perspectives</p> <p>Chair: Chris Phillipson</p> <p><b>S1.4-1 Building Age-Friendly Communities in Urban Environments: Theoretical and Policy Issues</b> Professor Chris Phillipson <i>Keele University</i></p> <p><b>S1.4-2 Purpose-built retirement communities as age-friendly environments? Evidence from England</b> Professor Thomas Scharf <i>National University of Ireland Galway</i> Jennifer Liddle, Bernadette Bartlam, Miriam Bernard, Julius Sim</p> <p><b>S1.4-3 Activity as disciplining and gifting - The ‘in common’ of communities of active aging</b> Ph.D. Aske Juul Lassen <i>University of Copenhagen</i></p> <p><b>S1.4-4 Feelings of Safety in Old Age: Evidence from the City of Brussels</b> Professor, Dr. Liesbeth De Donder <i>Vrije Universiteit Brussel</i> Nico De Witte, Sarah Dury, PhD researcher Tine Buffel, An-Sofie Smetcoren, Dominique Verté</p>	Room 2
13:45-15:15	<p>Symposium Session 1.5 - Ageism - concepts and empirical results</p> <p>Chair: Per Erik Solem</p> <p><b>S1.5-1 Ageism, a multi-dimensional concept</b> Associate Professor Lars Larsen <i>Århus University</i></p> <p><b>S1.5-2 Ageism vs. age coding: An examination of theoretical frameworks and analytical scopes</b> Associated Professor Clary Krekula <i>Karlstad University</i></p> <p><b>S1.5-3 Ageism and discourse, the case of the category of older drivers</b> Phd Satu Heikkinen <i>Linköping University</i></p> <p><b>S1.5-4 Ageism in the Nordic countries and Europe. Data from the European Social Survey</b> Ivar Lima <i>Norwegian Social Research</i></p>	Room 3/4

	<b>S1.5-5 Age discrimination in Norwegian working life.</b> Professor Per Erik Solem <i>Norwegian Social Research</i>	
13:45-15:15	Symposium Session 1.6 - The ethnic/migration lens: Expanding the gerontological imagination	Room 12
	Chair: Sandra Torres  <b>S1.6-1 Not (just) 'old': Identity, migrantship, old age and the gerontological imagination</b> PhD Candidate Laura Machat-From <i>Linköping University</i>  <b>S1.6-2 Media representations of culture-appropriate care and of ethnic 'Otherness': a study of Swedish newspaper articles on elderly care</b> Professor Sandra Torres <i>Uppsala University</i> Researcher Jonas Lindblom  <b>S1.6-3 Transnational relationships in old age</b> PhD Candidate Sari J. Heikkinen <i>University of Tampere</i> Researcher Kirsi Lumme-Sandt  <b>S1.6-4 "The best situation would be to be together with my entire family": The emotion work and kin work of older refugees in transnational families</b> PhD Candidate Marith Kristin Gullbekk Markussen <i>Akershus University College of Applied Sciences</i>  <b>S1.6-5 Understandings of social inequality in old age: how can the ethnic/ migration lens expand the gerontological imagination?</b> Professor Sandra Torres <i>Uppsala University</i>	
13:45-15:15	Symposium Session 1.7 - Social capital, neighbourhood and well-being of older adults	Room 13
	Chair: Tine Poulsen  <b>S1.7-1 Social capital and self-rated health among older people in Western Finland and Northern Sweden: A multilevel analysis</b> PhD Fredrica Nyqvist <i>National Institute for Health and Welfare (THL)</i> PhD Mikael Nygård  <b>S1.7-2 Social capital, neighborhoods and health - the significance of gender and age*</b> PhD, Senior lecturer Malin Eriksson <i>Umeå University</i> PhD, Associate professor Nawi Ng, PhD, Professor Lars Weinehall, PhD, Professor Maria Emmelin  <b>S1.7-3 How does the relationship between social capital and health change with age?</b> PhD Candidate Julie Norstrand <i>Boston College</i> PhD Candidate Keith Tsz-Kit Chan  <b>S1.7-4 Aspects of Social Capital and the Impact on Mortality 8 Years after Among Older Adults</b> Phd Student Tine Poulsen <i>Københavns Universitet</i> PhD Ulla Christensen, PhD Volkert Siersma, PhD Rikke Lund, DMSc Mikkell Vass, DMSc Kirsten Avlund	
15:15-16:15	Coffee break in the exhibition area - Poster Session I	

15:15-16:15	Geropsychology Scientific Meeting	Room 16
	All psychologists attending the congress are welcome	
16:15-17:30	Oral Session 2.1 - Geriatric patients II	Plenum 8/10
	Chair: Ólafur Samúelsson	
16:15-16:30	<b>O2.1-1 Clinical data in a new perspective; Cross sectional identification of the older acute medical patient in risk of readmission and death?</b> Dr. Henrik H Klausen <i>Clinical Research Centre, Copenhagen University Hospital, Hvidovre Hospital</i> ResearchPhysiotherapist Mette Merete Pedersen, M.D Ph.D Ove Andersen, Cand Scient Ph.D Janne Petersen	
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16:45-17:00	<b>O2.1-3 Via Senectutis</b> Dr. Berit Larsson <i>Sahlgrenska University Hospital</i> Senior Consultant Eva Sixt	
17:00-17:15	<b>O2.1-4 On the Threshold - Older Persons' Concerns Related to Hospital Discharge</b> Doktorand Felicia Gabrielsson-Järhult <i>School of Health Sciences</i> Docent Per Nilsen	
17:15-17:30	<b>O2.1-5 The Cumulated Ambulation Score for the evaluation of basic mobility in geriatric wards</b> Senior Researcher Morten Tange Kristensen <i>Department of Physiotherapy and Orthopaedic Surgery, Hvidovre University Hospital.</i> PhD-Student Thomas Linding Jakobsen, Physiotherapist Jesper Westphal Nielsen, Geriatric Consultant Lillian Mørch Jørgensen, Section Leader Robert-Jan Nienhuis, Physiotherapist, Development Line Rokkedal Jønsson	
16:15-17:30	Oral Session 2.2 - Social and health care	Plenum 9/11
	Chair: Sigurveig Sigurðardóttir	
16:15-16:30	<b>O2.2-1 Dilemmas in home nursing care and for elderly based on analysis of health care reform in Denmark</b> Ulla Skjødtt <i>University College Sealand</i>	
16:30-16:45	<b>O2.2-2 Support to elderly care nurses – developing a knowledge centre</b> Dr. Lena Olai <i>Dalarna University</i>	
16:45-17:00	<b>O2.2-3 Early Nonspecific Signs and Symptoms of Infection in Nursing Home residents and the Clinical Decision Making Process: Perceptions of Nursing Assistants</b> RNT, PhD Märtha Sund-Levander <i>Hoegland Hospital</i> MD, PhD Anna Milberg, RNT, PhD Pia Tongström	

17:00-17:15	<b>O2.2-4 The view of illness of older persons with diabetes mellitus</b> Dr. Tassana Choowattanapakorn <i>Chulalongkorn University</i> Ms Saipin Suriyawong	
17:15-17:30	<b>O2.2-5 Better cooperation- better care deliveryfor the frailest elderly</b> Marie Bergström <i>The city of Stockholm, the district of Hägersten-Liljeholmen</i>	
16:15-17:30	Oral Session 2.3 - Images of ageing	Room 1
	Chair: Myra Lewinter	
16:15-16:30	<b>O2.3-1 Constructions of age in variety of cultural contexts and the consequences for leading an ageing workforce</b> Professor Cordula Braedel-Kühner <i>Karlsruhochschule International University</i> Constructions of age in variet Marjo Wallin	
16:30-16:45	<b>O2.3-2 "As time goes by"?</b> Dr. Myra Lewinter <i>Department of Sociology</i>	
16:45-17:00	<b>O2.3-3 Older people on the agenda</b> Dr. Kirsi Lumme-Sandt <i>University of Tampere</i>	
17:00-17:15	<b>O2.3-4 Conceptions and tendencies of age discrimination among elderly people in Finland and Sweden</b> Fredrik Snellman <i>Umeå University</i> PhD Mikael Nygård, PhD Susanne Jungerstam	
17:15-17:30	<b>O2.3-5 The politicization of age discrimination</b> PhD, university lecturer Mikael Nygård <i>Åbo Akademi University</i> PhD, researcher Fredrik Snellman	
16:15-17:30	Oral Session 2.4 - Nutrition and vitamin status	Room 2
	Chair: Anne Marie Beck	
16:15-16:30	<b>O2.4-1 Nutritional risk (NRS2002) and low BMI was associated with increased mortality for patients in a university hospital. A one year follow-up.</b> Randi J Tangvik <i>Haukeland University Hospital</i> Professor Anne Berit Guttormsen, Professor Grethe S Tell, Biostatistician/PHD Roy Miodini Nilsen, Statistician Andreas Henriksen, Professor Anette Hylen Ranhoff	
16:30-16:45	<b>O2.4-2 Trends in nutritional status and caring practices among service house and nursing home residents in Helsinki 2003 - 2011</b> Dr. Helena Soini <i>Services for Elderly city of Helsinki</i> PhD Seija Muurinen, DSc Merja Suominen, PhD Niina Savikko, Med. student Marjo Halttunen, MD, PhD Kaisu Pitkälä	
16:45-17:00	<b>O2.4-3 Use of vitamins and trace elements among older people in helsinki – population based survey in 1999 and 2009</b> RN, PhD Niina Savikko <i>University of Helsinki</i> MD, PhD Kaisu Pitkälä, MD, PhD Reijo Tilvis, MD, PhD Timo Strandberg	
17:00-17:15	<b>O2.4-4 Dental professionals' identification of elderly patients at risk for cardiovascular diseases and high plasma glucose</b> Dr. Göran Friman <i>Department of Dental Medicine, Karolinska Institutet</i> Associate Professor Inger Wårdh, Professor Gunnar Nilsson, PhD Margareta Hultin	

17:15-17:30	<b>O2.4-5 Vitamin B6 deficiency and diseases in elderly – a study in nursing homes</b> MD Ida Kindsbekken Kjeldby <i>Norwegian University of Science and Technology</i> MPharm Gunvor S Fosnes, MSc Solveig Ligaarden, Prof Per G Farup	
16:15-17:30	Oral Session 2.5 - Inequality and health	Room 3/4
	Chair: Charlotte Nilsson	
16:15-16:30	<b>O2.5-1 Occupational status and education are associated with health in nonagenarians</b> Linda Enroth <i>Gerontology Research Center and School of Health Sciences, University of Tampere</i> Professor Marja Jylhä, Professor Antti Hervonen	
16:30-16:45	<b>O2.5-2 Social relations and mobility-related fatigue</b> PhD, assistant prof Charlotte Nilsson <i>Section of Social Medicine, Department of Public Health, University of Copenhagen</i> MD, PhD, associate prof. Rikke Lund, Professor, DMSc Kirsten Avlund	
16:45-17:00	<b>O2.5-3 Alcohol consumption among men and women.</b> Dr. Britt Slagsvold <i>NOVA- Norwegian Social Research</i> Researcher Ivar Lima	
17:00-17:15	<b>O2.5-4 Paying the price? The impact of smoking and obesity during mid-life on health inequalities in later life.</b> Dr. Stefan Fors <i>Aging Research Center</i> Dr Neda Agahi, Dr Benjamin Shaw	
17:15-17:30	<b>O2.5-5 Perceived work-related stress in midlife predicts disability in old age</b> Dr. Jenni Kulmala <i>Gerontology Research Center, University of Jyväskylä</i> Dr. Mikaela von Bonsdorff, Dr. Sari Stenholm, Dr. Monika von Bonsdorff, Prof. Clas-Håkan Nygård, Dr. Matti Klockars, Dr. Jorma Seitsamo, Prof. Juhani Ilmarinen, Prof. Taina Rantanen	
16:15-17:30	Oral Session 2.6 - Psycho-social aspect	Room 12
	Chair: Knud Ramian	
16:15-16:30	<b>O2.6-1 Inner strength of older people in Finland and Sweden</b> Kerstin Viglund <i>Umeå University</i> RN, PhD Elisabeth Jonsén, RN, Professor Berit Lundman, RN, Professor Gunilla Strandberg, RNT, PhD Björn Nygren	
16:30-16:45	<b>O2.6-2 Older people's accounts of their mental well-being and resources</b> Suvi Fried <i>The Age Institute</i> PhD, Line Manager Sirkkaliisa Heimonen, MSSc, Coordinator Pirjo Jokinen, Logotherapist, Planner Minna Laine	
16:45-17:00	<b>O2.6-3 Valuation of Life in old age and the role of intrapersonal factors</b> Lia Araújo <i>UNIFAI</i> Oscar Ribeiro, Constança Paul	
17:00-17:15	<b>O2.6-4 Life Course Transitions and Changes in Alcohol Consumption in the Second Half of Life</b> Ivar Lima <i>Norwegian Social Research</i> Senior researcher Britt Slagsvold	



16:15-17:30	Oral Session 2.7 - Hip fracture I	Room 13
	Chair: Timo Strandberg	
16:15-16:30	<b>O2.7-1 Will comprehensive geriatric work-up during the index stay improve mobility at 4 months in hip fracture patients?</b> Professor Olav Sletvold <i>Norwegian University of Science and Technology</i> Anders Prestmo, Pernille Thingstad, Kristin Taraldsen, Lars Gunnar Johnsen, Jorunn L Helbostad, Ingvild Saltvedt	
16:30-16:45	<b>O2.7-2 Rehabilitation to Elderly Patients with new Hip</b> Dr. Britta Hørdam <i>University College</i>	
16:45-17:00	<b>O2.7-3 Progressive strength exercise is feasible and seems very effective when commenced shortly after hip fracture surgery</b> Physiotherapist Jan Overgaard <i>Team Rehabilitation, Lolland Community</i> Ph.d., Senior Researcher Morten Tange Kristensen	
17:00-17:15	<b>O2.7-4 Changes in quality of life among older patients one year after hip fracture</b> Associate professor Else Vengnes Grue <i>Diakonhjemmet University College, Department of Nursing and Health</i>	
18:00-20:00	Welcome reception at the City Hall of Copenhagen	

Tuesday June 12, 2012

08:00-18:00	Registration - Hospitality Desk Open	
08:30-10:00	Oral Session 3.1 - Migration	Room 1
	Chair: Anne Leonora Blaakilde	
08:30-08:45	<b>O3.1-1 Aging and Health Practices Between Two Cultures</b> Visiting scholar Suzan Yazici <i>Akdeniz University</i> Research assistant Signe Gronwald Petersen, Postdoc Anne Leonora Blaakilde	
08:45-09:00	<b>O3.1-2 Living In-between and Doing Health</b> PhD Candidate Beate Lie Sverre <i>Buskerud University College</i> PhD, RN Grethe Eilertsen, PhD Kari Nyheim Solbrække	
09:00-09:15	<b>O3.1-3 Aging and Health Practices Between Two Cultures</b> Anne Leonora Blaakilde <i>Center for Healthy Ageing, Univeristy of Copenhagen</i> Visiting Scholar, Dr. Suzan Yazici, Research Assistant, MA Signe Gronwald Petersen, Postdoc, Ph.d. Anne Leonora Blaakilde	
09:15-09:30	<b>O3.1-4 Ageing in South Australia: Continuity and change in the caring practices of ageing Italian migrants in South Australia.</b>  Dr. Daniela Cosmini-Rose <i>Dept. of Language Studies, Flinders University</i>	
09:45-10:00	<b>O3.1-6 The invisibility leaders:</b> Dr. Aviva Kaplan <i>Netanya Academic College</i> Dr. Rachel Sharaby	

08:30-10:00	Symposium Session 2.1 - Policy, research and practice in the care of elderly people with complex health problems and severe needs. Experiences in the Nordic countries	Plenum 8/10
	Chair: Lennarth Johansson and Mats Thorslund	
	<b>S2.1-1 Providing eldercare to people with complex health problems and severe needs -highlights from an ongoing national evaluation study in Sweden</b> Senior Researcher Lennarth Johansson <i>Aging Research Center</i> PhD Mats Thorslund	
	<b>S2.1-2 The care of frail older people in Iceland</b> Associate professor Sigurveig H. Sigurðardóttir <i>University of Iceland</i>	
	<b>S2.1-3 Policy, practice and research in Denmark on care for older people with complex problems</b> Professor Eigil Boll Hansen <i>AKF, Danish Institute of Governmental Research</i>	
	<b>S2.1-4 Policy, research and practice in the services for frail elderly people in Finland</b> MD, PhD Matti Mäkelä <i>National Institute for Health and Welfare</i> MD, PhD Harriet Finne-Soveri, PhD. Anja Noro	
	<b>S2.1-5 The coordination reform” in norway - a step forward or backward for the elderly patient?</b> Professor Tor Inge Romøren <i>Gjøvik University College</i>	
08:30-10:00	Symposium Session 2.2 - Provision of assistive technology to support cognitive functioning in persons with dementia, and to reduce the care burden for family carers	Plenem 9/11
	Chair: Torhild Holthe	
	<b>S2.2-1 The importance of Nordic collaboration in the area of dementia and welfare technology</b> Occupational Therapist and Project Coordinator Ingela Månsson <i>The Swedish Institute of Assistive Technology</i>	
	<b>S2.2-2 Successful use and provision of Assistive Technology (AT) for persons with dementia: Results from a Nordic research project</b> Occupational Therapist MSc Astrid Andersen <i>The Norwegian Centre for Research, Education and Service Development</i>	
	<b>S2.2-3 A dilemma in using GPS solutions for localisation of people with dementia</b> BScE.E. Henrik Svensson <i>Danish Centre for Assistive Technology</i>	
	<b>S2.2-4 Assistive technology (AT) to support younger people with dementia and their family carers in everyday living: Dilemmas and challenges</b> Occupational Therapist MSc Torhild Holthe <i>The Norwegian Centre for Research, Education and Service Development</i>	
	<b>S2.2-5 People living with dementia and use of technology: ethical aspects</b> PhD Päivi Topo <i>University of Jyväskylä</i>	
	<b>S2.2-6 Adaptation and assistive technology are essential elements in rehabilitation of persons with dementia. Presentation of themes from a new book about (2012) rehabilitation and dementia</b> Occupational Therapist MSc Lilly Jensen <i>Danish Centre for Assistive Technology</i>	

08:30-10:00	Symposium Session 2.3 - Ageing in small rural communities: Dilemmas for western countries	Room 2
	<p>Chair: Jeni Warburton  <b>S2.3-1 Marginalized or Aging-Well? Discourses on rural aging in Canada</b>  Professor Norah Keating  <i>Department of Human Ecology, University of Alberta</i></p> <p><b>S2.3-2 Single older men in rural Sweden: Norms of masculinity</b>  Dr Magnus Nilsson  <i>Karlstad University</i></p> <p><b>S2.3-3 Multiple disadvantage and social cohesion: a challenge for rural elders?</b>  Professor Vanessa Burholt  <i>Centre for Innovative Ageing, Swansea University</i></p> <p><b>S2.3-4 Rapidly growing grey: local governance responses to social participation for ageing rural populations</b>  Dr Rachel Winterton  <i>John Richards Initiative, La Trobe University</i></p> <p><b>S2.3-5 Construction of ageing in the Faeroe Island</b>  Phd Student Ása Roin  <i>NISAL, Linköping university/University of the Faeroe Island</i></p>	
08:30-10:00	Symposium 2.4 - Life course in a cultural and psychological perspective	Room 3/4
	<p>Chair: Christine Swane</p> <p><b>S2.4-1 Everyday interpretations of age and the course of life - reading age-diaries of middle-aged and aging persons</b>  PhD Marja Saarenheimo  <i>The Central union for the welfare of the aged</i></p> <p><b>S2.4-2 Nursing home residents' relationship with nature - past and present</b>  MPH, PhD Eva Algreen-Petersen  <i>Municipality of Copenhagen</i></p> <p><b>S2.4-3 Life Histories in Theory and Practice</b>  Dr. philos Kirsten Thorsen  <i>Buskerud University College</i></p> <p><b>S2.4-4 36.500+ days - everyday life of centenarians</b>  PhD Christine E. Swane  <i>EGV Foundation</i></p>	
08:30-10:00	Symposium 2.5 - Measuring outcomes of long-term care: Experiences from Europe	Room 12
	<p>Chair: Tine Rostgaard</p> <p><b>S2.5-1 Measuring outcomes and improving quality in English care homes</b>  Professor Ann Netten  <i>University of Kent at Canterbury</i>  Research Officer Ann-Marie Towers, Research Officer Nick Smith, Dr Julie Beadle-Brown</p> <p><b>S2.5-2 Measuring outcomes of home care - Experiences from the Austrian Home Visit and Counselling Programme</b>  Dr Birgit Trukeschitz  <i>Vienna University of Economics and Business</i>  Professor Ulrike Schneider</p> <p><b>S2.5-3 Measuring outcomes in home care: Experiences from Finland</b>  MSc Marjo Pulliainen  <i>Diaconia University of Applied Sciences</i>  Dr.Pol.Sc. Aija Kettunen, Research Professor Ismo Linnosmaa</p> <p><b>S2.5-4 Measuring outcomes of home care - Experiences from Denmark</b>  Professor Tine Rostgaard  <i>Aalborg Universitet</i></p>	

08:30-10:00	Symposium Session 2.6 - Sarcopenia	Room 13
	<p>Chair: Anette Hylen Ranhoff</p> <p><b>S2.6-1 Frailty and Sarcopenia</b>  Professor MD Timo Strandberg  <i>Universities of Helsinki and Oulu</i></p> <p><b>S2.6-2 Sarcopenia in hip fracture patients</b>  MD Ole Martin Steihaug  <i>Haralds plass hospital</i>  Professor MD Anette Hylen Ranhoff</p> <p><b>S2.6-3 The role of sex hormones in the development and treatment of sarcopenia</b>  Professor Sarianna Sipilä  <i>University of Jyväskylä</i>  Researcher Eija Pöllänen, Adjunct Professor Vuokko Kovanen</p> <p><b>S2.6-4 Renal function after a 12-week resistance exercise program with protein supplementation in community dwelling older adults.</b>  MD PhD Alfons Ramel  <i>University of Iceland</i>  A Arnarson, OG Geirsdottir, PV Jonsson, I Thorsdottir</p> <p><b>S2.6-5 How far is it possible to counteract sarcopenia?</b>  MD Marius Myrstad  <i>Diakonhjemmet sykehus</i>  Professor MD Anette Hylen Ranhoff</p>	
10:00-10:30	Coffee break in the exhibition area	
10:30-11:30	Oral Session 4.1 - Medication	Plenum 8/10
	<p>Chair: Carsten Hendriksen</p> <p><b>10:30-10:45 O4.1-1 Does the increasing use of statins in older people reflect an indication creep?</b>  Post doc Helle Wallach Kildemoes  <i>University of Copenhagen</i>  Lektor Carsten Hendriksen, Post doc Mikkel Vass, Professor Morten Andersen</p> <p><b>10:45-11:00 O4.1-2 Dilemmas in discontinuing medication among elderly people</b>  Michael Nixon  <i>Copenhagen University</i></p> <p><b>11:00-11:15 O4.1-3 Life-Threatening Drug Use, Misuse And Abuse Among Male And Female Older Adults In The United States: 2005-2010</b>  Ms Victoria Albright  <i>RTI International</i>  Dr Jerry Hedge, Dr Al Woodward, Ms Victoria Scott</p> <p><b>11:15-11:30 O4.1-4 No cognitive impact of reduced anticholinergic drug score in a frail elderly population</b>  Hege Kersten  <i>Oslo University Hospital, Department of Geriatric medicine</i>  Prof Torgeir Bruun Wyller, Prof Espen Molden, Prof Knut Engedal</p>	

10:30-11:30	Oral Session 4.2 - Professional care workers	Plenum 9/11
	Chair: Hanne Marlene Dahl	
10:30-10:50	<b>O4.2-1 Nurses' self-assessed competence in gerontological nursing</b> Dr. Pirjo Tiikkainen <i>JAMK University of Applied Sciences</i> Dr. Sari Teeri, Ms. Sirkka-Liisa Karttunen	
10:50-11:10	<b>O4.2-2 Physical pain in formal caregivers of dependent older people</b> Dr. Margarida Pinto <i>Escola Superior de Saúde da Universidade de Aveiro</i> Prof. Dr. Daniela Figueiredo, Prof. Dr. Alda Marques, Dr. Vânia Rocha, Prof. Dr. Liliana Sousa	
11:10-11:30	<b>O4.2-3 The Strains in Dementia Care Scale</b> Dr. Michael Bird <i>DSDC, Bangor University</i> Professor Anna-Karin Edberg, Dr Katrina Anderson, Ms. Annali Orrung-Wallin	
10:30-11:30	Oral Session 4.3 - Death and dying	Room 1
	Chair: Peter Öberg	
10:30-10:50	<b>O4.3-1 Slow codes - do we have a problem</b> Trygve Johannes Sævareid <i>Diakonhjemmet hospital</i> Prof. Susan Balandin	
10:50-11:10	<b>O4.3-2 Pain management in dying hospitalized patients: A comparison of the young old and the oldest old patients</b> RN, PhD Student Simen A. Steindal <i>Diakonhjemmet University College, Institute of Nursing and Health</i> RN, PhD, Associate Professor Inger Schou Bredal, MD, PhD, Professor Anette Hylen Ranhoff, RN, PhD, Professor Liv Wergeland Sørbye, RN, PhD, Professor Anners Lerdal	
11:10-11:30	<b>O4.3-3 Existential issues in palliative care. Experiences of assistant nurses</b> Dr. Elizabeth Åhsberg <i>Nathional Board of Health and Welfare</i> PhD, Associate professor Maria Carlsson	
10:30-11:30	Oral Session 4.4 - Informal care giving I	Room 2
	Chair: Gerdt Sundström	
10:30-10:50	<b>O4.4-1 Up against a challenge of providing pre-discharge resources for family carers of older patients: The process of developing a user-friendly eLIP website</b> Lisa Low <i>The Chinese University of Hong Kong</i> Man-him Wong, Chi-fung Ling, Kim-pong Fan	
10:50-11:10	<b>O4.4-2 The strains and gains of caregiving: The effect of providing personal care to a parent on a range of indicators of psychological well-being</b> Thomas Hansen <i>NOVA- Norwegian Social Research</i> Britt Slagsvold, Reidun Ingebretsen	
11:10-11:30	<b>O4.4-3 Does Policy reflect Reality: Australian attitudes to the provision of formal and informal care</b> Dr. Suzanne Hodgkin <i>La Trobe University</i>	

10:30-11:30	Oral Session 4.5 - Depression	Room 3/4
	Chair: Hanne Pedersen	
10:30-10:50	<b>O4.5-1 Depressive symptoms among older people: A 15-year follow-up</b> Sini Eloranta <i>The Age Institute, HelsinkiFinland</i> PhD, Adjunct Professor Seija Arve, PhD Sini Eloranta, PhD Suvi Rovio, MSc, Statistician Hannu Isoaho, M.D., Professor Matti Viitanen, M.D., Professor Aapo Lehtonen	
10:50-11:10	<b>O4.5-2 A randomized controlled trial of a senior centre group programme for increasing social support and preventing depression in elderly people living at home in Norway</b> Associate Professor Hege Bøen <i>Diakonhjemmet University College, Department of Nursing and Health</i> Hege Bøen, Professor emeritus Odd Steffen Dalgard, Associate Professor Rune Johansen, Professor Erik Nord	
11:10-11:30	<b>O4.5-3 The association of mid-life physical activity with late-life depressive symptoms</b> Dr. Milan Gudjonsson <i>Landspítali University Hospital, Gerontological Research Institute</i> PhD Jane Saczynski, MD Thordur Sigmundsson, MD Bjorn Eirnarsson, MD Jon Snaedal, MD Sigurbjorn Bjornsson, PhD Thor Aspelund, MPH Melissa Garcia, MD Vilmundur Gudnason, MD Tamara B. Harris, MD Lenore J. Launer, MD Palmi V. Jonsson	
10:30-11:30	Oral Session 4.6 - Physical exercise I	Room 12
	Chair: Minna Mänty	
10:30-10:50	<b>O4.6-1 Nordic Walking for Geriatric Rehabilitation: A Randomized Pilot Trial</b> MSc Sabrina Figueiredo <i>McGill University</i> PhD Lois Finch, BSc (PT) Jiali Ming, PhD Sara Ahmed, MD Alen Huang, PhD Nancy Mayo	
10:50-11:10	<b>O4.6-2 Gait speed has a closer association with physical function when adding a cognitive task</b> Physiotherapist, PhD Student Bård Bogen <i>University of Bergen</i> Geriatrician, dr.med Anette Hylen Ranhoff, Physiotherapist, PhD Rolf Moe-Nilssen	
11:10-11:30	<b>O4.6-3 The association between older adults' personal goals and physical activity</b> Milla Saajanaho <i>Gerontology Research Center, Department of Health Sciences, University of Jyväskylä</i> PhD Anne Viljanen, PhD Sanna Read, PhD Merja Rantakokko, MSc Li-Tang Tsai, MD, PhD Jaakko Kaprio, MD, PhD Marja Jylhä, PhD Taina Rantanen	
10:30-11:30	Oral Session 4.7 - Rehabilitation	Room 13
	Chair: Jette Thuesen	
10:30-10:45	<b>O4.7-1 Identity Work in Geriatric Rehabilitation</b> Jette Thuesen <i>Roskilde Universitet, Center for Sundhedsfremmeforskning</i>	
10:45-11:00	<b>O4.7-2 Training the frail body: An exercise of hope</b> Louise Scheel Thomasen <i>Dep. for Ethnology &amp; Center for Healthy Aging, University of Copenhagen</i>	
11:00-11:15	<b>O4.7-3 Older Women's descriptions of how they activate themselves in their everyday living and what will promote their activity abilities.</b> Phd-candidate Sara Cederbom <i>Mälardalens university</i> Lektor Petra von Heideken Wägert, Professor Anne Söderlund, Associate Professor Maja Söderbäck	

11:15-11:30	<b>04.7-4 Examples of everyday rehabilitation – from a theoretical perspective</b> Annsofie Mahrs-Träff <i>Linköpings University, National Institute for the Study of Ageing and Later Life</i>	
11:45-12:45	Oral Session 5.1 - Dementia care I	Plenum 8/10
	Chair: Elizabeth Rosted	
11:45-12:00	<b>05.1-1 Cognitive development in adult children of Alzheimer’s patients. A neuropsychological reassessment: A seven-year follow up</b>  Magnus Johansson <i>Landspítali University Hospital</i> Neuropsychologist Smári Pálsson, MD Jón Snædal, MD Pálmi Jónsson, MD Sigurbjörn Björnsson, Director at deCODE genetics Þorlákur Jónsson	
12:00-12:15	<b>05.1-2 People with dementia and the National Gallery of Australia</b> Dr. Michael Bird <i>DSDC, Bangor University</i> Annaliese Blair, Dr. Sarah MacPherson, Dr. Katrina Anderson	
12:15-12:30	<b>05.1-3 The importance of sensory garden and therapeutic horticulture in dementia care: A scoping review</b> Dr. Marianne Thorsen Gonzalez <i>University of Oslo, Institute of Health and Society</i> Professor Marit Kirkevold, CNS, MNS, PhD Marianne Thorsen Gonzalez	
12:30-12:45	<b>05.1-4 Physical activity for people with dementia</b> Anders Møller Jensen <i>VIOLA / VIA University College</i>	
11:45-12:45	Oral Session 5.2 - Quality of home care services	Plenum 9/11
	Chair: Tine Rostgaard	
11:45-12:00	<b>05.2-1 The exhausting dilemmas faced by home care service providers when enhancing participation among older adults receiving home care.</b> Dr. Kjersti Vik <i>Sør-Trøndelag Univesity College</i> Professor Anre Henning Eide	
12:00-12:15	<b>05.2-2 Mapping systematic reviews in elderly care</b> Dr. Gunilla Fahlström <i>Swedish National Board of Health and Welfare</i> Programme officer Emelie Engvall, Programme officer Marie Nyström, Associate professor Gunnar Bergström, Dr Jenny Rehnman	
12:15-12:30	<b>05.2-3 Taking home care services into everyday life</b> PhD Student, Social Educator Aud Elisabeth Witso <i>Sør Trøndelag University College</i> Dr., Occupational Therapist Kjersti Vik	
12:30-12:45	<b>05.2-4 Care satisfaction among older people receiving public care and service, at home or in special accommodation</b> PhD, Senior Lecturer Staffan Karlsson <i>Lund University</i> Professor Anna-Karin Edberg, Associate Professor Ulf Jakobsson, Professor Ingallil Rahm Hallberg	

11:45-12:45	Oral Session 5.3 - Lifelong learning	Room 1
	Chair: Britt Slagsvold	
11:45-12:05	<b>05.3-1 The Development of an ICT-based Transgenerational Learning-Environment in Higher Health Care Education</b> Kriemhild Leitner <i>Carinthia University of Applied Sciences</i>	
12:05-12:25	<b>05.3-2 Four levels of complexity in reasoning among adults</b> Dr. Sofia Kjellström <i>Institute of Gerontology, School of Health Science, Jönköping University</i> PhD Sara Nora Ross	
12:25-12:45	<b>05.3-3 Intergenerational Interaction and Learning</b> Professor Antonio Fonseca <i>Universidade Católica Portuguesa</i>	
11:45-12:45	05.4 - Informal caregiving II	Room 2
	Chair: Anneli Sarvimäki	
11:45-12:00	<b>05.4-1 Co-residential parental care-giving</b> Dr. Anu Leinonen <i>Jyväskylän University</i>	
12:00-12:15	<b>05.4-2 Caregiving situation and quality of life of older family carers: A comparative study on family care in Finland and Estonia</b> Lic.Soc.Sc Åsa Rosengren <i>Arcada, University of Applied Sciences</i> M.Soc.Sc, PhD student Krista Tammsaar	
12:15-12:30	<b>05.4-3 The role of social networks on elderly caregivers’ wellbeing: a European cross-country approach</b> Daniela Craveiro <i>CICS, Centro de Investigação em Ciências Sociais</i> Alice Delerue Matos, Roberto Martinez-Pecino, Maria Schouten, Sara Silva, Rita Borges Neves	
12:30-12:45	<b>05.4-4 Living with Chronic Obstructive Pulmonary Disease in later life: dilemmas of family carers</b> Dr. Raquel Gabriel <i>Escola Superior de Saúde da Universidade de Aveiro</i> Dr. Daniela Figueiredo, Dr. Alda Marques, Dr. Cristina Jácome	
11:45-12:45	Oral Session 5.5 - Preventive home visits	Room 3/4
	Chair: Kirsten Avlund	
11:45-12:00	<b>05.5-1 Health-Promoting Interventions for Persons Aged 80 and Older are Successful in the Short Term</b> Susanne Gustafsson <i>Sahlgrenska akademien, University of Gothenburg</i> PhD, MD Katarina Wilhelmson, PhD Kajsa Eklund, A/prof, PhD Gunilla Hedström, PhD Lena Zidén, PhD Greta Häggblom Kronlöf, MS Betina Højgaard, PhD Frode Slinde, PhD, Prof. Elisabeth Rothenberg, MD, PhD, Prof. Sten Landahl, PhD Synneve Dahlin-Ivanoff	
12:00-12:15	<b>05.5-2 Are acceptance rates of a national preventive home visit programme for older people socially imbalanced?</b> Dr. Yukari Yamada <i>University of Copenhagen</i> Anette Ekmann, Charlotte Nilsson, Mikkel Vass, Kirsten Avlund	
12:15-12:30	<b>05.5-3 Preventive home visits for non-westerne elderly citizens in Denmark</b> PhD and Occupational Therapist Mette Andresen <i>University College Zealand</i> BA in Occupational Therapy Lisa Krogh Bonde, BA in Occupational Therapy Ditte Binsky	

12:30-12:45	<b>O5.5-4 Older peoples' experiences with preventive home visits in a Norwegian municipality: How do preventive home visits affect older peoples' health and possibility for a good life in their own home?</b> PhD student, MNSc, RN Mette Toien <i>Buskerud University College</i> Master student, OT Morten Heggelund, MPH, MScPH, RN Bjørg Landmark, PhD, RN Lisbeth Fagerström	
11:45-12:45	Oral Session 5.6 - Physical exercise II	Room 12
	Chair: Nina Beyer	
11:45-12:00	<b>O5.6-1 Effects of Nintendo Wii training on mechanical leg muscle function and postural balance in older adults: a randomized placebo-controlled trial</b> Martin Grønbech Jørgensen <i>Department of Geriatrics, Aalborg Hospital</i> Uffe Læsøe, Carsten Hendriksen, Ole Nielsen, Per Aagaard	
12:00-12:15	<b>O5.6-2 What factors influence physical activity of older women in retirement communities?</b> Gudfinna Björnsdóttir <i>Hrafnista</i>	
12:15-12:30	<b>O5.6-3 Effect of a 12-week resistance exercise program on body composition, muscle strength, physical function and glucose metabolism in healthy, prediabetic and diabetic elderly Icelanders.</b> Dr. Alfons Ramel <i>Unit for Nutrition Research</i> Dr Olof Geirsdóttir, MSc Atli Arnarson, Dr Kristin Brim, Dr Alfons Ramel, Dr Palmi Jonsson, Prof Inga Thorsdóttir	
12:30-12:45	<b>O5.6-4 Exercise and physical fitness post stroke</b> Dr. Associate professor Birgitta Langhammer <i>Oslo University College</i> Professor Birgitta Lindmark	
11:45-12:45	Oral Session 5.7 - Hip fracture II	Room 13
	Chair: Karen Andersen-Ranberg	
11:45-12:00	<b>O5.7-1 Balance confidence and functional balance are associated with physical disability after hip fracture</b> MSc Johanna Edgren <i>Gerontology Research Center, Department of Health Sciences, University of Jyväskylä</i> MSc Anu Salpakoski, PhD Ari Heinonen, PhD Taina Rantanen, MD, PhD Mauri Kallinen, PhD Erja Portegijs, PhD Mikaela von Bonsdorf, PhD Sanna Sihvonen, PhD Sarianna Sipilä	
12:00-12:15	<b>O5.7-2 Increased hip fracture risk in older persons using antidepressants</b> Dr. Marit Stordal Bakken <i>University of Bergen</i> MSc PhD Anders Engeland, MD PhD Lars B. Engesæter, MD PhD Anette Hylen Ranhoff, MD PhD Steinar Hunskaar, MD PhD Sabine Ruths	
12:15-12:30	<b>O5.7-3 Activity-specific balance confidence as a proxy for mobility and balance in older people with a fall-related hip fracture</b> Dr. Erja Portegijs <i>Gerontology Research Center and Department of Health Sciences, University of Jyväskylä</i> MSc Johanna Edgren, MSc Anu Salpakoski, MD PhD Mauri Kallinen, PhD Taina Rantanen, MD PhD Markku Alen, MD PhD Ilkka Kiviranta, PhD Sanna Sihvonen, PhD Sarianna Sipilä	

12:45-14:00	Grünenthal symposium	Room 8/10
	<b>MOR-NRI* - MORE THAN MEETS THE EYE</b> <b>Tapentadol for the treatment of severe chronic pain.</b> <b>Challenges in assessing and managing chronic pain in the elderly, Professor, Dr. med. Ralf Baron</b> <b>Pain mechanism and the role of age, Professor Lars Arendt-Nielsen</b>	
12:45-14:00	Edwards symposium	Room 9/11
	<b>The Forgotten Epidemic: Severe Aortic Stenosis TAVI a Novel Treatment Option, Introduction: Mika Laine</b> <b>Aortic Stenosis Prevalence in the Elderly Population, Dr Mika Laine</b> <b>What is Transcatheter Aortic Valve Implantation (TAVI), Dr Gry Dahle</b> <b>TAVI a Danish invention: From Son to Father, Dr Henning Andersen</b>	
12:30-13:45	Lunch in the exhibition area	
14:00-15:00	Oral Session 6.1 - Dementia care II	Plenum 8/10
	Chair: Marianne Schroll	
14:00-14:15	<b>O6.1-1 The Marte Meo method in dementia care</b> Marianne Munch <i>NKS Olaviken alderspsykiatrisk sykehus</i> Linn-Heidi Lunde	
14:15-14:30	<b>O6.1-2 Suffering and pain in end-stage dementia</b> Dr. Bechor Zvi Aminoff <i>Deriatric Division, Sheba Medical Center, Tel Hashomer</i>	
14:30-14:45	<b>O6.1-3 Creating relationships a way to understand personcentred dementia care</b> Dr. Iréne Ericsson <i>Hälsöhgskolan Jönköping Institutet för gerontologi</i> Ass prof Sofia Kjellström, RN, PhD Ingrid Hellström	
14:45-15:00	<b>O6.1-4 Enhancing dementia research by harmonizing the dementia work-up in the Nordic countries.</b> Dr. Anne Rita Øksengård <i>NVS- Department, Section of Clinical GeriatricsKarolinska Institutet, Karolinska University Hospital</i>	
14:00-15:00	Oral Session 6.2 - Long term care	Plenum 9/11
	Chair: Morten Balle Hansen	
14:00-14:15	<b>O6.2-1 Alcohol related cognitive and affective impairments in a sample of long term care residents in Luxembourg</b> Dr. Jean-Paul Steinmetz <i>ZithaSenior - Department of Research &amp; Development</i> Dr Jean-Paul Steinmetz, Dr Carine Federspiel	
14:15-14:30	<b>O6.2-2 Insidious impact of Canadian elder's (unspoken) perceptions of ageism in long term care facilities: Is home really a sweet home when coping strategies reinforce ageist attitudes?</b> Professor Martine Lagacé <i>University of Ottawa</i> Miss Annick Tanguay, Miss Marie-Lyse Lavallée, Miss Sarah Robichaud	
14:30-14:45	<b>O6.2-3 Use and costs of long-term care among older people in the last two years of life 1996-2008</b> Leena Forma <i>University of Tampere</i> Marja Jylhä, Jani Raitanen, Pekka Rissanen	

14:45-15:00	<b>O6.2-4 Estimating the demand for eldercare services – an economic experiment</b> Dr. Jacob Ladenburg <i>Danish Institute of Governmental Research (AKF)</i> Special Consultant Camilla Dalsgaard, Associate Professor Eigil Boll Hansen, Director of Research Karsten Vrangbæk	
14:00-15:00	<b>Oral Session 6.3 - Home, housing &amp; environment</b>	Room 1
	Chair: Eigil Boll Hansen	
14:00-14:20	<b>O6.3-1 Retirement Villages: Residents and Non-Residents Perceptions of Environmental Control</b> James Finn <i>University of Sydney</i>	
14:20-14:40	<b>O6.3-2 Housing and moving decisions of older people in Finland</b> Dr. Outi Jolanki <i>University of Jyväskylä</i> Ms. Suvi Fried, Ms. Sari Heikkinen, Dr. Kirsi Lumme-Sandt	
14:40-15:00	<b>O6.3-3 The association between self-reported environmental barriers and habitual walking activity among older people</b> Li-Tang Tsai <i>University of Jyväskylä</i> PhD Merja Rantakokko, MSc Milla Saajanaho, MSc Johanna Eronen, PhD Erja Portegijs, PhD Anne Viljanen, PhD Taina Rantanen	
14:00-15:00	<b>Oral Session 6.4 - Nursing home residents</b>	Room 2
	Chair: Eva Algreen-Petersen	
14:00-14:15	<b>O6.4-1 A controlled trial of Snoezelen in a care home: Should we be talking to our residents more?</b> Dr. Michael Bird <i>DSDC, Bangor University</i> Dr. Katrina Anderson, Dr. Sarah Macpherson, Ms. Annaliese Blair	
14:15-14:30	<b>O6.4-2 Preventive conversations</b> Jette Lynnerup <i>Betaniahjemmet</i>	
14:30-14:45	<b>O6.4-3 Comorbidity and poor physical functioning, but not cancer, predict mortality among nursing home residents without cognitive impairment: a five-year follow-up study</b> Dr. Jorunn Drageset <i>Nurse</i> Professor, statistican Geir Egil Eide, Professor, MD Anette Hylen Ranhoff	
14:45-15:00	<b>O6.4-4 Physical and daily activities for residents in Nordic nursing home settings – a randomized, controlled trial. Results after three months of intervention.</b> Dr. Kerstin Frändin <i>Karolinska Institutet</i> Doctoral student Helena Grönstedt, Professor Astrid Bergland, Doctor Jorunn Helbostad, Doctor Lis Puggaard, Doctor Mette Andresen, Doctor Karin Hellström	
14:00-15:00	<b>Oral Session 6.5 - Oldest old</b>	Room 3/4
	Chair: Bernard Jeune	
14:00-14:15	<b>O6.5-1 The health of the oldest old in Sweden deteriorated between 1992 and 2002 - is it better or worse in 2011?</b> Dr. Carin Lennartsson <i>Aging Research Center</i> Dr Ingemar Kåreholt, Dr Marti G Parker, Professor Mats Thorslund	
14:15-14:30	<b>O6.5-2 Predictors of nine-year mortality in nonagenarians: The Vitality 90+ Study</b> Dr. Kristina Tiainen <i>Gerontology Research Center and School of Health Sciences, University of Tampere</i> MSc Tiina Luukkaala, MD, PhD Antti Hervonen, MD, PhD Marja Jylhä	

14:30-14:45	<b>O6.5-3 The importance of children in old age</b> Professor Marianne Schroll <i>Center of Preventive Medicine, Glostrup University Hospital</i>	
14:45-15:00	<b>O6.5-4 Leptin as a predictor of mortality in nonagenarians</b> Inna Lisko <i>University of Tampere, Finland</i> PhD Kristina Tiainen, PhD, MD Terho Lehtimäki, PhD, MD Antti Hervonen, PhD, MD Marja Jylhä	
14:00-15:00	<b>Oral Session 6.6 - Physical capacity in later life</b>	Room 12
	Chair: Anette Ekman	
14:00-14:15	<b>O6.6-1 Midlife physical activity is associated with lower extremity function in late life</b> Dr. Milan Gudjonsson <i>Landspítali University Hospital, Gerontological Research Institute</i> MD Jon Snaedal, MD Sigurbjorn Bjornsson, MD Bjorn Einarsson, PhD Jane S. Saczynski, MPH Melissa Garcia, PhD Thor Aspelund, MS Kristine Siggeirsdottir, MD Vilmundur Gudnason, PhD Lenore J. Launer, MD Tamara B. Harris, MD Palmi V. Jonsson	
14:15-14:30	<b>O6.6-2 Associations of anemia and physical function in Georgia Centenarians</b> Dr. Dorothy Hausman <i>University of Georgia</i> Ms. Alyson Haslam, Dr. Adam Davey, Dr. M. Elaine Cress, Dr. Mary Ann Johnson, Dr. Leonard Poon, for the Georgia Centenarian Study	
14:30-14:45	<b>O6.6-3 Low-Grade Chronic Inflammation and Superoxide Anion Production by NADPH Oxidase are the Main Determinants of Physical Frailty in Older Adults</b> Dr. Gregory Baptista <i>Gerontology Center, University Hospital of Montpellier, France</i> Dr Anne-Marie Dupuy, Dr Richard Durant, Pr Jean-Paul Cristol, Pr Claude Jeandel	
14:45-15:00	<b>O6.6-4 Accumulation of disparity in physical activity in old age</b> MSc Johanna Eronen <i>University of Jyväskylä</i> PhD Mikaela von Bonsdorff, PhD Merja Rantakokko, Professor Taina Rantanen	
14:00-15:00	<b>Oral Session 6.7 - Social life and participation</b>	Room 13
	Chair: Mette Andresen	
14:00-14:20	<b>O6.7-1 Never too late to learn</b> Dr. Svetlana Aslanyan <i>Center for the Development of Civil Society</i>	
14:20-14:40	<b>O6.7-2 Does social capital enhance political participation of older adults?</b> PhD, university lecturer Mikael Nygård <i>Åbo Akademi University</i> PhD, researcher Fredrica Nyqvist	
14:40-15:00	<b>O6.7-3 The impact of new intimate relationships in later life on social and filial relationships</b> Dr. Torbjörn Bildtgård <i>Stockholm University</i> Dr Peter Öberg	
15:15-16:15	<b>Coffee break in the exhibition area - Poster Session II</b>	



16:00-17:30	Oral Session 7.1 - Social life	Room 13
	Chair: Anna Siverskog	
16:00-16:15	<b>07.1-1 Time as a structuring condition behind new intimate relationships in later life</b> Dr. Torbjörn Bildtgård <i>Stockholm University</i> Dr Peter Öberg	
16:15-16:30	<b>07.1-2 Ageing-in-place - older people's housing problems and social contacts</b> Sirpa Andersson <i>National Institue for Health and Welfare THL</i>	
16:30-16:45	<b>07.1-3 Old, inactive and happy: can a socially unproductive ageing be a successful one? Exploring the protective effect of fulfilling marital relationships in inactive 50 plus.</b> Rita Borges Neves <i>Centre of Research for Social Sciences, University of Minho</i> Prof. Alice Delerue Matos, Fátima Barbosa, prof José Machado, Victor Terças Rodrigues, Daniela Craveiro	
16:45-17:00	<b>07.1-4 How do different dimensions of social relations fulfil social needs in older people?</b> Katja Pynnönen <i>Gerontology Research Center and Department of Health Sciences, University of Jyväskylä</i> Timo Törmäkangas, Taina Rantanen, Tiina-Mari Lyyra	
17:00-17:15	<b>07.1-5 Life as theatre: older transgender persons' experiences of ageing and gender identity</b> Anna Siverskog <i>Nationella Institutet för forskning om äldre och åldrande</i>	
16:00-17:30	Symposium Session 3.1 - Dementia diagnostics in memory clinics in the Nordic and Baltic countries	Plenum 8/10
	Chair: Anette Hylen Ranhoff	
	<b>S3.1-1 Enhancing dementia research by harmonizing the dementia work-up in the Nordic countries</b> Coordinator NIDD Anne Rita Øksengård <i>Karolinska University Hospital</i>	
	<b>S3.1-2 Neuroimaging in dementia work-up: Volumetric measurements of brain regions using MRI</b> Professor Lars-Olof Wahlund <i>Karolinska Institutet</i>	
	<b>S3.1-3 Quantitative Electroencephalography (qEEG) in dementia diagnostics</b> Ass. Professor Jon Snaedal <i>Landspítali University Hospital</i>	
	<b>S3.1-4 Memory Assessment in the Baltic States</b> Jurate Macijauskien? <i>Lithuanian University of Health Sciences</i> K Saks	
	<b>S3.1-5 Depression in patients referred to memory clinics</b> Dr Anne-Brita Knapskoga <i>Oslo universitetssykehus</i> Knut Engeda	
16:00-17:30	Symposium Session 3.2 - Critical perspectives in need assessment practice(s) in elderly care	Plenum 9/11
	Chair: Sandra Torres	
	<b>S3.2-1 Need assessment and the organization of eldercare provision in the modern welfare state: a comparative perspective</b> Professor Morten Balle Hansen <i>University of Southern Denmark</i>	

<b>S3.2-2 Local guidelines for need assessment for elder care in sweden: a matter of equality in welfare provision</b> Postdoctoral Research Fellow David Feltenius <i>Umeå University</i>
<b>S3.2-3 Home care allocation in Norway. Negotiation and distribution of responsibilities</b> Research Fellow/phd Student Helene Aksøy <i>NOVA -Norwegian Social Research</i> Research Director Mia Vabø
<b>S3.2-4 Requests and outcomes in care management. processing older persons as clients in elderly care.</b> Phd Assistant Professor Anna Olaison <i>Linköping University</i>
<b>S3.2-5 Understandings of cross-cultural interaction and ethnic 'otherness' as challenges for need assessment practice: Results from a focus group study with swedish need assessors</b> Phd Emilia Forssell <i>Ersta Sköndal University College</i> Phd Assistant Professor Anna Olaison, Professor Sandra Torres

16:00-17:30	Symposium Session 3.3 - Evaluation of orthogeriatric services in Nordic and Baltic countries	Room 1
	Chair: Helgi Kolk	
	<b>S3.3-1 Comprehensive Geriatric Assessment including the Delirium-Check-list in patients suffering hip-fractures.</b> Professor Yngve Gustafson <i>Umeå University</i>	
	<b>S3.3-2 Implementation of geriatric care in fracture patients</b> Dr Helgi Kolk <i>Tartu University Hospital</i>	
	<b>S3.3-3 Can better treatment and prophylaxis of delirium in the early phase of a hip fracture improve long-term cognitive outcome? Randomised, controlled trial</b> MD and PhD-student Leiv Otto Watne <i>University of Oslo</i> MD, PhD student Bjørn Erik Neerland, Professor MD, PhD Knut Engedal, MD, PhD Frede Frihagen, MD, PhD Vibeke Juliebø, MD, PhD Ingvild Saltvedt, PhD student Anne Torbergsen, Professor Eva Skovlund, Professor MD, PhD Johan Ræder, MD, PhD Simon Conroy, Professor MD, PhD Torgeir Bruun Wyller	
	<b>S3.3-4 Characteristics of patients and care pathways in an orthogeriatric unit. Results from a patient database with 2000 patients.</b> Professor MD Anette Hylen Ranhoff <i>Diakonhjemmet hospital</i> Nurse Mette Martinsen, Ludvig F. Solheim	
	<b>S3.3-5 Will comprehensive geriatric work-up during the index stay improve mobility at 4 months in hip fracture patients? The Trondheim Hip Fracture Trial.</b> Professor MD, PhD Olav Sletvold <i>St. Olav University Hospital of Trondheim</i> Anders Prestmo, Pernille Thingstad, Kristin Taraldsen, Lars Gunnar Johnsen, Jorunn L Helbostad, Ingvild Saltvedt	

16:00-17:30	Symposium Session 3.4 - Family carers in the welfare state	Room 2
	Chair: Helgi Kolk	
	<b>S3.4-1 Assistive technology makes chance for family carers</b> Occupational Therapist Ingela Månsson <i>The Swedish Institute of Assistive Technology</i>	
	<b>S3.4-2 Support of carers of older people entering into and living in nursing home</b> RN, PhD, Research Director Elizabeth Hanson <i>Swedish National Family Care Competence Centre</i> Eva Gustafsson	



**S3.4-3 Frail elderly patients’ relatives - what role do they play during hospitalisation?**  
Senior researcher Tove Lindhardt  
*Copenhagen University Hospital, Herlev*

**S3.4-4 Family care and grandmotherhood in the welfare state**  
MA, Pd.D. Anne Leonora Blaakilde  
*University of Copenhagen*

**S3.4-5 Older Caregivers receiving and providing help.**  
Associate Professor Sigurveig H. Sigurdardottir  
*University of Iceland*  
Senior Lecturer Marie Ernsth Bravell, Associate Professor Sigurveig H. Sigurdardottir, Senior Lecturer Marie Ernsth Bravell

16:00-17:30	Symposium Session 3.5 - Centenarians in the past and present	Room 3/4
	Chair: Bernard Jeune	
	<b>S3.5-1 Centenarians today: new insigths on selection from the Five Countries Oldest-Old Project (5-COOP)</b> INSERM Research Director Jean-Marie Robine <i>INSERM</i>	
	<b>S3.5-2 The Era of Centenarians - The Mortality of Swedish Oldest-Old</b> PhD Sven Drefahl <i>Karolinska Institutet</i> PhD Karin Modig	
	<b>S3.5-3 Use of medicines among centenarians in Sweden</b> Phd Student Jonas W. Wastesson <i>Aging Research Center</i> Docent, Associate Professor Marti Parker, Professor Johan Fastbom, Phd Mats Thorslund, Associate Professor Kristina Johnell	
	<b>S3.5-4 Using cardiovascular diseases and medicine consumption to describe morbidity in Danish centenarians</b> Associate Professor, Senior Consultant Karen Andersen-Ranberg <i>University of Southern Denmark</i>	
	<b>S3.5-5 Disability in Danish centenarians: comparing gender-specific data on ADL from surveys of birth cohorts 1895, 1905 and 1910.</b> Post Doc Sonja Vestergaard <i>Syddansk Universitet</i> Professor Kaare Christensen, Associate Professor Bernard Jeune	
16:00-17:30	Symposium Session 3.6 - Fatigue in older adults	Room 12

Chair: Kirsten Avlund

**S3.6-1 Trends in fatigue 1992-2002-2010/11 among the oldest old in Sweden**  
Phd Carin Lennartsson  
*Aging Research Center*  
Marti G. Parker, Linda Hols-Salén, PhD Mats Thorslund

**S3.6-2 Tiredness in old age: Associated factors and predictors in seven years**  
MSc M Nevalainen  
MSc A-K Koivisto, PhD Marja Jylhä

**S3.6-3 Fatigability in basic indoor mobility in nonagenarians**  
PhD Minna Mänty  
*Københavns Universitet*  
MScPH Anette Ekmann, MSc Mikael Thinggaard, MD, PhD, DMSc Kaare Christensen, DMSc Kirsten Avlund

**S3.6-4 Fatigue and cardiovascular health: A study on aging Danish twins**  
Mscph Anette Ekmann  
*University of Copenhagen*  
Post Doc Minna Mänty, PhD Inge Petersen, MD, PhD, DMSc Kaare Christensen, DMSc Kirsten Avlund

**S3.6-5 Telomere length - a molecular biomarker for fatigue.**  
PhD Laila Bendix  
*University of Southern Denmark*  
Cand. scient. Mikael Thinggaard, PhD Masayuki Kimura, MD Abraham Aviv, MD, PhD, DMSc Kaare Christensen, DMSc Merete Osler, DMSc Kirsten Avlund

19:00	Conference Dinner in Odd Fellow Palæ
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Wednesday June 13, 2012

08:00-13:00	Registration - Hospitality Desk Open	
09:00-10:30	States of the Art Lecture	Plenum 8/10
	Chair: Nina Beyer	
	<b>SA3-1 Dilemmas in behaviour and physical activity in a gender perspective</b> Professor Roger A. Fielding <i>Friedman School of Nutrition Science and PolicyTufts University School of Medicine</i>	
	<b>SA5-1 Social inequality in ageing</b> PhD Mats Thorslund <i>Karolinska Institutet</i>	
09:00-10:30	States of the Art Lecture	Plenum 9/11
	Chair: Eigil Boll Hansen/Tove Lindhardt	
	<b>SA4-1 Trends in ageing and challenges for the provision of care for older people</b> Associate Professor Virpi Timonen <i>Trinity College Dublin</i>	
	<b>SA6-1 Dilemmas in family care: Learning from the past, looking to the future</b> Professor Mike Nolan <i>University of Sheffield</i>	
10:30-11:00	Coffee break in the exhibition area	
11:00-12:30	Plenary lectures	Plenum 8/10
	Chair: Christine Swane	
	<b>Sohlberg Nordic Price Lecture</b> <b>Andrus Viidik Lecture</b>	
12:30-13:00	Closing Ceremony	

# Keynote Abstracts

K1 Differences in the health and survival of women and men: Dilemmas that require action?

K1 11-06-2012, 08:30-10:00, Plenum 8/10 & Plenum 9/11

Professor Kaare Christensen  
*The Danish Aging Research Center,  
University of Southern Denmark*

A rapidly increasing proportion of individuals in the Western world are surviving into their tenth decade - the vast majority are women. There is widespread concern that the basis for this development is the survival of frail and disabled elderly into the highest ages, the so-called "Failure of Success Hypothesis". An alternative hypothesis is that the exceptionally old generally enjoy the "Success of Success", i.e., an increasing proportion of the population living to the highest ages is based on a postponement of physical and cognitive disability. The development is complex due to the "Male-Female Health-Survival Paradox", that is, the fact that females have higher physical disability levels but better survival than men at all ages, making the sex-difference in healthy life span much smaller than the sex-difference in life span. The planning of and policy development for the future care of the oldest-old will be highly dependent on whether one or both genders are experiencing the "Failure of Success" or the "Success of Success" as they reach the highest ages. This scientific knowledge is of fundamental importance for the sustainability of modern societies.

K2 Old Brain, New Demands on Information Processing: A Dilemma?

K2 11-06-2012, 08:30-10:00, Plenum 8/10 & Plenum 9/11

Professor Lars Nyberg  
*Departments of Radiation Sciences and  
Integrative Medical Biology, Umeå University*

Memory for well-consolidated facts (semantic memory) shows a positive age gradient. By contrast, episodic long-term memory and working memory decline with advancing age. However, large-scale population-based studies document well-preserved memory functioning in some older individuals. The influential reserve notion holds that individual differences in the brain itself or how people process tasks allow some to cope better than others with brain pathology and hence show preserved memory. In this presentation I will argue that the primary characteristic of successful memory aging is brain maintenance, or relative lack of brain pathology. Evidence for brain maintenance will be discussed at different levels; cellular, neurotransmission, gray- and white-matter integrity, and systems-level activation patterns. Various genetic and lifestyle factors support brain maintenance in aging, and interventions may be designed to promote maintenance of brain structure and function. Collectively, these findings highlight preserved ability of the aging brain/individual to cope with novel information-processing challenges.

State of the Art Abstracts

## SA2 Dilemmas in the ageing bones

SA1 11-06-2012, 10:30 - 11:15, Plenum 8/10

Professor Peter Schwarz  
*Glostrup hospital*

It is considered a major public health burden due to the large volume of patients who incur fractures as bone fractures not only represent a significant economic burden to society but also a social burden for the individual. A major problem in the prevention of osteoporosis is that osteoporosis rarely causes symptoms until the first significant fracture. Expensive and time consuming examinations may clarify whether an otherwise healthy person has osteoporosis and hence are at increased risk of fractures in a fall. A DXA scanning and blood tests will show disease conditions associated with osteoporosis. However, controversy exists regarding DXA i.e. who, when and the use of bilateral hip scanning? The mean age at diagnosis of osteoporosis is in the late sixties, and fracture risk and need for fracture prevention rises sharply with increasing age. However, what is the evidence that supports the use of anti-resorptive osteoporosis treatments in the old? Fragility fractures in men constitute a major worldwide public health problem with a life- time risk of 13%. Because of gender differences in risk factors, patophysiology and bone structure it cannot be directly inferred that anti-osteoporotic drugs effective in women have the same effect in men. Can we appraise the existing evidence for efficacy of osteoporosis treatment in men? The effects of increasing age, dosage and duration of treatment might influence treatment effect. PTH treatment alone seems to be able to improve bone mineral density significantly. However, what happens with increasing age, dosage and length of treatment? Several dilemmas in the ageing bone remain.

## SA2 Clothing and the embodiment of age: Why do clothes matter?

SA2 11-06-2012, 10:30 - 11:15, Plenum 9/11

Professor Julia Twigg  
*University of Kent*

Clothing - particularly when presented under the guise of fashion - can seem a lightweight sort of topic, not deserving serious academic analysis, especially in the context of old age where frailty and decline can seem to present both society and individuals with more pressing issues. But in this paper I will argue that clothing and dress are in fact highly relevant to the analysis of age, and that they intersect with some of the key issues of gerontology, in particular ones relating to the body and its cultural expression. Dress allows us to explore these, looking

at the complex ways in which ageing is both a bodily and a cultural phenomenon. Clothes are also part of how social difference is made manifest. Though we are accustomed to this in relation to forms of social difference like class and gender, it is true of age also. Exploring the ways clothes are age ordered thus allows us to interrogate age as a form of identity and a social category. It also allows us to examine arguments about change, particularly though the debate on the reconstitution of ageing and the potential role of consumption culture in this.

## SA3 Dilemmas in behaviour and physical activity in a genderperspective

SA3 13-06-2012, 09:00 - 10:30, Plenum 8/10

Professor Roger A. Fielding  
*Friedman School of Nutrition Science and PolicyTufts University School of Medicine*

Physical activity and exercise training have been proposed as possible preventive interventions for frailty as they can target four of the acknowledged frailty criteria: weakness, low physical activity, decreased motor performance, and decreased exercise tolerance. With increasing age, there is a well described decline in voluntary physical activity which is associated with decreases in several measures of exercise tolerance including maximal aerobic capacity, muscle strength, power, and increased fatigue. Data from several randomized controlled trials have shown that exercise can increase muscle mass and power, improve aerobic capacity, and delay fatigue. In addition, more recent evidence suggests that physical activity interventions may improve physical functioning and reduce role disability in “at risk” older adults. The goals of this presentation will be to identify the components of the disablement pathway that are associated with inactivity and to review the current literature on the utility of exercise and physical activity, both aerobic and anaerobic, as an possible intervention for preventing or reversing frailty. In addition, I will discuss critical issues related to adherence to physical activity and discuss potential barriers to adherence. I will also briefly address areas of further research in this area.

## SA4 Trends in ageing and challenges for the provision of care for older people

SA4 13-06-2012, 09:00 - 10:30, Plenum 9/11

Associate Professor Virpi Timonen  
*Trinity College Dublin*

Populations across the world are growing older, and growth is fastest among the oldest old, the group that is also most likely to need care. Women form the majority in the older groups, and their share increases in line with age. The number of older people living alone has increased considerably, although there is a lot of variation in this respect between countries, with the Nordic countries having particularly high proportions of older people in single-person households. These are well-known, persistent and on-going demographic trends that all societies are dealing with and preparing for. The diversity in responses to the shared challenge of care provision is striking: while some commonalities in countries’ responses can be identified, the differences in responses overshadow shared patterns. Policymakers and societies have therefore made very different choices in response to a common task, providing care to growing numbers of older people with support needs. In addition to demographic change, family changes are exerting a powerful impact on what are the feasible modes of care. While the share of older adults who are unmarried (never married, divorced/separated, or widowed) is increasing in some countries, it is decreasing in others. The convergence in male and female life expectancies is leading to increased availability of spousal support in some contexts. Spousal carers are increasingly older and hence more likely to have care needs themselves, a development that most countries are not well prepared for, the assumption still being that informal carers are for the most part younger adult children. With regard to the number of children, important differences also persist. In some systems, the share of older people with no children is declining, in others it is rising. Children’s employment status also varies greatly between countries, depending among other things on the proportion of women who are in paid work, and this in turn affects the profile of informal caregivers (working vs. non-working carers). Divorce and re-partnering among both ageing parents and adult children also has implications for availability of care, with divorced fathers at a disadvantage when it comes to contact with adult children and availability of care and support from them. The extension in disability-free life expectancy (of which there is evidence in some countries, but by no means universally) does in principle dampen growth in the volume of care needed. However, these gains are not equally shared across countries or population groups, as better-off older people typically enjoy better health. Furthermore, some older adults with care needs have higher incomes than older people in the past did, hence enhancing their capacity to purchase care. Attitudes are shifting, too: less deferential and more vocal older people with greater purchasing power demand better services, in line with their own preferences. The care of older people will therefore increasingly be care by older people,

both spousal carers and ageing daughter / son carers, and older formal carers. Those who are not (or not exclusively) cared for by their spouses or partners / family members have varying patterns of service use, differentiated by purchasing power and preferences, and by the extent to which the state is involved in financing care. While there has been a strong drive towards allocating services to those with ‘greatest needs’, in some systems a large proportion of care services is allocated on ‘social grounds’. Some of these are good grounds (e.g. social isolation, loneliness) in the sense that they clearly merit interventions. The issue of ‘care needs’ therefore calls for more careful attention. When does ‘care’ pertain to the body and the household, and when does it pertain to the person’s social needs? Should we differentiate between them? Do resource constraints force care workers to differentiate between them, to the detriment of quality of care and quality of life? These are central questions that remain largely unanswered. Virtually all long-term care systems advocate the primacy of home care. However, if home care is to be taken seriously, it must be appropriately regulated and adequately resourced. Given the perception / conviction among (most) policymakers that no major additional investments can be made into care, much further thought needs to go towards defining the grounds on which care is fully or partially paid for. Huge investments are being made into remote/electronic care delivery and monitoring systems, yet little empirical evidence and theorising exists on the extent to which can they replace care provided by people. Challenges in the area of care provision are therefore myriad, and call for redoubled efforts on the part of the gerontological research community, ideally within an inter-disciplinary context where social, economic, health and systemic factors are taken into account.

## SA5 Social inequality in ageing

SA5 13-06-2012, 09:00 - 10:30, Plenum 8/10

Professor Mats Thorslund  
*Karolinska Institutet*

Much of the health diversity found among elderly people can be described in relation to social inequalities. As well as having higher mortality rates, individuals with lower socioeconomic position (SEP) tend to have poorer health and function. However, the mechanisms behind the relationship are not well understood. It is probable that mechanisms and pathways differ for different cultures, different ages and cohorts, and men and women. Education and main occupation during working life are frequently used indicators of SEP. The latter, however, may be less relevant for elderly women who have not worked outside the home. Research has also shown that exposures and experiences in utero and during childhood likely contribute to health inequalities in later life. In my presentation I will discuss how choice of SEP indicators affects research results. Indicators to be discussed include individual and household SEP, education, income, childhood SEP, and the ability to raise a sum of money in a short time. Exploring the influence of different SEP

indicators among old people offers the opportunity to better identify mechanisms and to understand the relative importance of cumulative effects vs. effects that occur at one point in time (e.g. prenatal and childhood conditions). Other topics that will be covered include which indicators of health are more correlated with SEP than others and whether socioeconomic inequalities in health increase with age and over time.

## SA6 Dilemmas in family care

SA6 13-06-2012, 09:00 - 10:30, Plenum 9/11

Professor Mike Nolan  
*University of Sheffield*

This paper will provide a conspectus of research, policy and practice in the field of family care over the last 25 years. It will trace major trends and chart advances in our understanding of the experiences of family carers and the person they support, considering how formal service systems can best work in partnership with family carers and older people. It will highlight limitations in current conceptualisations of family care and service responses to their needs and identify future directions for research and practice with a particular emphasis on relational models.

# Symposium Abstracts



# S1.1 Reforming old age care across Europe: Comparing processes and strategies

Chair: Viola Bureau and Tine Rostgaard

S1.1-1 11-06-2012, 13:45-15:15, Plenum 8/10

## Reform strategies in home care for elderly in Europe

Professor Tine Rostgaard  
*University of Aalborg*

The paper addresses the main reform strategies in home care for elderly in Europe. The paper is based on a research cooperation of nine European countries, LIVINDHOME, and provides an empirical overview of drivers of changes and responses in the organisation, provision, regulation and quality of home care/help, as well as the theoretical implications for the study of home care. The countries included in the study are Norway, Sweden, Finland, Italy, Austria, Denmark, England, Ireland and Germany. The objective of the study was to provide a timely overview of recent reforms in the organisation and governance of home care systems, and to elucidate what are the intended and unintended results of the reforms, in particular how reforms have affected quality of care. The project is based on national accounts of reforms in home care, using national policy documents and statistics.

S1.1-2 11-06-2012, 13:45-15:15, Plenum 8/10

## Developments of home care policies in Ireland

Associate profesor/CSW Virpi Timonen  
*Trinity College Dublin*

Home care policy in Ireland was ambiguous throughout the first decade of the 21st century: policymakers expanded home care, but failed to develop policies to govern this expanded provision. As a result, home care became more widely available in the absence of a framework to govern access to services and to regulate care providers. Official policy documents, statistics and policy critiques published between 2000 and 2010 were analysed in order to understand this incongruity between expansion of homecare services and the failure to develop policies to govern access to and quality of services. The key factors that motivated home care expansion in the Irish case were (1) problems in the acute hospital sector and the perception of home care as a partial solution to these (political blame avoidance); and (2) significant GDP growth (until 2007) which provided politicians with the means to fund expansion in homecare services (political credit claiming). The key factors that inhibited the develop-

ment of a policy framework to govern homecare services were (1) weak governance structures in health services and decision-making at national level based on short-term political gain; (2) Ireland's adherence to the liberal welfare state model and concern about uncontrollable care costs in the face of population ageing; (3) until 2010, paucity of attention to homecare issues in the Irish media; and (4) weak provider interest representation. The recent budgetary cutbacks in Ireland bring into sharp relief the political expediency of an unregulated domiciliary care sector and absence of entitlements to home care. The forces that drive expanded provision are different from drivers of policy to govern home care, and that weakness of governance structures and political advantages of the absence of regulation are the main reasons for the lack of standards and entitlement rules.

S1.1-3 11-06-2012, 13:45-15:15, Plenum 8/10

## Reforms of long-term care policies in EU countries: an interpretation

Professor Costanzo Ranci  
*Polytechnic of Milan*  
Co-author:  
Associate Professor Emmanuele Pavolini  
*University of Macerata*

The aim of the paper is to interpret the changes introduced in long-term care policies in eight European countries in the last 15 years. The focus will be not just on providing a description of such changes (already known and largely described in the literature), but to adopt a comparative and interpretative framework. The main points of analysis will be:

"Identifying under which social, economic, and institutional conditions changes have been introduced in LTC policies; what are the common and peculiar factors to explain such changes in the countries considered?

"The form of change: change has occurred in strong continuity with the previous institutional setting in many countries, while it has been more radical in some others; how can we explain these differences?

"Is there really a convergence in the new forms of regulation of LTC uropean countries? What role has been played by the State, at the national, regional and local level? How have market mechanisms and recognition of informal care been introduced in the previous systems?

"After 10-15 years of reforms or incremental changes in many countries, what are the main impacts of such changes, both on the care system (including beneficiaries, care suppliers and public institutions) and on the institutional context: how has the institutional setting of LTC changed?  
The countries selected for comparison belong to the different 'welfare families' in Europe: Spain and Italy for the Southern

European family; France, Germany and Austria for the continental family; the UK as part of the Anglo-Saxon one; Sweden and Denmark for the Scandinavian family; the Netherlands as a special case, characterized by a combination of Nordic and continental patterns. In order to consider also some countries belonging the Central Eastern European family, the case of Rumania has been considered.

S1.1-4 11-06-2012, 13:45-15:15, Plenum 8/10

## Reforming old age care in Denmark – understanding policy processes

Dr Viola Bureau  
*University of Aarhus*  
Co-author:  
Professor Dr Hanne Marlene Dahl  
*Roskilde University*

From a comparative perspective reforms of old age care in Denmark are an interesting case: although Denmark like most of OECD has been exposed to New Public Management reforms understood as a drive for a retreat of the state, cost containment and consumerism, long-term care policies have not been characterised by retrenchment. At the same time, the absence of retrenchment does not necessary equal an absence of substantial change. Against this background, the aim of the paper is to investigate whether there has been a substantial change in long term care for the elderly in Denmark in the period 1994-2007, and if so, to identify the characteristics of this change. To this end, the paper focuses on how changes relate to existing institutions and also examines the policy processes leading to the changes concerned. The analysis demonstrates that substantial change has occurred, notably through restructuring. More specifically, long-term care policies since the 1990s have included elements of both control/standardisation and flexibility/choice and this has lead to substantial changes in terms of the organisation of long-term care. In procedural terms, reforms represent a form of gradual transformation based on layering, whereby new elements are attached to existing institutions which gradually change as a result. The analysis draws on in-depth case studies of two reforms that in substantive terms encompass elements of control and flexibility, and which in procedural terms point to legislative and non-legislative forms of gradual transformation.

# S1.2 Assessment, evaluation and experience of function, physical activity and exercise: A challenge in ageing and different contexts

Chair: Astrid Bergland and Birgitta Langhammer

S1.2-1 11-06-2012, 13:45-15:15, Plenum 9/11

## Applicability and Effects of Physical Exercise among Older People With Dementia in Residential Care Facilities

PhD Erik Rosendahl  
*Umeå University*  
Co-authors:  
PhD Håkan Littbrand, PhD Michael Stenvall

There is a need for exercise studies of high methodological quality among people with dementia in residential care facilities. A recent paper (Am J Phys Med Rehabil 2011; 90:495-518) systematically reviewed the applicability (attendance, achieved intensity, adverse events) and effects of physical exercise as a single intervention on physical functions, cognitive functions, and activities of daily living (ADL) among people with dementia. Eight of the ten studies included were performed in residential care facilities. The majority of these studies were assessed as having low methodological quality. The review concluded that it seems important that the interventions last for at least a few months and that the exercises are task-specific and are intended to challenge the individual's physical capacity. Combined functional weight-bearing exercise seems applicable for use and there is some evidence that this type of exercise improves walking performance and reduces the decline in activities of daily living among older people with Alzheimer disease in residential care facilities. The effect of physical exercise on cognitive functions among people with dementia remains unclear because studies evaluating this have either been of low methodological quality or used an intervention of presumably insufficient intensity. That functional weight-bearing exercise programs seem to be a promising method for influencing overall ADL performance is strengthened by a subgroup analysis of 100 participants with dementia in a randomized controlled trial (the FOPANU Study) of a high-intensity functional weight-bearing exercise program in residential care facilities. In an ongoing randomized controlled trial (the UMDEX Study) among 186 participants with dementia in residential care facilities, the primary aim is to evaluate the effect of a high-intensity functional weight-bearing exercise program on dependence in personal ADL. The effect on cognitive functions will also be evaluated.

S1.2-2 11-06-2012, 13:45-15:15, Plenum 9/11

Progressive resistance training  
for women 90+

PhD Student Gro Idland  
*Oslo University College*

**Background and purpose:** The number of aging women is increasing worldwide. It is well documented that muscle strength and mass decreases with advancing age associated with functional decline and subsequent loss of independence. Resistance training has been shown to have beneficial effects on the musculoskeletal system and also moderate impact on mobility. However, most studies are directed towards younger old people. The purpose of this study was to investigate the possibility of increasing mobility, balance and strength in community dwelling women aged 90+ by use of resistance training. The participants had different functional capacity, and all had observed functional decline during the last years. **Method:** Three women participated in this single subject study. The intervention phase consisted of a 12- week individually tailored resistance training performed twice a week aiming at improving strength in the main muscle groups. Main outcome measures were mobility measured with Timed Up and Go (TUG) and 6 m walking speed, balance measured by Bergs balance scale and strength measured by knee extension and 30 second chair stand test. **Results:** The participants had from three to ten diagnosed diseases and used from two to 12 prescribed medicines daily. Participant 1, 2 and 3 improved their mobility (TUG; 44%, 29%, 40%, walking speed; 37%, 40%, 42% respectively). All improved their balance (10%, 31%, 41% respectively) and all three increased strength of lower limbs (knee extension strength; 233%, 150%, 167%, chair stand increased from 8 to 18, 6 to 11 and 0 to 7 repetitions respectively). No adverse effects were reported. **Conclusion:** These findings are consistent with previous studies on younger old people showing that resistance training can improve mobility, balance and strength even in very old women experiencing functional decline. Randomized clinical trials are needed to evaluate the clinical effect of progressive resistance training in the oldest old.

S1.2-3 11-06-2012, 13:45-15:15, Plenum 9/11

The reliability and validity of clinical  
walking speed measurements in elderly  
people: a systematic review

PhD Elisabeth Rydwick  
*Karolinska Institutet*  
Co-authors:  
PhD A Bergland  
*Oslo and Akershus University College*  
PhD, Senior researcher L Forsén  
*Norwegian Institute of Public Health*  
PhD K Frändin  
*Karolinska Institutet*

**Background and Objectives:** The number of available walking tests has increased dramatically over the past decades. Therefore, it is highly important to help clinicians choose the most appropriate walking test for a specific setting. A decline in walking speed has been shown to be related to available energy. This systematic review aimed to critically evaluate the reliability, validity and responsiveness of clinical walking speed in a broad population of elderly persons living in the community, sheltered housing or institutions. **Methods:** Literature searches were performed in several different data bases. Key words were based on the topic of the measurement properties of performance based clinical tools for quantifying walking. The instrument selected for review was ‘walking speed’. The methods and results of all the evaluated measurement properties were rated using a standard checklist for appraising the qualitative attributes and measurement properties of the instruments. **Results:** A total number of 3,781 abstracts were reviewed, and 86 articles were chosen for inclusion. ‘Habitual walking speed’ seems to be highly reliable in community-dwelling people and residents in mixed settings. There have not been any studies which accord with our inclusion and exclusion criteria that have evaluated the reliability of ‘maximum walking speed’ in an aged population. Walking speed is a highly valid test, both at habitual and maximum speed. Few studies gave information about responsiveness regarding walking speed, which means that these results cannot be evaluated properly. **Conclusion:** Habitual walking speed is a reliable measure, but maximum walking speed needs further evaluation. Both habitual and maximum walking speed are valid instruments and they predict death, hospitalization/institutionalization and decline in mobility. The test is easy to administer and is useful for the clinician in order to screen impairment and to evaluate effects of treatment.

S1.2-4 11-06-2012, 13:45-15:15, Plenum 9/11

The Efficacy of Counseling and  
Progressive Resistance Home- Exercises  
on Adherence, Health- Related Quality  
of Life and Function after Discharge  
from a Geriatric Day-Hospital

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**Background and Objective:** Loss of function and low exercise adherence is common among older people after hospitalization. The aim of this randomized-controlled trial was to evaluate the effects of a combined counseling- and exercise program on changes in health-related quality of life and physical function in patients attending a day hospital and continuing exercise at home. **Methods:** The exercise program consisted of counseling, balance- and progressive resistance training and support from the physical therapist at GDH and home for the Intervention -group. The Control- group received counseling, balance- training and support from the physical therapist.The sample was recruited from a GDH in Norway. 108 participants were randomized into the Intervention group (IT) (n=53) or the Control group (CT) (n=55). After 3 months 77 participants were tested. **Results:** The intention to treat analysis showed that the program had significant benefits in terms of Health Related Quality of Life, measured by SF-36, on the domains vitality and bodily pain, in favor of the IT- group who performed the combined resistance exercises and balance program. All participants increased their scores on physical function, measured by Berg Balance Scale, Timed Up and Go, 5 times Sit-to-Stand, 6 Minute Walk Test and Activities Balance Confidence Scale, no group differences. Both groups were adherent to the home exercise program **Conclusion:** The results show that it is possible to facilitate older people to increase their health-related quality of life, physical function and level of physical activity through counseling, exercise and support from physical therapists.

S1.2-5 11-06-2012, 13:45-15:15, Plenum 9/11

Prolonged strength training after hip  
fracture: a randomized controlled trial

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**Background and Objective:** the aim of this study was to assess the effect of a 12-week once-a-week prolonged strength-training program in a group of home dwelling older hip fracture patients. **Design:** randomized, controlled; single-blind parallel-group trial. **Setting:** intervention at outpatient’s clinic. **Subjects:** 95 patients with surgical fixation for a hip fracture completed a preceding three-month progressive strength-training program twice a week. **Methods:** the program comprised four exercises, performed at 80% of maximum capacity. Measurements were taken after 12 weeks intervention. Outcome measurements were Berg Balance Scale, the sit-to-stand test, timed up-and-go test, maximal gait speed, six-minute walk test, Nottingham Extended Activities of Daily Living scale (NEADL), and the Short Form-12 questionnaire. Results: we found no statistically significant difference between groups in the primary outcome BBS, presumably because of a ceiling effect. The intervention group showed significant improvements in strength, gait speed and gait distance, instrumental activities of daily living and self-rated health. **Conclusions:** twelve weeks progressive strength training once a week, as a follow-up to a more intensive training period, seemed to improve strength and endurance and resulted in better self-reported NEADL and self-rated health after hip fracture. Hip fracture patients seem to constitute a group that needs long-term follow-up to achieve the improvements important for independent functioning.



## S1.3 Better care for fragility fracture

Chair: Anette Hylen Ranhoff

S1.3-1 11-06-2012, 13:45-15:15, Room 1

### The best repair of fragility fractures - a few aspects

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Hip fractures occur in patients with an annual rate of 14.000 per year and surgery for osteoarthritis is performed in 7.500 patients of which some may suffer sequel to a former hip fracture. Immediate mobilization subsequent to surgery for hip fractures is essential for an acceptable outcome even though some substantial technical barriers still exist such as aseptic femoral head necrosis, cutting out, dislocation og fracture, dislocation of hemiarthroplasty, pseudarthrosis. The hip protector was invented and introduced as hard shells sewn into undergarment and aimed at elderly with propensity to fall. A randomised study in nursing home showed a reduction in hip fracture rate by 54% (Lancet 1993, Lauritzen et al.). Its use was globally introduced in 1997 by SAHVATEX A/S. The intraarticular hip joint spacer was patented and later developed by Cartificial A/S. Reinforced cross-linked HMWPE cups replaced worn out cartilage in osteoarthritic joints. The pilot serie in three patients showed initially good outcome but unacceptable wear within months. The concept as such works, but more material tests are needed to improve the implants efficacy (NOF & EFORT, 2010, Lauritzen, Sporning, Duus et al.). Our comprehensive hip fracture program includes insertion of femoral nerve catheter in patients suspected for hip fracture. Pain is continuously relieved and patients may drink and take food and diagnosing can be accomplished uneventfully. Overall the new program showed a reduction in overall complication rate from 33 to 20 %, and one year mortality in home-dwellers was reduced from 23 to 12 %. (Pedersen, Duus, Jørgensen, Lauritzen et al. J Am Geriatr Soc 2008).

S1.3-2 11-06-2012, 13:45-15:15, Room 1

### Medical care for older hip fracture patients

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**Background:** Older hip fracture patients are known to have high comorbidity and incidence of complications, as well as 30-days mortality. In orthogeriatric units, orthopaedic care is combined with interdisciplinary geriatric care. Optimal pre-, peri- and postoperative care is crucial. The primary goal for the orthopaedic surgeons is high quality fracture repair, whereas the geriatricians and the interdisciplinary team are responsible for medical care, rehabilitation and secondary prevention of falls and fractures.

**Objective and methods:** The aim of this presentation is to describe the major element of the medical care for older hip fracture patients, and to illustrate this with data from a quality database which include demographic, medical, and functional data collected from routine assessment by the interdisciplinary team.

**Results:** 1903 patients (76% females), included 457 (24%) from long-term care institutions, are enrolled in the database. Mean age is 85 years (SD 7.2), chronic diseases are registered in 86%, and 55% had complications.

The major non-surgical problems of these patients are a combination of age-related diseases such as cardiovascular, dementia and musculoskeletal, polypharmacy, functional and cognitive impairment and undernutrition; all contributing to a high risk of complications. The most frequent complications are need of blood transfusions (25%), delirium (21%) and UTI (18%). Surgical post-operative infections are rare (3%), however often serious and should be actively prevented.

Stabilization and optimization of physiology preoperatively, as well as optimal care of chronic medical problems, systematic prevention of blood loss, delirium and UTI, as well as medication check and a continuously awareness for complications are important tasks. Fall assessment and prevention are important objectives, as well as assessment and treatment of osteoporosis.

**Conclusions:** Fall prevention and osteoporosis treatment are areas with good evidence for clinical practice, while there are controversies and lack of evidence in handling many other medical problems in older hip fracture patients.

S1.3-3 11-06-2012, 13:45-15:15, Room 1

### No difference in anticholinergic activity in CSF and serum between hip fracture patients with and without delirium

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**Background:** Cholinergic deficiency is among the leading hypotheses regarding the pathophysiology of delirium. Serum anticholinergic activity (AA) has previously been associated with delirium, but whether the intracerebral anticholinergic activity is increased remains to be studied.

**Research question:** To determine whether higher AA in CSF is associated with delirium.

**Methods:** Hip fracture patients (N=142 (Oslo University Hospital N=94; Royal Infirmary of Edinburgh N=48)) were assessed by the Confusion Assessment Method (pre-op and over two weeks post-op) and the IQCODE. Cerebrospinal fluid (CSF) was collected at onset of spinal anaesthesia. Anticholinergic activity in serum and cerebrospinal fluid (CSF) was determined by a muscarinic radio receptor bioassay. Mann-Whitney U tests were used for group comparisons.

**Results:** The mean age was 82 years, 73.2% were women, and 57/142 (40.1%) had chronic cognitive impairment (IQCODE> 3.44) - 71/142 patients (50%) were delirious at admission or developed delirium during their stay - There was no difference in anticholinergic activity between patients with and without delirium, either in CSF (0.39 pmol/mL vs 0.40pmol/mL, p=0.78) or serum (4.28 pmol/mL vs 4.20 pmol/mL, p=0.20)

**Conclusions:** This is the first study of anticholinergic activity in the CSF of people with and without delirium. The findings are not supportive of the hypothesis that CNS anticholinergic activity, as measured in the CSF, is an important mechanism of delirium in hip fracture patients.

S1.3-4 11-06-2012, 13:45-15:15, Room 1

### Secondary prevention of falls and fractures - an update

Professor Timo Strandberg  
*Universities of Helsinki and Oulu*

Those who have already fallen/got a fracture are a high-risk group for further complications. Therefore all efforts should be used in secondary prevention.

**Prevention of falls:** Multifactorial measures are needed including improvement of balance and gait, correction of possible eye problems etc. Vitamin D has been shown to increase muscle strength and balance but improvement of gait is equivocal. Comorbidity should be treated appropriately, the need of drugs increasing fall risk should be judged critically. General measures against frailty (nutrition, exercise) are important. Home or ward conditions should be checked to decrease fall risk. Use of sticks and rollators should be encouraged as needed. It is also important to identify possible fear-of-falling, which may lead to immobility. In hospitals and nursing homes use of ties or bedrails are a double-edged sword and may lead to complications themselves. Protection of bones in case of falling: Hip protectors are evidence-based therapy, but their problem is poor adherence. Also other protective devices (helmets etc) should be considered as appropriate. Treatment of osteoporosis: Not only hip and vertebrae but most fractures in older people are osteoporotic. Therefore adequate treatment of osteoporosis is vital in secondary prevention. Earlier hip or vertebral fracture is already an indicator of high-risk, those with other fractures or only falls should be examined for bone mineral density. Adequate vitamin D plus calcium supplementation is basic therapy, and a wide selection of evidence-based drugs with different mechanisms of action are available. Drug therapy is selected according to individual properties, adherence and cost.

S1.3-5 11-06-2012, 13:45-15:15, Room 1

### Putting up a holistic integrated service for older patients with fragility fractures

MD Maria Nuotio  
*Seinajoki Central Hospital*

**Background:** Orthogeriatric collaboration with comprehensive outpatient geriatric assessment for hip fracture patients was organized as a novel service in a hospital district of ca 200 000 inhabitants.

**Method:** Starting from September 2007, all hip fracture patients aged 65 years and over were invited to have a comprehensive geriatric assessment 4-6 months after the fracture at the geriatric outpatient clinic with a preceeding physiotherapist's examination. Starting from September 2008, geriatrician's

rounds of hip fracture patients at the orthopaedic ward were provided.

A systematic treatment protocol agreed by orthopaedic surgeons, geriatricians and anesthesiologists was introduced to the hospital staff. The outpatient assessments and the ward rounds were carried out in a multidisciplinary team fashion. Baseline and follow-up data was collected by a geriatric hip fracture nurse starting from the perioperative phase and during the outpatient visit.

**Results:** Data were available on 177 patients in the first and 232 patients in the second year (87 % and 95 % of eligible patients). The patients were more likely to be operated by a consultant orthopaedic surgeon and to undergo hemiarthroplasty in the second year. Urinary catheters were also removed earlier. There was a trend towards shorter delay to operation and more frequent use of blood transfusions. Until November 2009, 451 patients were recorded into the hip fracture database. Of the survivors, 276 (76%) attended the outpatient assessment and of them, 241 (87 %) had a physiotherapist assessment. New falls were reported in 58 (21 %) cases. The fallers, compared to the non-fallers, were more likely to have difficulties in activities of daily living, orthostatic hypotension, more medications and a longer time in the Timed Up and Go test. More than half of the patients with moderate to severe dementia by the MMSE did not have a diagnosis of a memory disease at the time of the fracture. Based on the physiotherapist's assessment, 179 (74 %) were in need of further physical exercises.

**Conclusions:** The service showed improvements in the care of hip fracture patients and provided an opportunity for secondary prevention, diagnosis of memory diseases and further rehabilitation. The ongoing data collection will show the effects of the service development on longer term outcomes.

## S1.4 Constructing age-friendly communities: Comparative perspectives

Chair: Chris Phillipson

S1.4-1 11-06-2012, 13:45-15:15, Room 2

### Building Age-Friendly Communities in Urban Environments: Theoretical and Policy Issues

Professor Chris Phillipson  
*Keele University*

This presentation will focus on outlining both the case for ‘age-friendly communities’ and the strategies which need to be adopted to promote strong ties within neighbourhoods. The paper will give particular emphasis to issues facing urban areas, these experiencing both population ageing and the rapid changes arising from globalisation and migration. The paper will draw upon strategy documents from bodies such as the World Health Organization and the European Union as well as findings from research conducted in Europe and the USA concerning the impact of urban environments on the quality of life of older people. The discussion will, first, provide a summary of the case for age friendly cities; second, assess what is known from research examining the planning of urban space which can enhance social and cultural connections; third, assess the benefits as well as the barriers to achieving strong connections within communities; finally, outline the basis of a strategy for securing age-friendly communities within urban societies.

S1.4-2 11-06-2012, 13:45-15:15, Room 2

### Purpose-built retirement communities as age-friendly environments? Evidence from England

Professor Thomas Scharf  
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Co-authors:  
Jennifer Liddle  
Bernadette Bartlam  
Miriam Bernard  
Julius Sim

This paper seeks to contribute to emerging conceptual debates around age-friendly environments, providing evidence relating to the relative age-friendliness of a specific type of environmental setting. Its focus is on exploring purpose-built retirement communities as environments that might be assumed to be age-friendly by design. While such communities have emerged

as a housing option for growing numbers of older people, they have not yet been subject to critical examination through the lens of age-friendliness. The paper combines both theoretical and empirical approaches. It reviews the emerging literature around age-friendly environments to generate a common understanding of the key features of an age-friendly community. Drawing on a new definition of age-friendly communities, the paper then examines available empirical evidence arising from UK-based studies of purpose-built retirement communities to assess the degree to which such communities may be regarded as being age-friendly. Findings are reported from the mixed-methods Longitudinal Study of Ageing in a Retirement Community (LARC), conducted in a community in England, to explore age-friendliness in a more comprehensive way. LARC involved two waves of a questionnaire survey with residents (n=122 at Wave 1; n=156 at Wave 2), interviews and focus groups with key stakeholders involved in the staffing, management and design of the community, and other qualitative data collected from community residents in the form of ‘directives’ (i.e. invitations to residents to write on particular topics). Drawing the different components together, the paper concludes by identifying implications for future research, policy and practice development in relation to age-friendly environments. The paper argues that purpose-built retirement communities need to commit to the genuine involvement of residents in a regular cycle of planning, implementation, evaluation and continual improvement in order to facilitate active ageing.

S1.4-3 11-06-2012, 13:45-15:15, Room 2

### Activity as disciplining and gifting - The ‘in common’ of communities of active aging

Aske Juul Lassen  
*University of Copenhagen*

This paper explores the development of communities at activity centres in an urban setting. It examines two main questions: how can active aging be understood within communities at activity centres, and what role does activity play in the everyday life of older people? Active aging has received attention during the last years as a way to add healthy years to the lives of elderly and a way to save public resources (e.g. European Commission:2011). Following the work of Marcel Mauss (1954) and Roberto Esposito (1998) a community is defined by something in common, and is continuously constituted by gifting. The ‘in commons’ of the activity centres are age, local area and activities. Information and motivation on health and activity are gifted, but the elderly also use the centres to create village-like communities in an urban setting by establishing relations in their local area. Thus, the activities are means to achieve a more active social and physical life, but can also be seen as part of a social construction focused on health and bodily activity (Foucault, 1977). This is analysed as a Foucaultian bio-political disciplining, thereby relating the communities of active elderly to power and discourse. To examine these issues, the author conducted

two months of participatory observations at two activity centres in the Copenhagen area, and in-depth 1-2 day interviews and shadowing with 9 users of the activity centres. The findings suggested that the relation between activity and community has paradoxical elements. The two constitute each other, but there is also resistance towards overdoing activity, as it is often seen as part of a health regime. This results in an ambiguous stance toward activity in these communities. The paper concludes that active aging is a specific way to be old and an enriching communal practice, but that the same communities also perceive it critically as a ‘health-regime’ tool.

S1.4-4 11-06-2012, 13:45-15:15, Room 2

### Feelings of Safety in Old Age: Evidence from the City of Brussels

Professor Dr. Liesbeth De Donder  
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This paper aims to explore the environmental determinants of feelings of safety among older people in an urban context. While most research focuses on the relationship between feelings of unsafety and crime experiences or risk of victimisation, this study takes account of broader contextual factors that may influence feelings of safety, including aspects of age-friendly environments. Data for the paper are derived from the Belgian Ageing Studies, a project that uses structured questionnaires to collect information about various aspects of quality of life among older adults at the level of municipalities. Using data from over 47.000 older adults, the study compares the city of Brussels with other communities beyond Brussels. Data analysis revealed that older people living in Brussels feel considerably less safe than those living in other locations. In exploring the determinants of feelings of safety, we examined which components of daily life enhance a feeling of safety; how the age-friendliness of the neighbourhood can increase or can decrease feelings of safety; and which of those factors are most important in understanding feelings of unsafety among older people living in Brussels. The argument will be developed that a broader ‘age-friendly’ perspective - beyond crime and victimisation - contributes to a deeper understanding of feelings of unsafety. The paper concludes with a number of policy recommendations and strategies to tackle feelings of unsafety among older people living in urban environments.



# S1.5 Ageism - concepts and empirical results

Chair: Per Erik Solem

S1.5-1 11-06-2012, 13:45-15:15, Room 3/4

## Ageism, a multi-dimensional concept

Associate Professor Lars Larsen  
Århus University

Research on Ageism has focused on the causes, the consequences, the concept, and the ways in which it may be reduced. The study of causes, consequences, and prevention has marked the field of research, whereas the conceptual aspect has been somewhat neglected. This means that today we have an important field of gerontological research operating with a multidimensional concept and researchers not always explicitly stating what they mean by the term Ageism. As a consequence the area is characterized by diverging research results which are hard to re-test and to compare. A good definition is an advantageous starting point for subsequent operationalizations. Further, it constitutes a sound foundation of a high reliability and validity in studies of any phenomenon including Ageism. In this presentation the different definitions of Ageism will be systematized according to their conceptual components; does the definition include the cognitive, affective and behavioral components, the positive and negative aspects, implicit and explicit forms of Ageism and are ageism on micro-, meso- and macro- levels included? Finally a new definition is proposed.

S1.5-2 11-06-2012, 13:45-15:15, Room 3/4

## Ageism vs. age coding: An examination of theoretical frameworks and analytical scopes

Associated Professor Clary Krekula  
Karlstad University

Studies of ageism have held a prominent position within social gerontological research for some time. Extensive research in this area has revealed that the elderly are subjected to negative treatment within different areas of social life. These results are an important contribution to strengthening the position of elderly persons in society. However, in order to achieve a new order it is not enough simply to reveal the presence of ageism. Institutional transitions and long term measures based on analyses of the reasons for inequality are also necessary. That is, research is also needed that reveals those processes by which age based inequality is created. An important question is therefore to what extent the theoretical concepts we currently use also have the potential to reveal how this

inequality is created and therewith also how it can be challenged. In this paper I make such a contribution through a discussion of the concepts of ageism and age coding, respectively. The analyzed material consists of four focus group interviews on age discrimination in Swedish working life, involving 14 women and 9 men between the ages of 22-61. Based on the material, I will argue that age based inequality can be particularly difficult to detect in part due to the limited debate on the phenomenon, and due to individuals' shifting age positions over the life course. I further discuss the limitations of the concept of ageism in relation to analyses of processes taking place at an interaction level, as well as illustrate how the concept age coding can identify institutionalization of age inequality. The concepts have, as I argue, different roles in light of age based inequality and should therefore be viewed as complimentary.

S1.5-3 11-06-2012, 13:45-15:15, Room 3/4

## Ageism and discourse, the case of the category of older drivers

PhD Satu Heikkinen  
Linköping University

In this paper discourse analysis is used to analyse the presence of ageism in debates on 'older drivers' in Swedish transportation policy. 'Older drivers' is a category which has been claimed to be stereotyped and subject to ageist practices. However, little research has been made on analysing ageism in relation to 'older drivers' which means that the mechanisms beneath or even the occurrence of ageism can be disputed. The category of older drivers therefore seemed suitable as an empirical case in order to discuss the usefulness of discourse analysis in investigating ageism. More specifically, a discourse analytical framework based on Michel Foucault is utilized as an example in the paper. The objective of the study is threefold: First to analyse the discursive construction of the category of older drivers, second to relate the construction of older drivers to questions of ageism and third to discuss some strengths and limitations of the discourse analytical framework in investigating ageism. The Foucaultian framework of discourse analysis temporarily puts assumptions of ageism aside and can be used to focus empirically on how age functions as a basis of categorisations in society. The analysis shows how the category 'older drivers' is used in different contexts and how many practices simultaneously constitute the category. The analytical framework is also used to discuss the consequences of certain practices on older people as well as power relations between different social categories. The results are then evaluated with regard to age based power relations. The paper argues that in order to consider if certain practices or images are ageist it is important to highlight their relationship to cultural 'figures of thoughts' e.g. the conception of the age-graded normative life course where midlife is most highly valued. Some strengths and limitations of the framework are then finally discussed.

S1.5-4 11-06-2012, 13:45-15:15, Room 3/4

## Ageism in the Nordic countries and Europe. Data from the European Social Survey

Mr Ivar Lima  
Norwegian Social Research

(Abstract is not presented)

S1.5-5 11-06-2012, 13:45-15:15, Room 3/4

## Age discrimination in Norwegian working life.

Professor Per Erik Solem  
Norwegian Social Research

**Objectives:** The paper explores the prevalence of age discrimination, the behavioural dimension of ageism, in working life; by job recruitment, at the workplace and by exit from working life. **Methods and theories:** The analyses are based on the general concept of ageism (Iversen et al. 2009), and dimensions on ageism in working life (Furunes et al. 2008). Data are from the Norwegian for employed persons (N=1000 each year) and one for managers (N= 750). Since age discriminaton in working life is prohibited by law, it is not straightforward to establish the prevalence of age discrimination in working life. **Results:** By recruitment Norwegian managers tends to hesitate to call in applicants above an average age of 57,8 years for interview, 61,7 years in public sector and 56,9 year in the private sector. About one of five managers and one of four workers say that they at least occasionally have experienced that older workers are passed over for appointments and internal recruitments. By exit, age discrimination is not necessarily illegal, since Norway still stick to a mandatory retirement age of 70 years, or even at an earlier age if the pensionable age in the company pension system are lower. Less than 30 per cent of workers are in favour of such legal age discrimination, while the majority of politicians, employers' organisations and labour unions approve it. **Conclusion:** Managers in the public sector seem to be more interested in older workers and tends to discriminate less than in the private sector. Probably, the public sector is less attractive for younger workers and public managers may to a smaller extent afford to discriminate older workers. Older workers seem more attractive in the public sector, particularly in the municipalities.

# S1.6 The ethnic/migration lens: Expanding the gerontological imagination

Chair: Sandra Torres

S1.6-1 11-06-2012, 13:45-15:15, Room 12

## Not (just) 'old': Identity, migrantship, old age and the gerontological imagination

PhD Candidate Laura Machat-From  
Linköping University

This presentation focuses on identity in old age as a field which can be expanded through the use of both a social positions lens and, more specifically, an ethnicity/'race' lens. It first discusses the results of a review of literature on identity in old age which has explored the role that social positions (i.e. gender, ethnicity/'race', class, (dis)ability, sexual orientation) have played in this body of research. Finding that all social positions but gender in fact largely have been neglected in this field thus far, it is argued that the inclusion of social positions in future research on identity in old age is key to advancing this field. Then, the presentation proceeds to present preliminary findings from a study of identity in old age that has incorporated an ethnicity/'race' perspective. The project in question focuses on identity negotiations in relation to old age and migrantship (i.e. ethnic otherness as the result of migration), exploring the intersection between the two. Empirical data consists of 24 individual interviews with 13 foreign-born men and 11 foreign-born women aged between 55 and 79 who have been living in Sweden for 18 to 61 years. With the help of both the review of previous research and the preliminary results from this study (which implements that which the review asks for), it is thus demonstrated how the gerontological imagination can be expanded by way of employing both a social positions lens and an ethnicity/'race' aware lens.

S1.6-2 11-06-2012, 13:45-15:15, Room 12

Media representations of culture-appropriate care and of ethnic ‘Otherness’: a study of Swedish newspaper articles on elderly care

Professor Sandra Torres  
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And:  
Researcher Jonas Lindblom  
*Mälardalen University*

This presentation departs from a project that focuses on media representations of elderly care. The understandings of ethnic ‘Otherness’ that newspaper articles about elderly care that have focused on ethnicity, culture, migration, language and religion attest to is what is at the core of the presentation. Methodologically speaking, the project departs from content analysis of all articles published in a major daily newspaper in Sweden between 1995 and 2008 that have touched upon the issues in question (n=101). In this presentation we will focus on the theme that was most prominent in these articles, i.e. culture-appropriateness, in order to shed light on the understandings of ethnic ‘Otherness’ that this particular debate exposed. The results show that culture-appropriate care is almost exclusively discussed by focusing on immigrants as care recipients, while the topic is only in exceptional cases viewed from the perspective of elderly care providers or the relatives of elderly care recipients (often referred to in the literature as informal caregivers). This means, among other things, that the implications of immigrants’ recruitment for elderly care recipients with an ethnic Swedish background were almost never discussed. The presentation How is it will address the following questions: how is it possible to exclusively discuss culture-appropriateness as an issue that only concerns immigrants as care recipients? What assumptions underlie this focus and the corresponding exclusion of other elderly care actors’ perspectives on culture-appropriateness? The presentation aims namely to problematize the way in which ethnicity and culture seems to be understood in the public debate and the implications that these understandings may have for gerontological practice.

S1.6-3 11-06-2012, 13:45-15:15, Room 12

Transnational relationships in old age

PhD Candidate Sari J. Heikkinen  
*University of Tampere*  
Co-author:  
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This presentation focuses on the older migrants transnational relationships. It is based on interview data of older migrants who have moved from the former Soviet Union to Finland. Interviewees have migrated in old age and they do not have any

working history in the host country. The paper provides an analysis of how transnational connections as important social relationships are tightly connected with wellbeing in a host country. The interviewees give their accounts on relationships over the borders on explaining their position between two places; the society and social relationships in a former home country and in Finland. The findings suggest that studying how and why older migrants sustain their transnational relations must also be considered in the respect of age. Transnational connections mean family affiliation, sharing emotions, larger social network and maintenance of agency especially to the interviewees who have poor language skills, the lack of know-how of the host society and few social contacts. Due to the age and frailty keeping on contacts over the borders often requires family members or other close relatives or friends to agent messages on behalf of them. According to the study transnational relationships play a great role in older migrants’ lives; phone calls, post cards, visits and waiting for those connections are a vital part of respondents’ everyday life. Transnational connections also give older people a sense of integration to the host society.

S1.6-4 11-06-2012, 13:45-15:15, Room 12

“The best situation would be to be together with my entire family”: The emotion work and kin work of older refugees in transnational families

PhD Candidate Marith Kristin Gullbekk Markussen  
*Akershus University College of Applied Sciences*

This presentation focuses on a group of older migrants whose lives have not yet been seriously explored by migration researchers nor gerontologists, i.e. refugees. Existing socio-gerontological research on older migrants have so far primarily focused on voluntary migrants. In this presentation I will focus on older refugees’ transnational family life. This kind of family life, where family members are scattered around the globe, requires that family members engage in emotion work and kin work aimed at maintaining family relations across time and space. However, as most of the existing studies on transnational families focus on younger, voluntary migrants, little is known about the emotion- and kin work of older, involuntary migrants (refugees). This paper makes three main contributions, based on individual qualitative interviews with 15 older Somali men and women aged 55-70 who have been living in Norway for 6 to 20 years. First, I will investigate what is particular about old age, refugeehood and transnational family life. Then I will explore the emotion work and kin work the older refugees perform in order to maintain transnational family relations, and finally, look at the barriers they encounter in their transnational emotion- and kin work.

S1.6-5 11-06-2012, 13:45-15:15, Room 12

Understandings of social inequality in old age: how can the ethnic/ migration lens expand the gerontological imagination?

Professor Sandra Torres  
*Uppsala University*

This presentation departs from two different approaches to social inequality (i.e. the one advocated by migration researchers and the one that is commonly taken for granted by social gerontologists) in order to problematize some of the assumptions that gerontology’s understanding of social inequality in old age take for granted. Through a focus on different types of older migrants this presentation aims also to nuance our understanding of how the social position known as migrantship affect people’s risks for inequality in old age. The point of departure is therefore that there are specific risks for social exclusion associated with the migratory life-course even if mechanisms of social exclusion are bound to work differently depending on the when, why and where surrounding the migratory life-course. The manner in which social exclusion is experienced by older migrants will depend, however, not only on the type of migration they have engaged in (e.g. international labor migrants, family-reunification migrants, amenity-seeking migrants and refugee) but also on the social positions (class, ethnicity and gender to name a few) from which they depart. By pointing toward the differences in conceptualizations of social exclusion that are characteristic of both, gerontological research and research in migration/ ethnicity-related issues, this presentation will explore different solutions to the problem of social exclusion as well as different conceptualizations of what social integration is.

S1.7 Social capital, neighbourhood and well-being of older adults

Chair: Tine Poulsen

S1.7-1 11-06-2012, 13:45-15:15, Room 13

Social capital and self-rated health among older people in Western Finland and Northern Sweden: A multilevel analysis

PhD Fredrica Nyqvist  
*National Institute for Health and Welfare (THL)*  
Co-author:  
PhD Mikael Nygård  
*Åbo Akademi University*

**Objectives:** Although a relationship between social capital and health has been widely recognized, relatively few studies have focused on the association between social capital and health among older people. Social capital can be conceptualized as an individual resource residing in relationships between individuals or as a collective resource produced by coordinated actions by individuals in a neighbourhood, community or society. In this study we acknowledge its dual focus and assess the evidence for an association between area- and individual-level social capital and self-rated health.

**Methods:** Data were retrieved from a cross-sectional postal questionnaire survey conducted in 2010. The study included in total 6838 people aged 65-, 70-, 75-, and 80-years living in the Bothnia region of Finland and Sweden. The association between social capital and self-rated health were tested by multilevel logistic regression analyses. Four models were fitted in order to assess the impact of two individual-level social capital variables as well as two aggregated social capital variables at the municipal-level. Social capital was measured by two survey items: interpersonal trust and social participation.

**Results:** The results showed that municipal-level social capital did not contribute significantly to individual-level health. However, individual-level social capital including social participation and interpersonal trust were significantly associated with health.

**Conclusions:** We conclude that context such as municipality is less important in understanding the influence of social capital on health in socio-cultural homogenous communities in the Bothnia region of Finland and Sweden. To the extent that social capital influences health, our study shows that its possible effect reside in social participation and trust as possessed by individuals. We suggest that other ways of defining social capital at the collective level, such as the inclusion of neighbourhood social capital, could be one direction for future research.



S1.7-2 11-06-2012, 13:45-15:15, Room 13

Social capital, neighborhoods and health - the significance of gender and age\*

PhD, Senior lecturer Malin Eriksson  
*Umeå University*  
Co-authors:  
PhD, Associate professor Nawi Ng  
Umeå University PhD, Professor Lars Weinehall  
*Umeå University*  
PhD, Professor Maria Emmelin  
*Lund University*

**Objectives:** Research on social capital and health has fuelled the debate on whether there is a place effect on health. A central question is if health inequality between places is due to differences in the composition of people living in these places (compositional effect) or differences in the local environments (contextual effects). Recent studies indicate that contextual effects on health may vary for different population sub-groups and measuring “average” contextual effects on health might therefore be inappropriate. This study aimed to investigate the associations between collective social capital and self-rated health for men and women, to understand if health effects of collective social capital are gendered.

**Methods:** Cross-sectional data from a social capital survey in the municipality of Umeå in Northern Sweden was used. The study included in total 5678 people aged 18-84 years. Sex stratified multilevel regression analysis was used to calculate odds ratio for good-fair self-rated health for individuals living in neighbourhoods with different levels of social capital. In a later stage, we further stratified the analyses for age. Two measures of collective social capital were used: one conventional measure (aggregated measures of trust, participation and voting) and one specific place-related (neighbourhood) measure.

**Results:** The results show a positive association between collective social capital and self-rated health for women, but not for men. When controlling for various individual characteristics, the relationship between women's health and collective social capital remained statistically significant when using the neighbourhood-related measure, but not when using the conventional measure. Preliminary analyses of the age stratified analyses suggest that the positive health effects of collective social capital may be higher for women in the oldest age group (65-84) compared to women in the younger age groups.

**Conclusions:** The health effects of collective social capital might be gendered in favour for women. However, a more equal involvement of men and women in the domestic sphere would potentially benefit men in this matter. A neighbourhood-related measure may provide a clearer picture of the health effects of collective social capital, at least for women.

\*These results refer to Eriksson et al. (2011), published in Social Science & Medicine, 73:264-273. Additional age-stratified analyses were performed in advance for this presentation.

S1.7-3 11-06-2012, 13:45-15:15, Room 13

How does the relationship between social capital and health change with age?

PhD Candidate Julie Norstrand  
*Boston College*  
Co-authors:  
PhD Candidate Keith Tsz-Kit Chan  
*Hartford*

**Objectives:** The link between social capital and health has been well documented, yet we still have little understanding of how this relationship changes with age. This is an important consideration as we are experiencing increased longevity today. The objective of this paper was to examine whether the relationship between social capital and health among three aging cohorts (65-74, 75-84 and 85+ years) changes as people age.

**Method:** For this paper, Putnam's definition of social capital was applied: “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.” The analyses were based on data collected from a 2010 community health survey from 5 counties of South Eastern Pennsylvania. Standard linear regression model by each age group were carried out to test the relations among 5 social capital indicators (trust, neighbors help, sense of belonging, participation in groups, social networks) and 3 health outcomes (self-rated health, activities of daily living (ADL), instrumental activities of daily living (IADL), and depressive symptoms). Standard socio-economic indicators were accounted for as covariates in the analyses.

**Results:** Different indicators of social capital indicators (except social networks) remained significant for health outcomes (except ADL). Findings suggest trust and sense of belonging are particularly important for health even into very old age. How age mediates this relationship will be further examined.

**Conclusions:** These results further our understanding of how the social environment impacts persons as they reach very old age and call for continued efforts to take the social environment into account when developing age-friendly environments.

S1.7-4 11-06-2012, 13:45-15:15, Room 13

Aspects of Social Capital and the Impact on Mortality 8 Years after Among Older Adults

Phd Student Tine Poulsen  
*University of Copenhagen*  
Co-authors:  
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PhD Volkert Siersma  
PhD Rikke Lund  
DMSc Mikkel Vass  
DMSc Kirsten Avlund

**Objectives:** Social capital has been measured in many ways, and this also goes for studies on older adults. Different kinds of contextual or compositional measurements have been used. Previous studies are characterized by using broad age groups (from young to old people) in the same study. Further, the studies do not reflect common definitions of social capital and often they only measure few aspects of social capital or they combine different aspects of social capital into one score. The purpose of this paper is to propose theoretical measures of three aspects of social capital to be used in older populations, and to analyse the impact of these three measures of social capital on all-cause mortality at 8 years follow-up among older people aged 75 and 80.

**Methods:** Data are from a Danish prospective cohort study on preventive home visits among 4,034 old people 75+ in 34 municipalities in Denmark with 8 years follow-up. The measurements of aspects of social capital at community-level are based on theory of bonding, bridging, and linking social capital. Cox regression analyses have been used to study the associations between the three aspects of social capital and all-cause mortality.

**Results:** It has been possible to analyse variations in the three measurements of social capital in the 34 municipalities, and to characterise different municipalities according to high versus low social capital. We found significant associations between mortality and both bridging (HR=1.24) and linking (HR=1.21) social capital in the 80 year-old-cohort, but controlling for relevant confounders attenuated the associations.

**Conclusion:** The study contribute to the literature of social capital and older peoples’ health with measures that focus on older peoples’ community and which had a distinction between bonding, bridging, and linking.

S2.1 Policy, research and practice in the care of elderly people with complex health problems and severe needs. Experiences in the Nordic countries

Chair: Lennarth Johansson and Mats Thorslund

S2.1-1 12-06-2012, 08:30-10:00, Plenum 8/10

Providing eldercare to people with complex health problems and severe needs -highlights from an ongoing national evaluation study in Sweden

Senior Researcher Lennarth Johansson  
*Aging Research Center*  
Co-author:  
Professor Mats Thorslund

**Background:** Care of elderly people in Sweden has undergone substantial changes in recent decades. A major shift has been the de-institutionalization and decentralisation of the responsibility for eldercare. Driven by the ageing in place policy and cost containment measures, substantial cuts have been made in institutional care and these cuts have not been compensated for by a corresponding increase in the provision of home based care. This development has led to elderly people with complex health problems and severe needs being forced to seek acute hospital care, often as a result of a breakdown in home care provision.

**Objectives:** In 2010, the national government granted financial incentives to projects aimed at improving home based care for elderly people with complex health problems and severe needs. The objective was to try to stimulate new, innovative eldercare models to alleviate the problems involved with providing coordinated round the clock services and care to very frail older people living at home. A total of 19 local developmental projects all over Sweden received government grants. In 2011, the Aging Research Center (ARC) was commissioned by the government to carry out a scientific evaluation of these projects over a three year period (2011 - 2014).

**Methods:** Under the first phase of the evaluation a descriptive base study was conducted during which all local project sites were visited and reviewed. Project plans, local data and local evaluation plans were collected and analyzed.

Results: The evaluation work is now under way and initial findings include the following observations: none of the projects have included the institutional care setting; Primary Health Care is notable by its absence; and the majority of the projects are focused on different kinds of Case Management models and multiprofessional teams.

**Conclusions:** Only a minority of the projects can provide the data necessary for a scientific evaluation. This is mainly due to

poor targeting of people with complex health problems, lack of base-line data, poor descriptions of the interventions and also poor basic evaluations knowledge/experiences. This reflects a culture, where the development of services and care, primarily is based on local traditions and praxis, rather than scientific knowledge.

S2.1-2 12-06-2012, 08:30-10:00, Plenum 8/10

### The care of frail older people in Iceland

Associate professor Sigurveig H. Sigurðardóttir  
*University of Iceland*

Iceland, as a nation, is rather young compared to most other European countries but the trend is towards an older population. The population of Iceland is 319.000, of whom 12% are 65 years of age and older. In the last 30 years many changes have taken place concerning the care of older people. A special Act on the Affairs of the Elderly was implemented in Iceland in 1982 with the purpose to ensure that older people should have access to health care and social services and to guarantee older people the possibility to enjoy a normal domestic life as long as possible. Despite this purpose the ideological shift from institutional to home care occurred later in Iceland than in other Nordic countries and the care model is considered more medical than social. The ageing-in place ideology has met many obstacles. Due to more stringent assessment regulations for admission to Nursing Homes the waiting lists have become shorter the recent years but it is debated if too frail older people are staying at home, without adequate formal services. The state has been responsible for the expenses of institutional care and the Home Health Care, but the municipalities have provided and paid for Home Help and other community services. The plan is that municipalities take over all the services for older people. This expanding coordination of domestic services for older people is expected to result in better quality of services and to increase the possibility for them to live longer in their own homes. In the presentation the future challenge in care of frail older people in Iceland will be discussed.

S2.1-3 12-06-2012, 08:30-10:00, Plenum 8/10

### Policy, practice and research in Denmark on care for older people with complex problems

Professor Eigil Boll Hansen  
*AKF, Danish Institute of Governmental Research*

The provision of care for older people has in Denmark for many years been the responsibility of the municipalities. The field of care is regulated through national legislation, but there is much free scope for the municipalities to decide the structure, the

composition and the quality of publicly financed care for older people. There are general trends in the Danish municipalities' provision of care, but at the same time local arrangements and innovative practice are observed.

This presentation will assess the overall situation and tendencies with respect to care for older people with complex problems. The general tendencies in residential care and home care will be described as well as political initiatives at the national level concerning the development of care for older people. E.g. a national action plan on dementia has been formulated; a commission on quality of life and self determination in residential care will finish its work in the spring of 2012, and the formulation of a national action plan on frail older patients suffering from chronic conditions and often with multi-morbidity is decided.

At the municipal level focus seems to be on testing and implementing new welfare technology and on re-ablement of home care recipients. The presentation will give examples of experience from innovative ways of providing care to older people with a special focus on older people with complex problems. The presentation will assess the situation with respect to research in Denmark on care for older people.

S2.1-4 12-06-2012, 08:30-10:00, Plenum 8/10

### Policy, research and practice in the services for frail elderly people in Finland

MD, PhD Matti Mäkelä  
*National Institute for Health and Welfare*

Co-authors:  
MD, PhD Harriet Finne-Soveri  
PhD Anja Noro

The active policy initiatives concerning services for elderly people in Finland are primarily population-oriented, and not specifically directed towards frail people. The most important policy tool is expected to be a right to services identified by a universal needs assessment, currently under legislation. A national program for dealing with memory problems is being developed. No national projects or practices directed specifically towards frail elderly people have been identified in Finland. In this context, the most important intervention research has shown the effectiveness of a multicomponent intervention program for with a family care coordinator for patients with dementia and delirium.

Not only policy but also the research into services actually provided to frail elderly people has been population-oriented. An important input has been research into the proximity to death as a determinant of health care use: the last two years of life is the period with the highest need for intensive health care, with important variations by age, gender and municipality. Also, public statistics show a consistent downward trend of acute hospital episodes. Thus, aging in itself does not indicate an increased need for high-intensity health care.

Various identifiers of frailty can be used in the population of

long-term care (LTC) and home care (HC) clients of the participants of the Finnish RAI benchmarking network, covering about 30% of the Finnish LTC and HC clients.

There are large differences in local policies on the provision of HC services to frail and very frail persons, leading to variations in the distribution of frailty among HC clients. Also, in most communities, the setting of care for frail and very frail persons is not systematically determined by frailty levels, and the frailty distributions among clients in various settings of HC and LTC indicate room for policy alternatives.

S2.1-5 12-06-2012, 08:30-10:00, Plenum 8/10

### The coordination reform" in Norway - a step forward or backward for the elderly patient?

Professor Tor Inge Romøren  
*Gjøvik University College*

The Norwegian "Coordination Reform" was presented in 2009 and implemented from January 2012. It aims at reducing the demand for hospital admissions, especially among the elderly and chronically ill. This is one of several policy measures to maintain sustainable welfare services through the demographic changes in the decades to come. Other measures are a revised pension system and a de-institutionalized eldercare.

The Coordination Reform is has much in common with recent changes in Danish health care. In Norway, two measures are implemented to reduce hospitalization of elderly people: a new payment system for hospital stays and development of intermediate care facilities in the communities.

In Norway the hospital sector is run on national level, primary health and long-term care on the municipal level. From 2012 the municipalities will have to pay part of the costs of in- and outpatient services for all medical cases referred to hospitals. In addition, all hospital costs for patients ready for discharge must be paid for if they are not transferred immediately to primary health care. In addition, before 2016 all Norwegian municipalities are obliged to develop acute beds for admission of patients not in need of specialised hospital services.

Through economical incentives and a widened responsibility for acute care the municipalities are expected to take over the responsibility for a larger part of elderly and chronic ill people, expected "to get better acute services closer to where they live". Ideally this may sound like an improvement of services for these patient groups. However, many of Norway's 430 municipalities are small and remote, a fact that may make the recruitment of competent personnel to give hospital-like health care difficult, and hence lead to low quality services for the targeted patient groups.

This presentation will give more details about the background and means of the reform and analyse experiences from the first stage of its implementation.

## S2.2 Provision of assistive technology to support cognitive functioning in persons with dementia, and to reduce the care burden for family carers

Chair: Torhild Holthe

S2.2-1 12-06-2012, 08:30-10:00, Plenum 9/11

### The importance of Nordic collaboration in the area of dementia and welfare technology

Occupational Therapist, Project Coordinator Ingela Månsson  
*The Swedish Institute of Assistive Technology*

There are many advantages with Nordic collaboration for institutions and organizations supporting persons with dementia and their families. In the Nordic countries there are a number of interesting research and development projects and knowledge, which all the Nordic countries could benefit through more extensive cooperation.

In a previous project called "Technology and Dementia in the Nordic countries" a model for such knowledge exchange was developed. That was the first project where all the five countries (Iceland, Norway, Finland, Denmark and Sweden) collaborated to carry out a project investigating successful use of new assistive technologies by people with dementia and their family carers. This project proved that it was possible to work together across the borders, to learn from each other and to utilize the common results in each country, after the end of the project.

The project demonstrated that assistive technologies have potential to support people with dementia and their family carers. Persons with dementia and their families who participated in the project described successful use of new assistive technology in many different ways. Different products supported the users in different situations and many times a day. And, one product may be used differently by the persons with dementia; for example a memory clock was used by one to check the time of day, hearing a voice telling the time. Another used the same clock to remind her about her appointments, by listening to messages recorded into the product by a helper earlier on.

Still, one of the biggest and overall dilemma in all the Nordic countries is that persons with dementia and their families seldom get access to proper "welfare technology". And, if they get AT, they usually get it too late. Therefore, it is important that the Nordic countries continue to collaborate, and imperative issues are dissemination of knowledge and networking, as well as procedures for providing AT to persons with dementia.



S2.2-2 12-06-2012, 08:30-10:00, Plenum 9/11

## Successful use and provision of Assistive Technology (AT) for persons with dementia: Results from a Nordic research project

Occupational Therapist MSc Astrid Andersen  
*The Norwegian Centre for Research, Education and Service Development*

The project "Technology & Dementia in the Nordic countries" investigated procedures of user needs' assessments, and implementation and use of AT that may support people with dementia at home.

The objectives were to investigate use of AT in the area of dementia, and specifically look for successful experiences with AT which could demonstrate a high degree of personal independence and quality of life, and to identify important factors in the process of providing AT.

**Methods:** Twenty-nine persons with the diagnosis of dementia and/or their relatives as well as professionals providing AT were interviewed about their experiences with assessment of needs for AT, the implementation and the use of the devices in the daily life. A thematic qualitative analysis focused on the usefulness and benefit of cognitive assistive technology in the daily living for persons with dementia, and on the function of the service delivery system in order to identify relevant procedures for providing AT to cognitively support persons with dementia.

**Results and conclusion:** The analysis of data accentuates that AT may support independence, feeling safe and secure, and strengthen the user's activity and social contact. But the results also tell us, that AT that support cognitive impairment are not commonly known among professionals, family caregivers or the persons with dementia. Concerning the process of assessing the need for and implementation of AT to support mental functions, the study revealed that usually only isolated problems were solved. The families were not offered a holistic evaluation, which could take all their problems into consideration.

The conclusion is that extensive information about AT to support cognitive functions, is needed. Also methods for identifying needs and systematic processes for provision of AT are required. On background of these results, a guideline for provision of AT has been developed in the field of dementia.

S2.2-3 12-06-2012, 08:30-10:00, Plenum 9/11

## A dilemma in using GPS solutions for localisation of people with dementia

BScE.E. Henrik Svensson  
*Danish Centre for Assistive Technology*

**Objectives:** The Global Positioning System (GPS) has been a success

for finding way on the roads and sea for many years. In recent years this technology has been combined with mobile phone technology and the internet for localisation of stolen vehicles, boats and people.

Both demented people in an early phase of dementia and responsible persons around them, see this solution as a way to reduce the risk of demented getting lost, and improve mobility and independence. Also locating lost people is often a resource demanding task for family carers, nursing home staff and police, which can be reduced using a good GPS localisation solution. In Denmark, several municipalities have tested GPS localisation with citizens suffering from dementia. The results are diverse and apart from the ethical dilemma of tracking people, there is a dilemma between, on one side obtaining the safety benefits of localisation, and on the other side the potential false safety, false positive alarms and the burden of maintaining the solution.

**Method:** Based on engineering knowledge and experience on the technologies, the inherited limitations of the current localisation technology are explained. The problems experienced during some practical Danish tests of localisation solutions are compared with above inherited technology limitations, and the user relevant issues identified. With this identification, reflections and recommendations are presented in order to support decision making and manage the expectations of use.

**Conclusion:** The presented limitations of the available GPS-technology, and the specific individual requirements, must be taken into account in the decision of implementing a GPS solution for locating a person with dementia. There is a risk that highly technical combined solutions like GPS-localisation will not be sufficient in special situations, causing a false safety. In addition the daily task of maintaining the solution is also a disadvantage. However, for many persons, a mobile GPS-locator solution can improve quality in daily life or work, and the presented deficiencies have to be compared with alternative measures needed in place of the localisation solution.

S2.2-4 12-06-2012, 08:30-10:00, Plenum 9/11

## Assistive technology (AT) to support younger people with dementia and their family carers in everyday living: Dilemmas and challenges

Occupational Therapist MSc Torhild Holthe  
*The Norwegian Centre for Research, Education and Service Development*

The study is part of the Norwegian program on Younger people with dementia 2009-2011, and aims to investigate how younger people with dementia and their family carers uses and benefit from AT to support everyday living. This paper focuses some dilemmas and challenges identified during this follow-up study. Twelve persons with dementia below 65 years of age and their family carers were recruited from four Memory clinics in Norway, and participated between three and nineteen months, using AT to support everyday living. A participatory design was chosen

in order to include the person with dementia, their family carer and the data collector in the mutual learning process about use, benefit and significance of AT device. Interviews, observation and film were used as data collection methods. Several dilemmas occurred during the study, and three of them will be presented: 1) Identifying user needs reveal problems and helplessness. The user needs analysis necessarily included both investigating problems and needs. This may easily be perceived as problem-focused and negative for the participants. 2) AT's potential to support the person with dementia. A device could promote the users independence, i.e. a simple remote TV-control may enable turning on and off TV and select a preferred channel. However, as the dementia deteriorates, a growing need for verbal instructions from the carer may occur. Something being a release may suddenly become a burden. 3) AT's potential to support the family carer. The AT used showed the potential to support the family carer, by reducing repeated questions, facilitating locating lost objects and supporting safety and security in the home. However, use of AT on a regular basis required engagement and commitment from the family carers. More research and more empirical data are necessary for learning more about use, benefit and significance of AT to persons with dementia and their carers.

S2.2-5 12-06-2012, 08:30-10:00, Plenum 9/11

## People living with dementia and use of technology: ethical aspects

PhD Päivi Topo  
*University of Jyväskylä*

Technology has been designed for years to support people with dementia and their informal and formal caregivers. Despite the development work the use of technology is still limited. Part of the slow implementation of technology in this field is due ethical questions and dilemmas. The aim of this presentation is to illustrate the main ethical issues in use of technology in supporting people with dementia and their caregivers. The main issues are related to privacy, autonomy, competence, justice and efficiency. In addition, ethical issues in research and development such as information consent and quality of data are discussed. The presentation is based on (i) review of previous literature on dementia, ethics and technology, (ii) literature review which included 66 intervention studies on the topic and (iii) interviews of seven family carers who had long experience on living with a person with Alzheimer's disease or other disease causing dementia. Theory based content analyses was carried out in analyzing the literature and the interviews. The first literature review showed that most texts published on ethical issues, dementia and technology are discussion papers and not based on information gathered from people with dementia or their families and that they were mostly concerned about use of surveillance technology. The second literature study showed that the intervention studies mainly focused on supporting formal caregivers or family caregivers and that the role of people with dementia was often very limited.

The aim of the studies was mainly to improve safety. The analyses of the interviews showed the lack of knowledge about existing technology and potential of physical environment in supporting people with dementia and their families. All the findings suggested that there is a need to broaden the ethical discussion to include not only privacy but also autonomy, competence, justice and efficiency.

S2.2-6 12-06-2012, 08:30-10:00, Plenum 9/11

## Adaptation and assistive technology are essential elements in rehabilitation of persons with dementia. Presentation of themes from a new book about (2012) rehabilitation and dementia

Occupational Therapist MSc Lilly Jensen  
*Danish Centre for Assistive Technology*

Objectives of the book about rehabilitation of persons with dementia are to demonstrate to professionals and students, that people with dementia can go on with their activities and social participation longer than normally expected, when an individual and targeted rehabilitation is implemented. The methods to do this is through results from research and from practice to demonstrate, that there in many aspects is evidence for starting relevant rehabilitation for people with dementia through all stages of the disease. In this rehabilitation process focus on adaptation and assistive technology together with personal aspects are essential elements in rehabilitation. The theories which are the fundament for the presentations in the book of rehabilitation of people with dementia are the approach to health given in the International Classification of Function and Health from WHO (ICF) and the first Danish definition and understanding of rehabilitation, described by a group of handicap societies and organisations from the official Denmark and professions in the rehabilitation area 2004. The results given in the book for rehabilitation of people with dementia show that there are many ways to adapt the personal surroundings and that there are many possibilities to use individual adjusted assistive technology for maintaining the daily activities, participation and inclusion. Conclusion for the information given in the book is that it is important to elaborate individual rehabilitation plans for people with dementia, which examples demonstrate through the book. Further more the authors conclude, that it is important to focus on rehabilitation and dementia, which is enhancing quality of life for people with dementia and their relatives, and which seems to minimize the expenses in the area of dementia.



## S2.3 Ageing in small rural communities: Dilemmas for western countries

Chair: Jeni Warburton

S2.3-1 12-06-2012, 08:30-10:00, Room 2

### Marginalized or Aging-Well? Discourses on rural aging in Canada

Professor Norah Keating  
*Department of Human Ecology, University of Alberta*

Publications on rural aging in Canada over the past 20 years reflect two lenses in rural aging. The ‘marginalization’ lens is on older adults who are at risk because they lack personal or community resources to meet their needs. This body of research is particularly important in highlighting the needs of vulnerable older adults. In contrast, the ‘aging-well’ lens reflects a focus on the contributions of older adults to their families and communities, and their ongoing engagement in creating their relationships to others and to their rural settings. In this presentation, Professor Keating discusses the state of knowledge of both marginalization and aging-well across the diversity of Canadian rural seniors and the communities in which they live, highlighting particular challenges in countries with severe climates, low density populations and great distances

S2.3-2 12-06-2012, 08:30-10:00, Room 2

### Single older men in rural Sweden: Norms of masculinity

Dr Magnus Nilsson  
*Karlstad University*

In this paper we focus on older men in rural areas who have remained unmarried and childless throughout their lives. The rural context has consequences for the ways that gender structures the lives of people throughout the life course, both materially and socially. Norms of masculinity remain strong in rural areas and there is less room for deviations than in urban areas. This is not least connected to the scarcity of meeting places, and above all to that of alternative spaces. Despite this, studies of rural masculinity have to a little extent explored the importance of age and ageing for the ways that masculinity is lived and articulated in rural areas. In this study, we explore the ways that unmarried and childless older men talk about relationships and childlessness in relation to norms of masculinity and heterosexuality, notions of ageing, growing old and approaching death

S2.3-3 12-06-2012, 08:30-10:00, Room 2

### Multiple disadvantage and social cohesion: a challenge for rural elders?

Professor Vanessa Burholt  
*Centre for Innovative Ageing, Swansea University*

Social deprivation and poverty can create a class of secondary citizenry confined to subordination as well as social and political exclusion. Szalai (2008) has noted that ‘such a fault line in civil society might deeply endanger social cohesion.’ However, the debate on the link between multiple disadvantage and social cohesion in the UK is usually confined to discourse on inner-cities, youth (disengaged, alienated, consumerist) culture, immigration or ethnic diversity. The recent riots (summer 2011) in the cities of London, Birmingham, Liverpool, Manchester and Bristol were used by the media to illustrate these fault-lines in society. However, in this paper Professor Burholt demonstrates that the link between multiple disadvantage and social cohesion extends beyond these populations and is also observed in relatively ethnically homogenous rural areas of England and Wales and experienced by older people. Furthermore, she demonstrates that in rural areas this relationship can be mediated by elements of social capital: local concerns, institutional trust, civic participation and social belonging. As many of the factors that impact on social cohesion are amenable to intervention, these findings provide challenges for policy makers and services providers in promoting community cohesion for rural elders.

S2.3-4 12-06-2012, 08:30-10:00, Room 2

### Rapidly growing grey: local governance responses to social participation for geing rural populations

Dr Rachel Winterton  
*John Richards Initiative, La Trobe University*

Many rural communities are struggling to provide a range of services to support active involvement and social participation for their older residents. There is thus a need to explore how rural communities manage the challenges associated with local ageing populations, particularly in regard to the growing diversity of these communities. From an Australian perspective, this paper aims to explore and identify effective models and approaches that best meet the needs of local older residents in terms of social participation, and the agencies that support them.

S2.3-5 12-06-2012, 08:30-10:00, Room 2

### Construction of ageing in the Faeroe Island

Phd Student Ása Roín  
*NISAL, Linköping university/University of the Faeroe Island*

This is a presentation of a doctoral project in which discourse analyses are carried out on official documents as regards how older people and ageing are represented, and compared with older people’s representations of their own ageing in interviews. The study has a strong rural component since it is carried out in the Faroe Islands which is a rural archipelago where people live on islands, in villages and a few towns.

## S2.4 Life course in a cultural and psychological perspective

Chair: Christine Swane

S2.4-1 12-06-2012, 08:30-10:00, Room 3/4

### Everyday interpretations of age and the course of life - reading age-diaries of middle-aged and aging persons

PhD Marja Saarenheimo  
*The Central union for the welfare of the aged*

Age and aging are intricate concerns of many people in third age or approaching it. Yet, people don’t necessarily think very often purposely about their age or their position in the course of life. Rather, these themes occur incidentally and often unexpectedly in the midst of everyday chores and social situations. The purpose of this study is to examine everyday interpretations given to age, aging and life-course by middle-aged and aging persons. The data consists of 39 age-diaries kept by ordinary aging people. An invitation to the study was published in a national daily newspaper and in the web-site of “Life-course and generations” -project. 59 persons responded; 39 of them between 52 and 84 years. So far, 18 diaries have been returned, and these constitute the data analyzed in this paper. The time frame of the diaries was one month, and most of the 18 participants made entries daily. The entries were analyzed thematically and using discourse analytic tools, such as subject position and discourse. In general, the participants were astonished at the great amount of entries. Age and aging were thought of more often than they had anticipated. The themes of entries varied depending on the life situation of the participant. Not surprisingly, the most common discourses dealt with health, appearance, and what behavior is or is not appropriate for a person in their age or for an aging person in general. Age was used to legitimize and explain one’s behavior and experiences. Comparisons with peers and representatives of other generations were also made frequently.

S2.4-2 12-06-2012, 08:30-10:00, Room 3/4

### Nursing home residents’ relationship with nature - past and present

MPH, PhD Eva Algreen-Petersen  
*Municipality of Copenhagen*

Getting old and moving into a nursing home is a change associated with a break-up compared to the previous life. A part of life that is in risk of being exposed to such a break-up is the relationship to nature. From research it is known that very few nursing home residents are able to get outside without assistance from staff or

relatives, and that they do not get out in nature to the extent they would like. This presentation is about an action research project where researcher together with residents, relatives, and staff in a nursing home in Copenhagen explored the possibilities for changing these facts. The purpose of the project was to bring nature and outdoor life into the everyday life of the nursing home. Interviews made in the preparation phase of the project showed that relations to nature are diverse and so are the dreams of an outdoor life in a nursing home context. What the interviewees had in common were ideas of how to make the outdoor facilities attractive. Accepting that their abilities to e.g. working in the garden had changed, they still wanted to contribute with ideas and experiences. **Method:** Action research was used to create knowledge of how to minimize the gap between the existing possibilities and the dreams of the residents, and to change the physical environment and the routines of the daily life in the nursing home towards the dreams of the involved persons. About half of the participating residents were suffering from dementia. Careful preparations made it possible to support residents' participation in the research process. Participants worked in workshops where their critique of the existing outdoor life and their wishes for a better future were expressed. **Results:** In addition to the local changes the study brings results of common research interest. The action research process made it possible for the residents to build common scenarios of outdoor lives based on their diverse relations to nature during their life.

S2.4-3 12-06-2012, 08:30-10:00, Room 3/4

### Life Histories in Theory and Practice

Dr. philos Kirsten Thorsen  
*Buskerud University College*

Life histories are important scientific avenues to the experiences of aging. The life course perspective underlines that personal development is embedded in changing social and cultural contexts. Aging occurs in time and place, people are related to each other, they are active, reflecting, and choosing their lives within social frames. Life histories are constructions of experienced life courses. Oral life histories are narratives giving meaning and salience to certain life themes and events, constructing continuity and a sense of coherence, presenting identities and self images. This paper will explore the analytical use of life histories in theory and practice, illustrated by a study of aging people with five rare diagnoses. While many died young a few decades ago, they may now reach an advanced age. During life they are exposed to dominating cultural concepts like normality, health and illness, deviation and disability. **Objectives of the study:** How do people with rare disorders narrate their life course and aging experiences living a long life with a congenital disability? How do they cope with and relate their identities to cultural norms and scripts of 'normal life courses', being 'rare' and having disabilities? **Methods:** Transcribed life history interviews with 47 individuals (15 men and 32 women 40 - 70 years) having disorders of

congenital limb deficiency, haemophilia, Marfan syndrome, short stature and Turner syndrome. The aging experiences are analyzed according to cultural-psychological theory. Life histories of the five diagnosis groups are compared concerning the impact of living in historical contexts with a rare diagnosis with visible or non-visible disability. **Results:** A dominating life theme in the interviewees' stories is the striving to be 'normal', to have a normal life course with work and family, being accepted as a 'normal' human being. Their life histories expose their 'identity'-battles with normality as a dominating concept both in biomedical models and as a cultural category. During their life course they have used different strategies to handle stigmas and social barriers. Ageing 'normalizes', gradually bringing them into the master category of being old, overriding the status of being rare and disabled. Life history as a method will be discussed.

S2.4-4 12-06-2012, 08:30-10:00, Room 3/4

### 36.500+ days - everyday life of centenarians

PhD Christine E. Swane  
*EGV Foundation*

Images of centenarians split between categorisations like "successfully aged" and persons whose "life stands still" due to mental and physical frailty. The aim of this research is to develop our understanding of very old people's everyday life experience. In this paper the present here-and-now is reflected through the life course, i.e. what sociologist Alfred Schutz calls the biographical situation. Everyday life of centenarians is represented through qualitative interviews with 18 centenarians, four men and 14 women. The participants were selected from the Danish centenarian cohort 1995-96 at the time of a medical follow up study at the age of 101.5 years. Two centenarians lived alone, one with a spouse, two with a daughter and son-in-law, five in care facilities, eight in nursing homes. Mentally the participants are relatively well to well-functioning, with great variety in terms of physical resources. In 15 cases also the closest relative of the centenarian was interviewed and in 14 cases the contact person from health care services. Different interpretations and experiences related to ageing and the life course are discussed. According to a nurse, who is the primary caregiver of a lady who lives in a nursing home, the lady's life is an example of successful ageing: Living her life like this, she wouldn't mind to reach the age of a hundred years herself. On the other hand the lady's closest relative, a niece, finds the old lady to be unhappy about her life in the nursing home and that she is 'not stimulated at all'. Whereas the lady herself describes how difficult it is to become so incapable, but how she loves to sit by herself and sleep in a chair in the sun. The interviews with the centenarians show that, despite various levels of frailty, they reflect complex aspects and experiences of agency in their everyday life. The presentation touches upon ways of attaching meaning to the structure and processes of everyday life, according to interests earlier in life.

## S2.5 Measuring outcomes of long-term care: Experiences from Europe

Chair: Tine Rostgaard

S2.5-1 12-06-2012, 08:30-10:00, Room 12

### Measuring outcomes and improving quality in English care homes

Professor Ann Netten  
*University of Kent at Canterbury*  
Co-authors:  
Research Officer Ann-Marie Towers  
Research Officer Nick Smith  
Dr Julie Beadle-Brown

There is increased policy emphasis on outcomes, but how do we identify these and then use this information to improve outcomes for individuals? In England the Adult Social Care Outcome Toolkit (ASCOT) measure has been developed with the objective of being able to compare social care outcomes across a wide range of services. It measures social care related quality of life (SCRQoL) across eight domains and innovative approaches have been developed to establish the impact of service interventions in the absence of costly and demanding research designs. The toolkit includes a multi-method approach to establishing outcomes in care homes, which has attracted widespread interest. Follow-up work has developed a model for, and identified relationships between, workforce characteristics and qualifications and outcomes for residents. Further work is currently building on this to develop an approach to improving quality of care by providing a range of tools to understand resident experiences, where problems in delivering outcomes might lie, and how these might be addressed. The presentation will describe the basis for the ASCOT measure, the methods used and results from a study of 300 residents of residential care homes for older people. We will describe the model of expected relationships between workforce and institutional characteristics and outcomes and current progress in developing the approach to improving quality.

S2.5-2 12-06-2012, 08:30-10:00, Room 12

### Measuring outcomes of home care - Experiences from the Austrian Home Visit and Counselling Programme

Dr Birgit Trukeschitz  
*Vienna University of Economics and Business*  
Co-author:  
Professor Ulrike Schneider

Measuring outcomes of social care services for people in later life

is a topic of perennial interest. Not only demographic changes but also dwindling public resources strongly urges for unravelling the impact these services have on frail elderly people. However, in Austria 70% of all people in approved need of care do not use any long-term care services. They rely on help solely from kith and kin. A current Austrian research project deals with measuring outcomes of domiciliary care and informal care. This project builds on the ASCOT-concept and methodological approach to measuring care outcomes and connects to recent research in England. Our paper reports on experiences of the Austrian approach of measuring care outcomes in private households and the challenges of capturing the effects of informal care. Our data of the pilot study consists of approx. 1,000 LTC cash benefit recipients visited in the course of the Austrian Home Visit and Counselling Programme by 38 registered nurses who collected the data. Applying multivariate regression analysis we will investigate the determinants of outcome of long-term care in private households in Austria.

S2.5-3 12-06-2012, 08:30-10:00, Room 12

### Measuring outcomes in home care: Experiences from Finland

MSc Marjo Pulliainen  
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Co-authors:  
Dr.Pol.Sc. Aija Kettunen  
*Diaconia University of Applied Sciences*  
Research Professor Ismo Linnosmaa  
*National Institute for Health and Welfare (THL)*

Municipalities are responsible for organizing social and health care services in Finland. In the world of shrinking tax revenues, municipalities are forced to think about the most efficient ways of allocating limited resources. The general objective of this project is to develop cost and outcome measures for social care services. We are collaborating with two municipalities in eastern Finland and one municipality in southern Finland. In this presentation we will concentrate on the home care and care home outcomes among elderly social care clients. To measure social care outcomes we have used a method that is based on the Finnish translation of the English ASCOT tool. Self-completion questionnaire (SCT4) and care home interview schedule (CHINT3) were translated into Finnish using the forward-backward translation techniques enhancing the quality of the translation. Self-completion questionnaire was tested with 20 home care users, their relatives and nurses in January 2011, and the survey was conducted for 200 home care users in eastern Finland in April 2011. Care home interview schedule will be applied to 50 clients using vouchers and 50 clients using services organized by a municipality in order to examine if the two ways of organizing sheltered housing produce different outcomes. In our presentation we will introduce the first results of the home care survey and care home interview, and also discuss our experiences about the translation process as well as about applicability and usability of the ASCOT tool in the Finnish context.



S2.5-4 12-06-2012, 08:30-10:00, Room 12

## Measuring outcomes of home care - Experiences from Denmark

Professor Tine Rostgaard  
*Aalborg Universitet*

The ASCOT-method was applied in a study among 300 Danish nursing home residents in summer 2011. This concept of Social Care Related Quality of Life (SCRQoL) and methodology was applied, involving observation as well as survey data collection among residents and staff. In addition, staff was interviewed about working condition and work satisfaction. The study provides information about present care related quality of life as well as gives a prediction of the level of quality of life without care services. Overall, residents gained in quality of live in regards to 'basic' domains of SCRQoL, in that their needs related to especially housing and maintenance of this, personal care and food were covered, where as needs for social contact and activities were less well cared for. Using multi-level analysis, the results indicate that especially individual factors such as functional ability and health determine improvements in care related quality of life. Institutional factors such as working conditions and work satisfaction among staff could not explain differences in residents' care related quality of life, although the small number of nursing homes participating in the study (38 homes) rendered such analysis difficult, and some correlation was visible. The study was conducted for the Elder Commission (Ældre kommissionen).

## S2.6 Sarcopenia

Chair: Anette Hylen Ranhoff

S2.6-1 12-06-2012, 08:30-10:00, Room 13

### Frailty and Sarcopenia

Professor MD Timo Strandberg  
*Universities of Helsinki and Oulu*

Although lacking a consensus definition the phenotype of frailty is commonly defined according to the 5 criteria initially described by Fried and colleagues: shrinking, slow gait speed, low physical activity, reduced grip strength, and mental exhaustion. The presence of 3-5 criteria depicts frailty and 1-2 criteria prefrailty. Also sarcopenia (muscle wasting) does not have strict criteria, but it is wellknown that muscle mass is reduced with advancing age. However, for physical function dynapenia (reduced muscle strength) is probably more important than muscle mass. Sarcopenia is usually not included in the definitions of frailty as such, but it is obvious that it may contribute at least to grip strength, gait speed and low physical activity. Prevention and treatment of both sarcopenia and frailty have thus similar aims, at the moment best evidence is from multifactorial programs including exercise (resistance training), adequate energy and protein nutrition, and vitamin D supplementation. The quality of amino acids and their relationship to exercise may be important in the stimulation of protein synthesis. Several studies are also ongoing, for example, about vitamin, D, omega-3 fatty acids, testosterone/estrogen, specific drug treatments, and various combinations. Sarcopenia is the key feature of frailty in older people and a major determinant of adverse health outcomes such as functional limitations and disability. Resistance training and adequate protein and energy intake are the key strategies for the management of sarcopenia. Management of weight loss and resistance training are the most relevant protective countermeasures to slow down the decline of muscle mass and muscle strength. The quality of amino acids in the diet is an important factor for stimulating protein synthesis. Vitamin D deficiency should be treated, and new pharmacologic approaches for sarcopenia are currently assessed.

S2.6-2 12-06-2012, 08:30-10:00, Room 13

### Sarcopenia in hip fracture patients

MD Ole Martin Steihaug  
*Haraldsplass hospital*  
Co-author:  
Professor MD Anette Hylen Ranhoff  
*Kavli Research Center for Ageing and Dementia*

**Background:** Hip fractures frequently occur in the elderly population with dramatic consequences for mobility, indepen-

dence and life. Sarcopenia is the age related syndrome of reduced muscle mass and strength and/or physical function, according to the European Working Group on Sarcopenia 2010 definition. There are no known studies examining the relationship between sarcopenia, using the newer consensus definition, and outcomes one year after hip fracture. **Aim:** 1. To determine whether bioelectric impedance (BIA) can measure skeletal muscle mass in hip fracture patients compared to dual emission spectroscopy (DXA), and develop new algorithms for determining skeletal muscle mass. 2. To study sarcopenia as a predictor for reduced mobility, dependency in activities of daily living, place of residence, and mortality after one year. Our primary hypothesis is that sarcopenia at hospitalisation predicts impaired mobility one year after hip fracture. **Methods:** Hip fracture patients, 65+ years admitted for surgical repair are subjects for inclusion. Eligible patients are able and willing to give informed consent, medically stable and have a remaining life expectancy of more than 3 months. Exclusion criteria are moderate cognitive impairment, not being able to walk without human assistance, or being a permanent resident of a nursing home. Information about health and function pre-fracture is obtained by structured interview with patient and proxy, including the New Mobility Score, Barthel Index, IQCODE, Charlson co-morbidity index, number and type of medications and a dietary assessment. Type of fracture and surgical repair, bodyweight, height, arm muscle circumference, BIA, knee extension of the non fractured hip, grip strength, serum 25-OH-cholecalciferol (vitamin D), routine blood analyses, complications, place of discharge admission and discharge medications are also recorded. At three months a new assessment is including weight, grip strength, knee extension, BIA, and DXA of bone mineral density and appendicular lean mass. One-year data is collected by a telephone interview. New mobility score is the primary outcome, while place of residence, new fractures, new acute hospitalisations of any cause and mortality are secondary outcomes. **Conclusions:** Preliminary results will be presented at the symposium.

S2.6-3 12-06-2012, 08:30-10:00, Room 13

## The role of sex hormones in the development and treatment of sarcopenia

Professor Sarianna Sipilä  
*University of Jyväskylä*  
Co-authors:  
Researcher Eija Pöllänen  
Adjunct Professor Vuokko Kovanen

Previous data on women suggest accelerated decline in muscle performance around the age of 50. This implies the role of sex hormones as the mechanism for age-induced muscle weakness. We tested this hypothesis by two designs: a randomized placebo controlled trial (RCT) among 50-57-year-old postmenopausal women including 1 year hormone replacement therapy (HRT)

and a case control twin design with 15 54-62-years old female MZ pairs discordant for HRT for an average of 7 years. We found that after 1 year of HRT, muscle power increased on average 7 % compared with 5 % decline in the controls (p=0.014). The twin sisters on HRT had on average 16 % greater muscle power and 32% greater peak twitch torque compared with their co-twins (p=0.023 and p=0.002, respectively). To explore the mechanisms by which HRT effects on muscle performance, we measured thigh muscle cross-sectional area (CSA) and composition and took biopsy samples from the thigh muscle in both studies. After 1 year HRT, muscle CSA increased on average 6 % compared with 1 % increase in the controls (p<0.001). The relative proportion of fat in the muscle compartment increased 5 % after 1 year HRT use compared to the 17 % increase observed in the controls after the trial (p=0.009). HRT using twin sisters had on average 6% greater thigh muscle area, 8% greater relative muscle area and 5% lower relative fat area compared with their co-twins (p=0.065, p=0.047, p=0.047, respectively). In the RCT, explorative global transcriptome analysis (microarray) showed e.g. notable changes in many genes related to proteolysis and peptidolysis among the controls but not among the women on HRT. On the other hand, HRT up-regulated the expression of IGF-1 gene and its splice variants, especially MGF, which is a well-known growth factor. HRT using twin sisters had up-regulated genes in processes related to the cell structure regulation and down-regulated genes in processes related to the e.g. cell-matrix interaction and energy metabolism. Hormonal changes related to menopause are among the key factors in the development of muscle weakness and wasting. HRT is an effective treatment for adverse outcomes in the skeletal muscle among postmenopausal women. Given the known contraindications and potential harms related to the current HRT, further development and studies are needed.

S2.6-4 12-06-2012, 08:30-10:00, Room 13

## Renal function after a 12-week resistance exercise program with protein supplementation in community dwelling older adults.

MD PhD Alfons Ramel  
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Co-authors:  
A Arnarson  
OG Geirsdottir  
PV Jonsson  
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**Background:** Resistance exercise and increased protein intake have been recommended for older adults to prevent sarcopenia. However, concern has also been expressed about providing extra protein to elderly because they are at risk for decreased renal function and resistance exercise might further decrease renal function. We investigated this issue during a 12-week resistance exercise program with protein supplementation in community dwelling older adults.

**Methods:** Subjects (N=237, 73.7±5.7 years, 58.2% female) participated in a 12-week resistance exercise program (3 times/ week; 3 sets, 6-8 repetitions at 75-80% of the 1-repetition maximum), designed to increase strength and muscle mass of major muscle groups. Participants were randomly assigned to one of three different dietary supplements consumed after each training session. The dietary supplements were 1) a whey protein drink (20 g whey protein + 20 g carbohydrates), 2) a milk protein drink (20 g milk protein + 20 g carbohydrates) or 3) a carbohydrate drink (40 g carbohydrates). Renal function was assessed as glomerular filtration rate (GFR) based on creatinine and Cockcroft-Gault formula adjusted for body surface area. Results: At baseline mean protein intake was 0.95 g/kg body weight and 23.5% of the participants were with GFR below 60 ml/min. After the intervention we observed an increase in carbohydrate intake (+ 12.2 g/kg BW, P=0.004), but not in other energy giving nutrients, as well as in GFR (+ 4.3 ml/min, P 0.001). The change in GFR was similar in men and women, participants with GFR below or above 60 ml/min and in the three supplement groups. Protein intake (g/kg) was not associated with GFR (neither baseline nor endpoint). Conclusion: Our data indicate that the combination of resistance exercise and protein supplements for 12 weeks is not detrimental to renal function measured as GFR in community dwelling older adults with a basic protein intake above the dietary recommendations.

S2.6-5 12-06-2012, 08:30-10:00, Room 13

### How far is it possible to counteract sarcopenia?

MD Marius Myrstad  
*Diakonhjemmet sykehus*  
Co-author:  
Professor MD Anette Hylen Ranhoff  
*Kavli Research Center for Ageing and Dementia*

**Background and aim:** Studies of the effect of long-term endurance training in preventing frailty are scarce, but since the maintenance of skeletal muscle mass is dependent on activity components, there are reasons to believe that endurance training can counteract sarcopenia and frailty in the same way as resistance training which is much better studied. The aim is to study longitudinal variation by age in physical capacity in older still active skiers, participating in the Birkebeiner cross-country ski race of 54 km and difference in altitude of 1000 meters. **Methods:** The Birkebeiner Aging study is a study of health and life style self-reported by postal questionnaire. It has a cross-sectional as well as longitudinal design. In the cross-sectional part the participants will be compared with age-matched participants in Norwegian health surveys. 550 participants in the Birkebeiner cross-country ski race who are 65+ years are included from the 2009 and 2010 races.

The questionnaire includes questions about health and life style used by the national and regional health surveys in Norway (the CONOR questions). Since VO2max correlates well with average racing speed and ranking, we use average racing speed obtained from the race results as a surrogate measure for physical capacity. In this part of the study we analyse longitudinal variation in physical capacity for selected participants where such data are available for more than 10 race participations. **Results:** In the 2009 race average finishing time for the study participants was 4:37:02 (SD 0:51:00, range 3:16:18 - 9:00:08). Average speed at different ages for five selected subjects; one healthy woman and four men, of which three are healthy and one underwent cardiac surgery at the age of 61 years, show only small variations in average speed from year to year for each individual. For the male with the best physical capacity (highest speed), a decline started when he was 70 years old, while a decline is seen from between 75 and 80 years for the two oldest males. For the female participant and the male who had cardiac surgery, average speeds are stable over time, but they are still not over the age of 70 years. Results from more participants will be shown. **Conclusion:** It is possible to maintain physical capacity to the age of 70-80 years by regular endurance training, and thereby counteract sarcopenia.

## S3.1 Dementia diagnostics in memory clinics in the Nordic and Baltic countries

Chair: Anette Hylen Ranhoff

S3.1-1 12-06-2012, 16:00-17:30, Plenum 8/10

### Enhancing dementia research by harmonizing the dementia work-up in the Nordic countries

Coordinator NIDD Anne Rita Øksengård  
*Karolinska University Hospital*

**Background:** Dementia is one of the most common mental diseases. It increases dramatically with the aging of the Nordic population. At the same time, even younger persons are being diagnosed with dementia. Early diagnostics is crucial, but unfortunately the actual causes of dementia are discovered far too late in the disease process. **Method:** The Nordic Network in Dementia Diagnostics (NIDD) consisting of a multidisciplinary consortium of nine research groups from five Nordic countries and Lithuania and funded by NordForsk aims to harmonize diagnostic working methods for dementia, and contribute to earlier and enhanced diagnostics. **Results:** Based upon a common diagnostic protocol and consensus in how to interpret the clinical information, several validation projects on diagnostics methods that are relatively reasonable in cost are carried out. The use of this protocol may contribute to enhancing the understanding and lead to a quality assurance of the dementia diagnostics. The network also focuses on recruiting PhD students and transferring the achieved new knowledge about dementia diagnostics. All participant groups are involved in the publishing of the results. **Conclusion:** The potential for Nordic synergy in such research is considered to be great. The Nordic countries are often markets with too small a potential individually for the pharmaceutical industry to finance trials of new types of treatment. A closer Nordic collaboration in the development of improved methods might generate an earlier access to treatment of dementia and a better quality of life for persons with the dementia diagnosis and their caregivers.

S3.1-2 12-06-2012, 16:00-17:30, Plenum 8/10

### Neuroimaging in dementia work-up: Volumetric measurements of brain regions using MRI

Professor Lars-Olof Wahlund  
*Karolinska Institutet*

**Background:** Structural imaging of the brain is one significant

part of the routine clinical dementia work-up. Previously the most important was to exclude secondary causes of cognitive impairment but this has changed last years. Today the new diagnostic criteria for Alzheimer's disease require a morphological MRI scan since evidence for medial temporal lobe atrophy is one of the necessary requirements for the disease. Methods to estimate or calculate the size of relevant brain structures have been developed lately. The goal is to have reliable fast calculation algorithms implemented in the routine scanning procedures. Another important issue is to judge the extent of changes in the white matter. The diagnose of vascular cognitive impairment and dementia relies on the presence of white matter changes. **Methods:** We have used visual ratings of medial temporal lobe atrophy on large samples (ADNI and AddNeuroMed) and compared that with fully automatic volumetric methods. Visual ratings of MTA in a large population based sample (SNACK) have also been performed. This cohort consists of 550 people randomly selected from a large population in central Stockholm. We are also currently developing similar methods for cranial computed tomography. **Results:** We found similar accuracy values comparing visual rating and automated volume calculations in the AddNeuroMed cohort. When comparing the results from the SNACK sample we observed that the visual rating of MTA well correlated to manual outlined hippocampus volumes. **Conclusions:** We have shown that automated volumetric methods for regional brain atrophy are as accurate as visual rating. Moreover, we present reference values of hippocampus volumes based on randomly selected subjects in subjects aged from 66 to 85+.

S3.1-3 12-06-2012, 16:00-17:30, Plenum 8/10

### Quantitative Electroencephalography (qEEG) in dementia diagnostics

Ass. Professor Jon Snaedal  
*Landspítali University Hospital*

**Introduction:** The recently proposed research criteria on Alzheimer's disease (Dubois et al 2010) put great emphasis on biological markers. The proposed markers are volumetry on MRI (or CT) of the brain, liquor analysis of amyloid beta and tau and PET scans. EEG is not stated as a reliable marker for Alzheimer's disease (AD) in these proposed criteria. There is however a renewed interest in this old and simple technique and it is now been evaluated as a possible biological marker for AD in line with the validated methods which are either invasive or complicated and expensive. **History:** EEG was already proposed in 1932 as a possible diagnostic marker for AD. It was however found to have limited value for diagnosis. In the 1980's, the possibility of quantifying the EEG registration by the use of computers created again an interest in this method. In a meta-analysis of 46 articles published 1980-2008 (Jelic and Kowalski 2009) the conclusion



however was that the evidence of diagnostic utility of resting EEG in dementia and MCI is still not sufficient to establish this investigation in initial assessment battery of a patient with cognitive impairment.  
**Current research:** Using a dataset of a great number of EEG registrations, it is possible to classify a single EEG registration into one of many groups of diseases or of “normal state” using contemporary statistical methods (Statistical Pattern Recognition=SPR). This method has been evaluated in a project in Iceland. The diagnostic accuracy seems to be similar to the biologic methods that now are being proposed for diagnostic purposes. The method is now being validated in a project of the Nordic Network for Dementia Diagnostics (NIDD) with the participation of seven different Memory Clinics.

S3.1-4 12-06-2012, 16:00-17:30, Plenum 8/10

### Memory Assessment in the Baltic States

Jurate Macijauskiene  
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Co-author:  
K Saks  
*Tartu University*

All three Baltic States (BS) are similar geographically, undergone health care reforms through the last two decades after regaining independence, and face the aging phenomena challenging health and care systems. Memory complaints become special problem to be addressed with the demographic projections of increasing numbers of older adults.  
The situation on the assessment of persons with the memory impairment and dementia symptoms in BS was assessed via survey aiming to reveal the similarities and differences.  
Exact numbers of dementia cases are not known since there are no epidemiological studies or national register on dementia in BS. Guidelines for diagnosing dementia are established by Health Insurance Fund in Estonia and by Ministry of Health in Lithuania. General practitioners in Estonia can make a diagnosis of advanced dementia, referring to specialists only those with mild cognitive impairment and early stages of dementia. Memory clinics do not exist in the BS, although there are centres specializing in the memory assessment.  
Physical and neurological examinations are obligatory in Estonia and Lithuania, as Mini Mental State Examination test. The other tests for cognitive performance are optional, and are used depending on the case and on the established practice in certain institutions. Different scales on activities of daily living (ADL) are used in Estonia; Lithuania has accepted Blessed dementia scale as a key scale for ADL. Laboratory tests are obligatory, but differences exist in number of obligatory tests - Lithuania has longer list. Head computed tomography is obligatory in both countries, and other instrumental and neurovisual investigations are optional. When the diagnosis of Alzheimer's diseases is established, acetylcholinesterase inhibitors and NMDA inhibitor are available and in Estonia and Lithuania, yet reimbursement systems are different.

Although health and social care services for patients with dementia are available in Estonia and Lithuania, geographical maldistribution of services exists, making lower accessibility in rural areas. Another important issue addressed by the specialists is low awareness towards memory impairment in society, which delays early diagnosis

S3.1-5 12-06-2012, 16:00-17:30, Plenum 8/10

### Depression in patients referred to memory clinics

Dr Anne-Brita Knapnskoga  
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Co-author:  
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Depression is common in dementia. It may be the first symptom of dementia, but can be present at any stage of the disorder. About 30% to 40% of the patients referred to a memory clinic today are depressed. It is presumed that about 50% of the patients with dementia will suffer from depression during the course of the disorder, to a greater or lesser extent. The persistence rate of depression among cognitively impaired patients varies a lot in different studies (33 to 58%).  
In most studies depression scales are used to define depression, and diagnoses are seldom made. Even though depression in dementia is common, it is often not diagnosed and treated. The symptoms of depression in those with and without dementia are mostly the same, but not always so pronounced as in those without dementia. Some symptoms overlap with dementia.  
A psychiatric assessment of the patients referred to a memory clinic is seldom possible, but evaluation scales are shown to be useful. Which scales best suited depend upon the degree of cognitive impairment. Few scales are specifically designed for use in dementia, but some scales may nevertheless be suitable in the earlier stages of dementia. Some scales are based upon self-reporting (e.g. the Geriatric Depression Scale), others are based upon an interview with the patients (e.g. the Hamilton Scale and the MADRS) or the caregivers (e.g. the Cornell Scale). The two most commonly used depression scales in memory clinics in the Nordic countries are the Cornell Scale and the MADRS.  
Antidepressants seem to be less effective in patients with depression in dementia than in patients without dementia. They should not be the first choice of treatment, but be reserved for more severe cases, and for depressions that do not improve within few months. Psychosocial interventions should be the first choice, at least in cases with depression of milder degree. Electroconvulsive therapy (ECT) should be considered in refractory severe depression.

## S3.2 Critical perspectives in need assessment practice(s) in elderly care

Chair: Sandra Torres

S3.2-1 12-06-2012, 16:00-17:30, Plenum 9/11

### Need assessment and the organization of eldercare provision in the modern welfare state: a comparative perspective

Professor Morten Balle Hansen  
*University of Southern Denmark*

**Background:** Comparative studies of home care, elder care and social care generally indicate that a large number of industrialized countries are facing common challenges. These challenges are caused by the demographical developments of an aging population, changed labour market conditions and changed family structures. At a macro-level this presentation analyzes how different welfare state systems cope with these challenges by organizing the provision of eldercare in different ways. At a micro-level different systems of needs-assessment are analyzed. The pros and cons of these different systems will be discussed since this presentation is planned as an introduction to the complexities that are associated with need assessment practice. Objectives: To provide a rich contextual understanding of the challenges and complexities of needs assessment in elderly care in advanced welfare states.  
**Methods:** Corporative case studies can roughly be divided into most-similar and most-different studies and in this study a 'most similar cases' strategy is applied. After a short characteristic of some global tendencies, the study focuses on 16 European OECD countries. Based on deskwork and the analysis of secondary data a typology of welfare state regimes for eldercare provision is elaborated.  
**Theory:** A conceptual framework to guide the comparative analysis is elaborated based on a) different types of elderly care, b) different types of welfare regimes, c) a distinction between financing, organisation and control of services, and d) a distinction between the mechanisms of exit, voice and loyalty. Results: Different welfare state regimes enhance different divisions of labour between state, market and family/civil society in the provision of elderly care. The Nordic model is characterized by a major role of the municipalities in the provision of elder care. The emphasis on home care as contrasted to care homes is especially pronounced in the Danish care system. Differences in the organization of elder care imply differences in the utilization and functions of needs assessment in elderly care.  
**Conclusions:** There is a trade-off between different functions of needs assessment in elderly care. The pros and cons of different systems are discussed.

S3.2-2 12-06-2012, 16:00-17:30, Plenum 9/11

### Local guidelines for need assessment for elder care in sweden: a matter of equality in welfare provision

Postdoctoral Research Fellow David Feltenius  
*Umeå University*

**Objectives:** This study investigates the rationale behind the guidelines for need assessment for elder care adopted by local politicians. What do local politicians seek to achieve through the adoption of these guidelines? In seeking to answer this question, the study departs from the literature on “deprofessionalization” which emphasizes economic considerations as a main motive for standardized procedures within public administration. An alternate perspective is provided for in the literature on public administration and legitimacy. This literature emphasizes “equality of welfare provision” as the main motive behind the adoption of standardized routines.  
**Methods:** This study consists of interviews with local politicians in four municipalities in Sweden. In each municipality, the politicians who were responsible for elder care and represented different positions, i.e., from left to right within the political spectrum, were interviewed. In total, 16 politicians were interviewed for the purpose of this study.  
**Results:** The study shows that the adoption of guidelines can be explained to some extent by the economic consideration of the politicians in charge as suggested by the literature on “deprofessionalization.” However, the interviews show that guidelines are not solely a question of economic considerations. In fact, quite the opposite is the case since another important consideration associated with these guidelines is the political aim to achieve equality in welfare provision. This rationale was the most commonly expressed reason in the interviews with local politicians.  
**Conclusions:** This finding suggests that politicians have been concerned with more than the expenditures for elder care. Indeed, politicians have been concerned with the need to reach a balance between “individual needs” and “equality of welfare provision.” This finding raises the question of whether the guidelines really could be interpreted as a case of “deprofessionalization.” Instead, these guidelines might be an expression of collaboration between care managers and politicians to avoid arbitrary decisions on need assessment.

S3.2-3 12-06-2012, 16:00-17:30, Plenum 9/11

Home care allocation in Norway.  
Negotiation and distribution of  
responsibilities

Research Fellow/PhD Student Helene Aksøy  
*NOVA -Norwegian Social Research*  
Co-author:  
Research Director Mia Vabø

**Background:** This paper focuses on complexities associated with needs assessment in home care. As home care is characterized by overlapping responsibilities between formal and informal care, it is of vital importance to recognize that the process of needs assessment always will be discretionary, interactive and negotiated. Attention is paid to the ways in which needs are assessed and addressed both in the initial stage when older people first need care and later as needs changes

**Aim:** To identify different allocation routines within different organizational home care arrangements and to explore how different routines influence the way home care staff and service users come to an agreement about needs and distribution of responsibilities.

**Theory:** The analysis is informed by the negotiated order theory (Strauss 1978) presuming that both the structural context and the negotiation context are explored.

**Method:** Case studies based on: (1) participant observations of daily routines, (2) interviews and informal talks with care recipients/ families, managers and staff on different levels, (3) analysis of instructional documents, assignments, citizens charters etc.

**Results:** The negotiation context of home care is influenced by new organizational arrangements e.g. by narrowing the options for negotiation or by limiting the number of issues possible to negotiate. However, new informal arenas of negotiation and the established egalitarian culture of home care continue to mediate day-today decisions.

**Conclusion:** The paper highlights the dynamic and contingent aspect of needs assessment and thereby demonstrates that service allocation is not just about ‘clear entitlements’ and ‘fixed standards’. Service allocation is filtered through the expectation of both service staff and citizens and is mediated by time constraints, staff-client continuity etc.. The paper contributes to ongoing debates about the protection of the most vulnerable old.

S3.2-4 12-06-2012, 16:00-17:30, Plenum 9/11

Requests and outcomes in care  
management. processing older  
persons as clients in elderly care.

PhDAssistant Professor Anna Olaison  
*Linköping University*

**Objectives:** There are few studies in elderly care today that cast

light on the micro-processes of needs assessment, i.e., what effects the introduction of care management has had on elderly care with regard to handling the allocation of resources. In these processes, there are central questions about what scope exists in the treatment of older persons’ requests for services in the assessment situation itself, and what is transferred from assessment conversations to case-file texts. This practice is important to study from a perspective of welfare policy as a research gap exists in how the intentions of the so-called care management model are being applied in practice. The focus of this presentation is thus directed towards how older persons’ descriptions of care needs become the basis for institutional assessments and what happens in the assessment process in the transfer of talk to text.

**Methods and theories:** The data for this study is comprised of twenty cases from three Swedish municipalities. The material consists of tape-recorded assessment conversations and associated case-file texts. The research questions originate from theories of marketization of welfare services and communication as a central part of people processing.

**Results:** The findings point to the fact that cases that can be regarded as simpler has a more direct “recontextualisation” of older persons’ requests in the processing of older persons and their needs. In the cases that are more complex, it is more obvious that requests are negotiated away, added or renegotiated and repackaged to fit within the framework of a publicly defined problem relative to the municipality’s supply of social services.

**Conclusions:** Managerialist thinking has had a certain impact on the care management process. The presentation will contribute to the debate on resource allocation of welfare services and how institutional categorization is used within care management in order to create older persons as clients in gerontological social work.

S3.2-5 12-06-2012, 16:00-17:30, Plenum 9/11

Understandings of cross-cultural  
interaction and ethnic ‘otherness’ as  
challenges for need assessment practice:  
results from a focus group study with  
swedish need assessors

PhD Emilia Forssell  
*Ersta Sköndal University College*  
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PhD Assistant Professor Anna Olaison  
Linköping University  
Professor Sandra Torres  
Uppsala University

**Objectives:** This presentation departs from a project that aims to shed light on the understandings of cross-cultural interaction and ethnic ‘Otherness’ that are upheld by need assessors within the context of Swedish elderly care. Through a focus on the

challenges associated with cross-cultural encounters, this presentation will shed light on the ways in which need assessors address the ethnic diversity that is now characteristic of Sweden’s elderly population.

**Methods and theories:** The presentation is based on 14 focus groups with 60 needs assessors. The research questions emanate from theories of institutional categorization and power differentials in institutional settings.

**Results:** Although many of the challenges that needs assessors face are the same regardless of the older persons background, it seems as if specific challenges exist when the assessment of needs entails foreign-born elders. This seems to be especially the case when dealing with late in life immigrants who do not speak Swedish since interpreters are needed in their case. Furthermore need assessors voiced being torn between the social legislation definition of “reasonable standard of living” and what they regarded as older immigrants’ culture-specific needs.

**Conclusions:** Understandings of ethnic ‘Otherness’ seem therefore to affect the need assessment process. Alternative elderly care services are being designed in order to cater to the needs of foreign-born older people. These services are based on the differentiation that is often made between older people with migrant backgrounds and the ethnic majority population and seem therefore to be rooted in the ‘us’ and ‘them’ dynamics that are often characteristic of power un-aware ethnic relations. The presentation contributes to the debate on institutional categorization by shedding light on how welfare services are affected by categorization practices and power differentials in institutional settings.

S3.3 Evaluation of orthogeriatric  
services in Nordic and Baltic  
countries

Chair: Helgi Kolk

S3.3-1 12-06-2012, 16:00-17:30, Room 1

Comprehensive Geriatric Assessment in-  
cluding the Delirium-Check-list in patients  
suffering hip-fractures.

Professor Yngve Gustafson  
*Umeå University*

In the early 80ties I worked as a consultant in internal medicine at Umedalens mental hospital. I worked with assessment of patients who were referred for dementia assessment and a common story was that the patient in association with a hip-fracture had developed delirium post-operatively and that they never had recovered cognitively after that. I became curious about what they do with old people in the Orthopaedic department that seem to cause irreversible brain damage.

After having assessed and carefully followed 111 consecutive patients with a hip-fracture during their hospital stay as well as after discharged I was surprised that any of them recovered. The care was not adjusted to frail old people.

Hypoxia, hypercortisolism as well as infections were commonly associated with delirium. Delirious patient also suffered a large number of complications during hospital stay that prolonged their delirium. Post-operative delirium was the most common factor associated with in-hospital falls resulting in new fractures and 8% of all hip-fractures in Umeå had occurred in the hospital. Based on the results we designed several intervention studies in several hospitals in Northern Sweden and the intervention programmes have been implemented in a large number of hospitals all over the world. Prevention and treatment of delirium is also the best way of preventing falls and other complications during hospitalisation.

Delirium can be successfully prevented by protecting the brain from hypoxemia and hypercortisolism by preventing complications endangering the metabolism of the brain. In a patient who develops delirium there is an urgent need to detect and treat any underlying complications and the treatment of the delirious patient should have the focus of creating the best prerequisites for the recovery of the brain which includes an active prevention, early detection and treatment of any new complications. A geriatric team applying comprehensive geriatric assessment including the use of the Delirium-Check-list is probably the best way of taking care of the old patient with a hip-fracture. The Delirium-Check-list and the experience of its use in patients suffering hip-fractures will be presented.



S3.3-2 12-06-2012, 16:00-17:30, Room 1

Implementation of geriatric care in fracture patients

Dr Helgi Kolk  
*Tartu University Hospital*

Estonia is a country with aging population: 19% of inhabitants are estimated to be over 65 years of age by 2012. The number of geriatric patients admitted to hospitals with fractures is increasing. The geriatric care program in the department of Traumatology at Tartu University Hospital is being designed and implemented to improve the care of the elderly fracture patients. The second goal of the program is to optimize the utilization of medical and social care resources.

**The aim of the study:** to assess patient characteristics and management of hip fractures at Tartu University Hospital during 2010-2011 as background information for the development geriatric services.

**Material and methods:** retrospective analysis of medical records of patients admitted to the department of traumatology for primary hip fracture.

**Results:** In 2 years 607 (195M/412F) patients with hip fracture were hospitalised, 297 in 2010 and 310 in 2011. 94% of patients were over 65years of age (568) including 452 over 75. Patsients younger than 65years (39) had similar concomitant medical and social problems to the older age groups, there was male prevalence in younger age group.

Antithrombotic treatment with low molecular weight heparin was assigned to 97% of patients with hip fracture in the hospital. Hospital guidelines were used for postoperative pain management. Osteoporosis (OP) was diagnosed in a few cases, however most patients with hip fracture were not screened for OP. Three quarters of patients (461;76%) were referred to local hospitals or nursing care facilities, only 37 patients were referred to the specialised rehabilitation unit. Mortality rate during the hospital stay was 1.5% (9 patients). No comprehensive geriatric assessment was performed, social worker consulted patients case by case.

**Conclusion:** implementation of international guidelines for the management of geriatric fractures in Estonia remains challenging.

S3.3-3 12-06-2012, 16:00-17:30, Room 1

Can better treatment and prophylaxis of delirium in the early phase of a hip fracture improve long-term cognitive outcome? Randomised, controlled trial

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**Background:** Delirium is a common complication of hip fracture in the elderly. The aim of this ongoing trial is to investigate, in a RCT, whether optimizing medical treatment will prevent and/or improve the treatment of delirium and thereby improve long-term cognitive outcome.

**Methods:** Patients are randomized in the Emergency Department to treatment in a new orthogeriatric service or the conventional orthopaedic ward. The intervention patients are transferred as soon as possible to the orthogeriatric ward, stabilised there preoperatively, and transferred back to the same ward postoperatively, while the control group are treated in a traditional orthopaedic ward. Surgical and anaesthesiologic procedures are similar in the two groups. The inclusion was closed at the 5th of January 2012. 332 patients has been randomised.

**Primary endpoint:** We have constructed a composite endpoint, tapping cognitive functioning in the lower as well as the higher spectre of performance by combining two instruments; the Clinical Dementia Rating Scale, and The 10 words memory test. Endpoints will be assessed after 4 and 12 months, by a research assistant blinded to allocation. Secondary endpoints: Preoperative and postoperative delirium (according to the Confusion Assessment Method) Duration of delirium Severity of delirium (according to the Memorial Delirium Assessment Scale) The Barthel ADL Index Length of stay in hospital Cumulative mortality and causes of death.

**Residential status:** Short Physical Performance Battery, a simple

test of mobility. Number of days in own home during the first 4 monthsIncidence of dementia 12 months postoperatively (ICD-10-criteria for research)  
**Results:** Analysis of the results will start in May 2012, when the last patient has reached the 4 months assessment.

S3.3-4 12-06-2012, 16:00-17:30, Room 1

Characteristics of patients and care pathways in an orthogeriatric unit. Results from a patient database with 2000 patients.

Professor MD Anette Hysten Ranhoff  
*Diakonhjemmet hospital*  
Co-authors:  
Nurse Mette Martinsen  
Ludvig F. Solheim

**Background:** It is increasingly common to care for older hip fracture patients in orthogeriatric units where orthopaedic care is combined with interdisciplinary geriatric care.

The characteristics and needs of older hip fracture patients are poorly described. The aim is to describe the characteristics of these patients in order to better understand their need for care and rehabilitation.

**Methods:** This is an observational study based on a quality register for all patients 65+ years in an orthogeriatric unit who are operated for a hip fracture. The unit covers 250,000 inhabitants in Oslo. The quality database includes demographic, medical, and functional data collected from routine assessment by the interdisciplinary team.

**Results:** From 2007 to 2011, 1903 patients, included 457 (24%) from long-term care institutions, were enrolled in the database. Mean age was 85 years (SD 7.2), 76% were female, and 80% had fallen indoors. Chronic diseases were registered in 86%, and 41% of the community-dwelling patients had pre-fracture cognitive impairment defined as IQCODE-SF >3.6. Complications were observed in 55%, the most common complications were need for blood transfusion (25%), delirium (21%), and urinary tract infections (18%). Post-operative orthopaedic infections were rare (3.2%).

Patients from long-term care were older, (87 vs. 84 years, p<0.001), more had American Society of Anaesthesiologists (ASA) score  $\geq$  3 (72% vs. 50%, p<0.001) and a higher number of chronic medical conditions (mean 2.2 vs. 1.6, p<0.001). Among community-dwelling patients, those who had fallen indoors were older (mean age 85 vs 82 years), p>0.001. More were female (79 % vs 67 %, p>0.001), had ASA score  $\geq$  3 (55% vs 37%, p>0.001), more chronic medical conditions (mean 1.7 vs 1.3), larger impairment in pre-fracture ADL (pre-morbid Bartel mean 17.4 vs 18.7, p>0.001), and lower cognitive function IQ-CODE 3.7 vs 3.3p>0.001, and more complications during hospital stay 1.15 vs 0.74 p>0.001.

**Conclusions:** Older hip fracture patients in this orthogeriatric unit may be divided into three groups; patients who are

relatively fit and have experienced outdoors falls (20%), frail community-dwelling patients who have fallen indoors (56%), and patients from long-term care institutions (24%). Different caring pathways are needed for these groups.

S3.3-5 12-06-2012, 16:00-17:30, Room 1

Will comprehensive geriatric work-up during the index stay improve mobility at 4 months in hip fracture patients? The Trondheim Hip Fracture Trial.

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**Background:** Hip fractures in old age have serious consequences on function, mobility and mortality. The aim of the study was to investigate if treatment of old hip fracture patients in an orthogeriatric ward during the hospital index stay has advantage over standard care in an orthopedic ward. Primary endpoint is mobility at 4 months after the fracture.

**Methods:** A randomized clinical trial (RCT) enrolled 400 home dwelling patients aged 70 years +. Randomization was performed before surgery while the patients were in the emergency room. The intervention group received comprehensive geriatric assessment including a work-up by geriatricians, nurses, physiotherapists and occupational therapists. Control patients received standard orthopedic care. Information on demographic characteristics, pre-fracture use of walking aids, cognitive function, activities of daily living (ADL), instrumental ADL (IADL) and medical condition was collected during index stay from patients and caregivers and review of medical records. ADL was evaluated by use of Barthel Index (0-20) and IADL by use of Nottingham extended IADL scale (0-66). Mobility was assessed by use of Short Physical Performance Battery (SPPB) and Timed Up and Go (TUG) at the 5th postoperative day and at 1, 4 and 12 months.

**Results:** Data collection will be closed in January 2012.Group allocation is therefore unknown. Preliminary analyses show that the study sample has a mean age of 83±6 years, 75% are female, and 10 % lived in sheltered housing before the injury, and that the participants had a prefracture median Barthel Index value of 20 (interquartile range 17-20) and median IADL score of



45(interquartile range 28-57). The mean SPPB score at 4 months was 5.11 points (SD 3, 04) (range0-12).  
**Conclusions:** Preliminary data demonstrate a study sample of old hip fracture patients with restricted mobility 4 months after the fracture. Data comparing mobility and ADL/I-ADL in the two treatment arms will be presented at the congress.

## S3.4 Family carers in the welfare state

Chair: Tove Lindhardt

S3.4-1 12-06-2012, 16:00-17:30, Room 2

### Assistive technology makes chance for family carers

Occupational Therapist Ingela Månsson  
*The Swedish Institute of Assistive Technology*

In Sweden as well as in many other countries family carers are taking great responsibilities for the care of their relatives. In Sweden three quarters of all care and support are given by family members, and nearly a quarter of all persons in Sweden over 55 years are helping an elderly, sick or disabled person in their own home or at distance. That means that it is very important to support family carers and to consider their needs of support and help in a 24 hours perspective all year around. Since 2007, the Swedish Institute of Assistive Technology (SIAT) has, with support from the Swedish Government, the Ministry of Health and Social Affairs, carried out a development program Technology for Elderly. The goal is to support the development processes that will provide elderly people and family carers with better access to good and safe technology and services making their lives easier. The program which consists of more than a 100 projects is being run in cooperation with companies, R&D-centers, municipalities and organizations for senior citizens in the areas of products, service development and information. The objective is to test and develop new technology for elderly and family carers. The development program has resulted in better knowledge for supporting family carers with assistive technology in their daily lives. Examples of lessons learned are e.g: - family carers do not have information about available and appropriate assistive technology matching their needs - assistive technology is making change for family carers as it makes them more safe, secure and self-reliant in their daily activities - family carers get assistive technology too late. Information and communication technology (ICT) is one of several technologies that has been tested and developed for supporting family carers. One example is ACTION a computer communication system with internet, adapted information, education and support system. ACTION has been tested and evaluated in a project in a sparsely populated area. A model to facilitate information to family carers has been created and introduced in order to show how assistive technology can help family carers in various situations. Methods and strategies for assessing the family carers needs of assistive technology have also been created and tested in the project. One of the main results from the project is that timing for the assistive technology intervention is critical if the assistive technology should be useful for family carers.

S3.4-2 12-06-2012, 16:00-17:30, Room 2

### Support of carers of older people entering into and living in nursing home

RN, PhD, Research Director CO Elizabeth Hanson  
*Swedish National Family Care Competence Centre, Linnaeus University*  
Co-author:  
RN, RNT, MScN, Eva Gustafson  
*Swedish Family Care Competence Centre*

Family carers often express that making the decision for one's partner to move into a nursing home is one of the most difficult decisions they have had to make in their lives. The process is commonly associated with feelings of guilt, remorse and resignation, particularly for carers who have been caring for their relative over a prolonged period. Entry to nursing home continues to be largely in response to a crisis situation, as a result of a deterioration in the health of the older person and/or the physical and mental exhaustion of the carer. Carers are subsequently faced with having to adjust to the physical separation of their partner and to a re-orientation of one's roles as partner and carer. Finding ways to maintain relationships with their partner, participate in their care and life in the nursing home, develop relationships with staff and to re-invest in one's own life are common themes that are highlighted within the literature. Equally, there are issues for adult children who may play a deciding role in the decision making process and who subsequently attempt to support both parents in various ways (Sandberg et al 2001, Davies 2004). This subject forms one of the prioritised areas of the Swedish National Family Care Competence Centre (SNFCCC). Currently, 8 local blended learning networks (LBLNs) in municipalities across Sweden, consisting of family carers, older people, practitioners, decision makers and politicians meet to share their experiences, learn from each other and discuss research results in the area. It is intended that this work will lead to them identifying and engaging in local practice development work. Our presentation will begin with an overview of the research that has been carried out in the field and a description of the working method of LBLNs which is based on the concept of Communities of Practice (Wenger, 1998). The main findings arising from the initial themed discussions across the networks will be presented and discussed with the audience. Finally, we will conclude with the main lessons learned from our collaborative project work thus far.

S3.4-3 12-06-2012, 16:00-17:30, Room 2

### Frail elderly patients' relatives - what role do they play during hospitalisation?

Senior Researcher Tove Lindhardt  
*Copenhagen University Hospital, Herlev*

**Background:** Relatives of frail elderly patients have often played a significant role in managing the patient's daily life prior

to admission, and may have deep knowledge of the patient's health and functional prob-lems. Hence, they may expect to negotiate the care and treatment plan, particularly in relation to discharge, and their knowledge may improve decision-making, if asked for. But how do relatives experience the encounter with the hospital system, and what are their expectations for involvement? The aim of this study was to investigate this.  
**Method:** A prospective, cross-sectional design was applied, using descriptive and comparative analyses. 180 relatives of elderly medical patients in a university hospital participated in a survey using a val-idated structured, self-report measure covering attributes, prerequisites, outcome and barri-ers/ promoters for family in-hospital collaboration.  
**Results:** Data collection is currently ending, and analyses are about to commence. Preliminary analyses in-dicate that relatives are heavily involved in pre-hospital caregiving activities and particularly the discharge is a crucial point for them. Many report guilt and powerlessness, and 40 % felt they had to ensure the patient sufficient care. Almost 50 % report experience with mistakes and insufficient care during the current and prior hospital stays. Relative's knowledge of the patient's situation was assessed in less than half of the cases, mostly at discharge. Half of the sample expected influence on in-hospital decision-making, but 70 % when it concerned discharge. While 14 % reported influence on decision-making, 21 % reported being informed about decisions; 38% was satisfied with level of influence. Predictors for trust, wanting influence, and reporting guilt and powerlessness will be cal-culated and ready for the conference.  
**Conclusion:** Hospital staff's involvement of relatives is low, as is their information of relatives. Although all engaged in caregiving activities, relatives is a heterogeneous group and the sample is seemingly split in two halves - one reporting guilt and powerlessness and one not; and one expecting influence on decisions and one not.

S3.4-4 12-06-2012, 16:00-17:30, Room 2

### Family care and grandmotherhood in the welfare state

MA, Pd.D. Anne Leonora Blaakilde  
*University of Copenhagen*

**Background/purpose:** In a historical perspective carework has primarily been reserved for women. During the 20th century, the Housewife was a social construction in most Western welfare states, inaugurated by a system which, while conveying expectations to female unpaid work, prioritized female carework as a societal value free of charge. In late modernity, however, everybody is expected to contribute at the paid labor market, and the necessary tasks of carework such as child rearing, health and nutrition management in daily life, care of sick and dying persons etc., have turned into a site of contestation, since it has never been financially prized in a society with increasing emphasis on market economy structure. Who is supposed to do the carework? This study encircles contemporary expectations to grandmotherhood in Denmark.

**Methods:** The discursive study is based on historical material, biographical interviews, and current representations in media and policy papers. Experiences revealed in qualitative interviews with grandmothers are included in the discourse analysis.

**Findings:** While the Housewife aged during the transition period from modernity to late modernity, she willingly continued to perform care work which made possible the increasing amount of younger women on the labor market. Hence, a cultural and societal ideal was established, and grandmothers - and elderly women, representing the image of the ideal grandmother - are now to a large degree expected to shoulder carework, not only in their own families but also in the voluntary sector of society. This carework is still mostly unpaid.

**Conclusion:** Grandmothers are contributing substantially to the general welfare, but reciprocally, the income, life standard and health situation of this female population is generally on the lowest level. From a cultural perspective, elderly women are stigmatised as old, so their work is appreciated while their representation is not.

S3.4-5 12-06-2012, 16:00-17:30, Room 2

### Older Caregivers receiving and providing help.

Associate Professor Sigurveig H. Sigurdardottir  
*University of Iceland*

Senior Lecturer Marie Ernsth Bravell

**Objectives of the study:** The aim of the study is to describe older informal caregivers, their need of help and how they provide help to others in combination with the formal care providers and other informal caregivers.

**Method:** In the study Icelandic older people (ICEOLD), data was collected using a national sample of persons aged 65 and over living in their own homes in Iceland. A telephone interview was conducted with 782 individuals, 441 women and 341 men, 65-98 years of age. The response rate was 66%. The participants were asked about living standards, help received and whether they provided help to someone living in their own household or somewhere else. The study is based on descriptive analysis.

**Results:** About one fifth (21%) of the total sample of respondents helped or provided care for another person (n=157). More than half of those older informal caregivers (n = 85) needed help themselves with ADL tasks. The respondents that were cohabiting were more often informal caregivers than those living alone. The older caregiver were mostly alone in his/her role as a caregiver, but when care became too burdensome, the formal care system provided help in tandem with the older caregiver. The most frequent help given is emotional support.

**Conclusion:** This study provides information about older caregivers and how they interact with the formal care system. The results show that older caregivers, despite the fact that they need help themselves, are an important resource in providing care. Further research is needed to assess how municipalities can support them in their roles as caregivers.

## S3.5 Centenarians in the past and present

Chair: Bernard Jeune

S3.5-1 12-06-2012, 16:00-17:30, Room 3/4

### Centenarians today: new insights on selection from the Five Countries Oldest-Old Project (5-COOP)

INSERM Research Director Jean-Marie Robine  
*INSERM*

The number of oldest old grew tremendously over the past few decades. However, recent studies have disclosed that the pace of increase strongly varies among countries. The present study aims to specify the level of mortality selection among the nonagenarians and centenarians living currently in five low mortality countries, Denmark, France, Japan, Switzerland, and Sweden, part of the 5-Country Oldest Old Project (5-COOP). All data come from the Human Mortality Database, except for the number of centenarians living in Japan. We disclosed three levels of mortality selection, a milder level in Japan, a stronger level in Denmark and Sweden and an intermediary level in France and Switzerland. These divergences offer an opportunity to study the existence of a trade-off between the level of mortality selection and the functional health status of the oldest old survivors which will be seized by the 5-COOP project.

S3.5-2 12-06-2012, 16:00-17:30, Room 3/4

### The Era of Centenarians - The Mortality of Swedish Oldest-Old

PhD Sven Drefahl  
*Karolinska Institutet*

Co-author:  
PhD Karin Modig

Between 1969 and 2009 Swedish life expectancy at age 80 increased by 2.01 years for men and 2.79 years for women. While the number of Swedish centenarians and the maximum age at death have risen dramatically, it is still unknown whether their mortality has declined as well. For our investigation we use individual-level data of all Swedes who reached age 100 between January 1, 1969 and December 31, 2009 (N=15,231). We estimated different measures of the average age at death. Our results indicate that the mortality rates for centenarians of both sexes remained remarkably stable over the 40 year period, even for the most recent years. This suggests that either the progress in delaying death has been limited to mortality at ages below 100, or that increasing heterogeneity among centenarians is concealing declining morbidity rates.

S3.5-3 12-06-2012, 16:00-17:30, Room 3/4

### Use of medicines among centenarians in Sweden

PhD Student Jonas W. Wastesson  
*Aging Research Center*

Co-authors:  
Docent, Associate Professor Marti Parker  
Professor Johan Fastbom  
Professor Mats Thorslund  
Associate Professor Kristina Johnell

Little is known about the use of medications among very old persons. This study investigated pharmacological drug use in community-dwelling and institutionalized centenarians, nonagenarians and octogenarians using the Swedish Prescribed Drug Register. The register was linked to the Swedish Social Services Register and comprised 1,672 centenarians, 76,584 nonagenarians, and 383,878 octogenarians. Multivariate logistic regression analysis was used to analyse whether age was associated with use of drugs, after adjustment for sex, living situation and co-morbidity. With these adjustments, centenarians were more likely to use analgesics, hypnotics/sedatives and anxiolytics, but less likely to use antidepressants than nonagenarians and octogenarians. Moreover, centenarians were more likely to use high-ceiling diuretics, but less likely to use beta-blockers and ACE-inhibitors. Centenarians' high use of analgesics, hypnotics/sedatives and anxiolytics may reflect a palliative approach to their drug treatment or that pain and mental health problems increase into extreme old age. Also, centenarians do not seem to be prescribed cardiovascular drug therapy according to recommended guidelines to the same extent as nonagenarians and octogenarians. Longitudinal studies will be needed to ascertain if this is an age or cohort effect.

S3.5-4 12-06-2012, 16:00-17:30, Room 3/4

### Using cardiovascular diseases and medicine consumption to describe morbidity in Danish centenarians

Associate Professor, Senior Consultant Karen Andersen-Ranberg

*University of Southern Denmark*

Although health in general deteriorates with advancing age, centenarians are generally perceived as survivors with better health than their age peers. The Danish 1895-birth cohort study was launched to describe the health of unselected 100-year-olds (N=275; n=207; 75%) through interview and objective examinations, as well as health information from family doctors and national health registers. Since CVDs are the main cause of mortality we focus on the prevalence of objective CVD findings. General morbidity was assessed by use of drugs. Major CVDs

were assessed by measuring blood pressure (BP) (participation rate 69%) and electrocardiogram (ECG) (participation rate 76%). Hypertension affected 52%. ECGs revealed a major pathology in 69%, ischemia 46%, atrial fibrillation/flutter 27%, and previous myocardial infarction 10%. Drugs were used regularly by 95% (mean: 3.9 drugs/day; using 5 drugs: 38%). The most commonly prescribed drugs were those aimed at the cardiovascular (64%), alimentary (56%) and nervous systems (49%). Based only on these selected findings we find the 1895-cohort to have a high prevalence of CVDs. Moreover, drugs aiming at the cardiovascular system were similarly the most commonly prescribed drugs, but may reflect underdiagnosing of cardiovascular diseases in the oldest old.

S3.5-5 12-06-2012, 16:00-17:30, Room 3/4

### Disability in Danish centenarians: comparing gender-specific data on ADL from surveys of birth cohorts 1895, 1905 and 1910.

Post Doc Sonja Vestergaard  
*Syddansk Universitet*

Co-authors:  
Professor Kaare Christensen  
*University of Southern Denmark*  
Associate Professor Bernard Jeune  
*Danish Aging Research Center*

The number of Danes reaching 100 years has increased with more than 50% since 1995. It may be hypothesised that today more frail person reach the age of 100 than in earlier decades. We therefore examined whether this increase in survival has led to an increase in disability levels. We have earlier found that Danish centenarians born in 1905 had better ADL than those born in 1895, but only among women. We have now carried out a third survey of Danish centenarians born in 1910. Does the improvement for female centenarians in 2005 still hold in 2010? In all three birth cohorts, disability was assessed according to a modified version of Katz ADL and Avlund's PADL. In the 1895/96-cohort 207 out of 276 participated (75%), in the 1905-cohort 225 out of 364 participated (63%), and in the 1910-cohort 273 out of 442 participated (62%). The first cohort was interviewed and examined by the same geriatrician and nurse, the next two cohorts was interviewed and examined by trained interviewers. It seems that the improvement in ADL holds for 100-year old women in 2010 but it did not improve further.



## S3.6 Fatigue in older adults

Chair: Kirsten Avlund

S3.6-1 12-06-2012, 16:00-17:30, Room 12

### Trends in fatigue 1992-2002-2010/11 among the oldest old in Sweden

PhD Carin Lennartsson  
*Aging Research Center*

Co-authors:  
Marti G. Parker  
Linda Hols-Salén  
Professor Mats Thorslund

This study examines and describes self-reported fatigue and tiredness among the oldest old (ages 77+) in Sweden over a twenty-year period. Fatigue and tiredness are symptoms of ill-health and can reflect several dimensions of health - physical, mental and/or pharmacological. Analyses of the Swedish panel study of the oldest old (SWEOLD) from 1992, 2002 and 2010/11 (n=537, 621, 675) show that fatigue and tiredness are commonly experienced phenomena. Today about half of the oldest old reported fatigue and one fourth reported tiredness. There was no significant difference between women and men in either reporting fatigue or tiredness. Comparisons of the three SWE-OLD waves show that a greater proportion of elderly persons report fatigue and tiredness over the period. The increasing in fatigue and tiredness is found both among women and men. The increase is most substantial between 1992 and 2002 but the figures continue to rise in 2010 although more modestly.

S3.6-2 12-06-2012, 16:00-17:30, Room 12

### Tiredness in old age: Associated factors and predictors in seven years

MSc M Nevalainen  
Co-authors:  
MSc A-K Koivisto  
PhD Marja Jylhä

The aim of the study was to investigate factors associated with self-rated tiredness in a sample of home-dwelling individuals aged 70 or older, as well as factors associated with the onset of tiredness during a 7 year follow-up period. The data are from the multidisciplinary prospective Tampere Longitudinal Study on Aging (TAMELSA) which started in 1979. Waves from 1999 and 2006 were used in this study. In 1999, 398 respondents out of the total of 429 (93 %) and in 2006 252 out of the total of 275 respondents (92 %) were interviewed. After the removal of proxy respondents and those lost-to-follow-up between 1999 and 2006, the sample in 1999 was 378 and in 2006

197. Altogether 113 respondents died during follow-up period. The study was conducted with structured questionnaires by personal interviews in 1999 and via telephone at follow-up. The respondents were asked whether they had felt tiredness during the last two weeks, categorized as tiredness often or almost continuously and no tiredness (no, or occasionally). The covariates included gender, age, education, self-rated health, number of diseases, functional ability and depressiveness. The prevalence of tiredness was 23 % with highest prevalence among the oldest age group. Feelings of tiredness increased among 15 % of the participants. Self-rated health and functional ability increased the likelihood of tiredness as did feelings of depressiveness. Age was associated with tiredness independently but not in an adjusted model. Number of diseases was associated with the increase of tiredness over a seven year follow-up period. Tiredness alone was a significant independent predictor of mortality when age and gender were adjusted for, but not in the fully adjusted model.

The study confirmed the connection of tiredness with self-rated health, functional ability, diseases and depressiveness. Rather than age as such, age-related changes in health and functioning seem to be connected with subjective feeling of tiredness.

S3.6-3 12-06-2012, 16:00-17:30, Room 12

### Fatigability in basic indoor mobility in nonagenarians

PhD Minna Mänty  
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MD, PhD, DMSc Kaare Christensen  
*University of Southern Denmark*  
DMSc Kirsten Avlund  
*Copenhagen University*

**Objectives:** Older adults' subjective feelings of fatigue have been considered an important indicator of functional decline in old age. However, fatigue in the fastest growing segment of the older population, the oldest old, has not been reported before. The aim of this study was to evaluate the prevalence and associated health factors of indoor mobility related fatigability among nonagenarians.

**Methods:** The study is based on baseline data of The Danish 1905 cohort study on 92-93-year old persons (n=1181) who were independent of help in indoor mobility. Fatigability in basic indoor mobility was defined as a subjective feeling of fatigue when transferring or walking indoors. Other standardized assessments include self-report measures of medical history, as well as performance-based assessments of walking speed and maximum hand grip strength.

**Results:** In total, every fourth (26%) of the participants reported fatigability when transferring or walking indoors and fatigability was more common among participants living in sheltered housing as compared to those living independently (32% vs. 23%, p<.001). Cardiovascular diseases, musculoskeletal pain in lower body, medications, walking speed and depressive symptoms were independently associated with fatigability.

**Conclusions:** In non-disabled nonagenarians, fatigability in basic indoor mobility is associated with many potentially modifiable health factors that should be taken into account when planning interventions to maintain independent functional ability and well-being among the oldest old population.

S3.6-4 12-06-2012, 16:00-17:30, Room 12

### Fatigue and cardiovascular health: A study on aging Danish twins

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*University of Copenhagen*

Co-authors:  
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PhD Inge Petersen  
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DMSc Kirsten Avlund  
*Copenhagen University*

Fatigue has been shown predictive of ischaemic heart disease (IHD) in healthy middle-age men. The aim of this study was to investigate the predictive value of fatigue for IHD and poor cardiovascular health in healthy individuals aged 70 and older. The study population was drawn from The Longitudinal Study of Aging Danish Twins (LSADT). In total 1696 healthy individuals was followed 10-16 years through registries and 2-10 years by questionnaires. Kaplan Meier, Cox Proportional Hazard and logistic regression were used to analyse data. Fatigue was measured with the mobility-tiredness scale (Mob-T) and multivariable-adjusted models included age, sex, SEP, life style factors and depression. IHD was defined as first hospitalization due to IHD (ICD10: I20-I25) or death with IHD as primary cause. A poor cardiovascular health profile was assigned to individuals who at questionnaire follow-up was loss to follow-up, had been hospitalized due to IHD, had self reported IHD related diagnoses or had developed mobility disability. Fatigued individuals had a significantly larger risk of being hospitalized due to IHD during the 10-16 years of follow-up (HR=1.47 (CI95%: 1.08-2.00) and of having a poor cardiovascular health profile at 2- (OR=1.45 (CI95%: 1.08-1.93)) and 4-year of follow-up (( OR=1.55 (CI95%: 1.11-2.16)), compared to older persons without fatigue. At 6-10 year follow-up we lacked study power as very few individuals sustained a good cardiovascular health profile. We concluded that fatigue in older cardiovascular healthy adults is an independent early predictor for development of subsequent poor cardiovascular health and even hospitalization due to IHD.

S3.6-5 12-06-2012, 16:00-17:30, Room 12

### Telomere length - a molecular biomarker for fatigue.

PhD Laila Bendix  
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*Copenhagen University*

Fatigue is often present in older adults with no identified underlying cause. We suggest that cellular wear and tear due to oxidative stress and inflammation is an underlying factor to fatigue. We therefore hypothesized that LTL might be relatively short in those who experience fatigue since leukocyte telomere length (LTL) is known as a marker of cellular aging. We assessed 439 older Danish non-disabled twins. LTL was measured using Southern blots of terminal restriction fragments. Fatigue was measured by the Mobility-Tiredness scale based on questions on whether the respondents felt fatigued after performing six mobility items. We examined lifestyle factors, mental health and aging related somatic diseases as possible confounders. LTL was significantly associated with fatigue (p=0.023), showing an increase of 0.038 kb/fatigue score unit, i.e. LTL was longer in individuals that were less fatigued. Aging-related diseases and mental health did not explain the association, while lifestyle factors slightly influenced the association. Our results support an association between LTL and fatigue, suggesting cellular wear-and-tear as an underlying factor to fatigue.

# Oral Abstracts

# 01.1 Geriatric patients I

Chair: Kirsten Damgaard  
11-06-2012, 11:30-12:30, Plenum 8/10

01.1-1 11:30-11:45

## Barriers to a person-centred care for older patients with cognitive impairment in acute care.

Author: RNT, MSc, PhD student Anita Nilsson  
*Umeå universitet*  
Co-authors: RNT, Professor, Birgit H. Rasmussen, RN, Associate Professor, David Edvardsson

**Objectives:** Older patients with cognitive impairment often receive acute care not corresponding to their individual needs. Person-centred care (PCC) is described as a model for high quality care taking the needs of the whole patients into account. Despite the known advantages it appears difficult to implement, practice and sustain PCC in acute care settings. The aim of this study was therefore to further explore barriers for PCC of older patients with cognitive impairment in acute care.  
**Methods:** A total of 110 hours of ethnographic style observations were completed at a cardiologic ward. The data analysis was inspired by the principles of grounded theory and based on different types of observations and interviews.  
**Results:** Data analysis is under progress. Preliminary results show that barriers to PCC exist on several levels in acute care settings, namely the organizational; environmental and individual staff and team level. Consequences of the barriers observed point towards patients' suffering from care, family being excluded from care and staff being frustrated. A theoretical model of barriers for PCC, its properties, consequences and core category will be presented at the conference.  
**Conclusions:** Preliminary results show the complexity and interwovenness of the barriers for PCC of older patients with cognitive impairment in acute care. Change processes, strategies and interventions must target underlying workplace and organizational factors as well as the individual healthcare staff.

01.1-2 11:45-12:00

## Metabolic syndrome and associated factors among South Korean Older adults Analysis of KNHANES 2007

Author: Professor Seung-youn Hong  
*Kangnam Univ.*

**Introduction:** Over the past decades, the number of obese as well as older population in South Korea has increased due to socioeconomic growth. Cardiovascular disease therefore

becomes more prevalent which is now a leading cause of death and the development of components of the metabolic syndrome(METs) within this population has increased as well. A better understanding of the determinants of Mets in older population might provide insight into preventive interventions for improving health and reduce the incidence of associated disease. However, little information is available about determinants affect Mets in later life.  
**Objective:** The aim of this study was to investigate the determinants for METs among older adults over 60 year in Korea.  
**Method:** Dataset was obtained from the K-NHANES 2007; a cross-sectional health survey of a nationally representative sample of non-institutionalized civilian South Koreans. The prevalence of the METs, as defined by NCEP ATP III, was determined, and factors associated with predisposition to the METs were analyzed.  
**Result:** Total 897 older adults, 514(57%) females. 383(42.7%) males with a mean age of 69.75 years were included in this study. Among the 897 older adults, the age-adjusted prevalence of the METs was 22.7% for men and 42.4% for women. Higher BMI was associated factors for the Mets regardless of gender. Smoking in men and economic inactivity, Medicaid beneficiary, functional limitation in women increased the odds of the metabolic syndrome.  
**Conclusion:** Mets is present in more than 34% of older South Koreans. Whereas current smoking and higher BMI were identified as independent modifiable risk factor of Mets in men, other factors such as economic activity and functional limitation were also identified as risk factor of Mets in women. Therefore, not only lifestyle modification but also modification of economic activity and functional limitation are required to prevent metabolic syndrome in older population.

01.1-3 12:00-12:15

## Orthostatic hypotension - significance of measurement duration in geriatric inpatients

Author: MD Heidi Pedersen  
*Gentofte Hospital*  
Co-authors: MD, PhD Jesper Petersen, MD, PhD Marianne Kirchhoff

**Introduction:** Orthostatic hypotension (OH) is defined as a blood pressure (BP) decrease of at least 20 mmHg (systolic) and/or 10 mmHg (diastolic) within 3 minutes (min) of standing up. However, the measurement duration of 3 min is not evidence-based. Consequently, many geriatric departments in Denmark use a measurement duration of 10 min.  
**Objective:** To examine the proportion of patients who experience a significant orthostatic BP decrease after the first 3 min.  
**Methods:** All journals from patients who were hospitalized at the geriatric department at Gentofte Hospital, Denmark, in the period from the 1st of January to the 1st of May 2011, were

retrospectively screened. Of 156 patients screened for eligibility, 49 underwent orthostatic BP measurement and were assessed for eligibility. BP and pulse rate were measured at baseline after rest in the supine position, and at 1, 2, 3, 5 and 10 min in the standing position.  
**Results:** Of 49 patients assessed for eligibility, 45 patients were included in the study. 4 patients were ineligible due to deviations from the standard test procedure (n=3) or significant low back pain (n=1) during test. 10 patients without OH terminated the test after 1(n=1), 3(n=3) or 5(n=6) min due to fatigue. 24 (53.3%) vs. 2 (4.4%) patients experienced OH fulfilling the definition before, respectively after, the first 3 min of the test. 7 of 24 patients who had OH within the first 3 min terminated the test before 10 min due to symptoms caused by OH.  
**Conclusion:** 2 of 45 patients experienced OH after the first 3 min. One of these patients showed a trend towards OH during the first 3 min, but the measurement was not significant until 5 min after standing up. The other patient experienced a clinically insignificant decrease in diastolic BP after 10 min. Hence, in geriatric inpatients screened for OH, we recommend BP measurement within 3 min and suggest continuing measurements in patients who present insignificant but declining BP during the first 3 min.

01.1-4 12:15-12:30

## Similarities and differences in characteristics in elderly patients admitted to an acute geriatric unit, an orthogeriatric unit and a department of geriatric psychiatry

Author: Mette Irene Martinsen  
*Diakonhjemmet hospital*  
Co-authors: Kari Midtbø Kristiansen, Marianne Dahl, Anette Høyen Ranhoff, Thomas Svendsen, Bernhard Lorentzen, Ludvig Fjeld Solheim

**Objectives:** Hospital services to elderly takes place in different areas. The aim here is to indicate differences and similarities in by comparing demographic and medical characteristics in elderly patients admitted to an acute geriatric unit, an orthogeriatric unit and department of geriatric psychiatry at Diakonhjemmet hospital in Oslo.  
**Methods:** Cross-sectional observational study. Data was obtained from quality registry where demographic and medical information is collected by the interdisciplinary teams in each unit.  
**Results:** 880 patients, 346 acute geriatric unit (AGU), 450 orthogeriatric unit (OGU) and 84 department of geriatric psychiatry (DGP), 642 women and 238 men aged 61 - 103, were included in in 2011. A higher percentage of women was admitted to the OGU 78% than the other two units, 6 % DGP and 67% AGU, p=0.001. Patients admitted to DGP were younger, mean age 75 years, than patients admitted to the other two units OGU mean age 85 and AGU 86 years, p=0,001. 80% of the

patients admitted to AGU and 76 % in OGU were 80+, while only 26 % of the patients in DGP were 80+. DGP had a higher percentage of registered dementia diagnosis, 39% vs 26 % in OGU and 28% in AGU. AGU 69 % of the patients admitted to DGP, 53% patients in AGU and only 13 % of patients in OGU were discharged home. While 41 % and 42 % of the patients with dementia returned home after hospitalstay from DGP and AGU, only 2.5 % of the patients with dementia returned home from OGU. 95% of the patients with dementia in OGU were either returned to a longterm nursing home residence or discharged to a shortterm nursing home.  
**Conclusion:** The OGU had more women admitted than the DGP and the AGU. The patients in DGP were younger and stayed longer in hospital than patients in OGU and AGU. Our data suggest that dementia alone does not determine place of discharge, however a fracture added to the dementia, seems to increase the need for nursing home after hospitalization.



# 01.2 Home care and participation

Chair: Eigil Boll Hansen

11-06-2012, 11:30-12:30, Plenum 9/11

01.2-1 11:30-11:45

## Older volunteers help improve quality of life through out-of-home activity intervention among older people with severe mobility limitations: a randomized controlled trial.

Author: Professor Taina Rantanen

Gerontology Research Center and Department of Health Sciences, University of Jyväskylä

Co-authors: PhD Merja Rantakokko, MSc Irma Äyräväinen, MSc Hannele Khalil, Ms Sini Honkala, MSc Johanna Eronen, Tiina-Mari Lyyra, PhD Marja Vaarama

The emphasis on home care has increased the number of home-confined and isolated frail people in the communities. Volunteers could provide recreation for such people. No earlier studies have examined the effects of voluntary work on the people served. We examined the effects of out-of-home individualized recreational activity intervention on quality of life (QoL) among community living older people, who have difficulty accessing the outdoors independently. Volunteering, Access to Outdoor Activities and Wellbeing in Older people (VOW) project (ISRCTN56847832) was a randomized single blinded controlled trial (RCT) conducted in Jyväskylä, Finland, in 2008-2011. The inclusion criteria were: agree to participate in a RCT, age 65 or higher, severe mobility limitation, willing to increase outdoor activity and able to communicate normally. 125 people aged 67-92 years were interviewed at home and randomized into intervention or waiting list control group. The primary outcome is QoL measured with WHOQOL-BREF which includes the overall QoL (2 items), physical capacity (7 items), psychological well-being (6 items), social relationships (3 items) and environment (8 items). Each intervention group member was assigned a trained volunteer who assisted the participant in attending recreational out-of-home activities once a week for three months. The baseline characteristics of the intervention and control groups were comparable. In the intervention group, the QoL total score increased on average 0.44 points (95% Confidence Interval, CI, -1.70, 1.58) while the control group QoL decreased on average -1.60 points (95% CI -3.45, 0.35; treatment effect p=0.163 and group difference p=0.076). For physical capacity subscale a significant treatment effect was observed (p=0.005) while for other QoL dimensions no treatment effects were observed. This study suggests that decline of QoL among old severely mobility-limited people may be prevented with individualized out-of-home activity intervention.

01.2-2 11:45-12:00

## Help to self-help as principle and as everyday practice

Author: Dr. Leena Eskelinen

AKF

Co-authors: Eigil Boll Hansen, Hanne Marlene Dahl

**Objectives:** The aim of the study was to examine how social and health care helpers and assistants understand the principle of help to self-help, and how they practice it when providing home care to elderly citizens.

**Methods:** The study was carried out among home care personnel and their clients in four Danish municipalities.

The data consists of 12 focus group interviews with home care staff and 90 participant observations of home visits. The data was structured with help of N'vivo program and analyzed according to predefined thematic categories.

**Results:** We identified two main forms of help to self-help, i.e. help to self-help in everyday situations and help to self-help with a rehabilitative aim. The most common form was to involve elderly people in small daily tasks in order to maintain their activity level, though without aiming to support their independent living. The other but relatively rare form was to encourage the elderly to train their functions in order to improve their capabilities and learn to cope with their functional decline thus making the elderly less dependent on home care services.

**Conclusion:** The home care staff subscribes to help to self-help as the normatively right principle based on their professional training and official regulations. However, there seems to be many aspects that intervene when they translate the principle into concrete care in everyday interaction with their elderly clients. If help to self-help is to be promoted in practice, more attention is required in relation to

- support to the care staff from management to maintain the principle in daily practice,
- formulating objectives for the help provided and clear communication of what is expected of the recipient when the help is granted,
- support from other professional groups, e.g. occupational therapists and physiotherapists, as to provide help with a rehabilitating objective.

01.2-3 12:00-12:15

## The outcome of focusing on a principle of help to self-help in the provision of home care

Author: Dr. Eigil Boll Hansen

AKF, Danish Institute of Governmental Research

Co-authors: Dr. Leena Eskelinen, Professor Hanne Marlene Dahl

**Objective:** The overall purpose of the study was to examine whether there is a preventive effect on the physical functional

level and psychological well-being of older people and an effect on the amount of help granted if local authorities focus on help to self-help when providing home care rather than "standard" provision of help.

**Methods:** The development in physical functioning, psychological well-being and granted help among recipients of home care in two municipalities with projects and active policies on activating the recipients of practical and personal help was compared with two municipalities with "standard" provision of home care services. The study was based on a questionnaire survey among recipients of help in the four municipalities in the autumn of 2009 and a follow-up questionnaire survey in the autumn of 2010 among those who responded in 2009. A total of 1,664 responded both years.

**Results:** In one of the municipalities focusing on help to self-help men had a more favourable development in mobility. The development of the recipients' functional level in relation to activities of daily living was inconclusive. We find no differences between the four municipalities with respect to the development of older people's psychological well-being. In both municipalities representing help to self-help we found a relative reduction in the amount of help granted than in the two other municipalities.

**Conclusion:** The outcome of focusing on help to self-help in providing practical and personal help on the recipients' functional ability with respect to activities of daily living is uncertain. This may be due to the fact that the principle has not been widespread in the home care organisation. An effect with respect to a relative reduction in the amount of help granted may be due to the assessment officers focusing more on what the applicants for help really are able to carry out themselves.

01.2-4 12:15-12:30

## Active citizenship and service voucher for the elderly

Author: Kirsi Kuusinen-James

The Centre of expertise onn social work, Verso

**Abstract:** Demographic, socio-economic, and political trends throughout the developed world have made elder care an issue of utmost policy importance. In Finland recent elderly care policies emphasize active citizenship (Anttonen et.al 2011). Active citizenship consists mainly of choice, participation and responsibilities. A purchaser provider model is a new way to organize and produce services. Service vouchers are regarded as new innovations which are expected to give service users more input in the service organizing process and at the same time relieve the pressure from public service provision and expenditure. The research focuses on how service vouchers function in the regular home care context. Plans to cut down institutional care have increased the urgency to develop home care services which has been on the political agenda for years. This research studies how the service voucher- model works from point of view of elderly persons, municipalities, and private service providers and

how service voucher users' choices and participation are present in the needs assessment and service delivery process. Currently there is little information as to how these policies that highlight active citizenship are perceived by elderly persons (Anttonen et.al 2011). This research will give some insight into the subject. The empirical data consists of survey and interviews by individuals who are using service vouchers. Municipal elder care coordinators as well as private service providers were also interviewed.

The paper will discuss the preliminary results of the research. It seems that not all of the regular home care clients fit the current norm of active citizens The research is funded by the Finnish Foundation of Communal Development.

**References:** Anttonen, Anneli & Häikiö, Liisa (2011): Care "going market": Finnish elderly-care in transition. Nordic journal on social Res



# 01.3 Inter generations and family relations

Chair: Catharina Nord  
11-06-2012, 11:30-12:30, Room 1

01.3-1 11:30-11:50

Intergenerational relations materialized  
The significance of older peoples’ private possessions in residential care

Author: Dr. Catharina Nord  
*Linköping university*

This presentation conveys results from an ongoing study of the significance of the private possessions that older people bring to their last home in residential care. The focus is on intergenerational relations embedded in the older person’s private assets and how these possessions represent the next of kin. The research is a qualitative study, with individual, semi-structured interviews as the main data collection method. Also, photography was used to document the interviewees’ rooms and assets. Eleven interviews were carried out with 13 older individuals involved. They were in the age range of 60 to 99. The analysis was based on actor network theory and aimed to reveal how artefacts are included in networks in time and space in which personal relations are remembered, confirmed or symbolized. Several aspects of time are present in these networks; the past, the now, and the future are conflated to a field of associations with significant others. There is a need for an extremely restricted selection of things when the older person moves from an often substantially bigger ordinary home to the small bed-sitting room or flat that is normally available to older people in residential care. The things selected may represent the most valuable of an older individual’s possessions, perhaps not so much in economic value, but rather emotionally, practically and as a representation of the individual’s identity and life in which other individuals play and have played an important role. The results show who these significant others are and what types of artefacts represent older people’s relations with them. Furthermore, the results show how relations/artefacts are connected to the older person’s life-stories as well as their present day support and social life. The study concludes that family members from the past and present constitute the most important relations to an older individual in the very late phase of life in residential care. Most of the few assets that are brought to the last home are linked to them in a number of ways.

01.3-2 11:50-12:10

The materialized connection of objects to other generations for elderly people living at home who are reducing their material room in old age

Author: Dr. Åsa Larsson  
*Linköpings universitet*

In an earlier study regarding the oldest old and their daily life and doings it was found that many old people planned and reasoned about reducing their material room and getting rid of things. This process of reducing the material room is often called ‘Casser maison’ and is the focus of an ongoing project consisting of three studies in which this process, disbandment of home, is studied at different points in later life transitions. In this presentation the focus is on how the possessions link different generations together, as described by elderly people who are not exactly at the point of changing their living arrangements but nevertheless are starting to think about, plan or are actually reducing the number of their possessions. Qualitative semi-structured interviews regarding the disposal of objects in the home were performed with 13 elderly persons (age 72-93) still living in their own home and managing primarily by themselves. The continuing analysis shows that the objects mentioned as being of special value often have connections to their ancestors, especially grandparents, as the objects have been inherited from the grandparents, usually via the parents. At the same time these objects are things that the elderly wish their grandchildren to continue to preserve for future generations of the family. The objects thus have important connections over several generations, from both the past and the future, to both ancestors and heirs of the elderly. Further elaborated findings and discussion will be presented at the conference.

01.3-3 12:10-12:30

Cherished objects as materialized links between generations

Author: Anna Whitaker  
*National Institute for the Study of Ageing and Later Life, Dep. of Social and Welfare Studies*

The presentation is based on data obtained from an ongoing qualitative study which aims to explore the symbolic meanings and functions of cherished objects among surviving children after sorting out the property and possessions left by a deceased elderly parent. Ten semi-structured interviews were conducted with twelve individuals - six men and six women - born between 1943 and 1969. This study is part of a larger project consisting of three studies, in which the aim is to study the changing meaning of personal possessions in later life transitions - a research field that is limited. An often unavoidable task for the next of kin of

a deceased person is to take care of the estate, i.e. the home and/or personal objects that belonged to the deceased person. This process, which consists of sorting out objects of different types, can accommodate a range of considerations, negotiations and compromises around the possessions. It is about what should be thrown away, sold, given away, what to keep, and how retained things should be allocated. It is a process that is partly affected by the grief over the deceased, and partly by the relationship to the deceased and other relatives. A dominant theme in the study is how some of the saved and highly valued objects act as a kind of materialized link between past and future generations and serve as a tool to preserve memories of a relationship to the deceased. The presentation includes a discussion on how the surviving children’s experiences of taking care of the estate and inheritance elucidate how different objects are imbued with various meanings linked to early memories, the relationship to the deceased parent. The presentation shows that inheritance issues have complex emotional and family relationship dimensions - also in relation to future generations/heirs.

# 01.4 Psychiatry, technology, BMI

Chair: Finn Rønholt  
11-06-2012, 11:30-12:30, Room 2

01.4-1 11:30-11:45

Active outdoor in inpatient geriatric psychiatry - experiences and data from development of a model

Author: Dr. Marianne Thorsen Gonzalez  
*Diakonhjemmet University College*  
Co-authors: RN Marianne Larsen, PT Lara Mishler, MHSc Kari Midtbø Kristiansen

**Objectives:** To develop and test out a model for increased outdoor activities for old persons with psychiatric disorders. To explore how nursing students and the supervising staff supervising mutually experienced taking part in the active outdoor project as pedagogical clinical project.  
**Methods and theories:** The Active Outdoor Project is scientifically underpinned by theories and research that recommend activities in general and outdoor activities in particular as supplementary treatment in preventing and rehabilitation of mental disorders. In Norway all the region health authorities offer funding opportunities for projects that involve students, lecturers in colleges and universities and supervising clinical in clinical studies. Often these projects also involve projects that directly or indirectly involve patients or users in order to improve or develop clinical practice. The Active Outdoor Project is a 1 year project involving students in different activities like developing suitable activity programs, learning monitoring tools, and at the same time being involved in motivating and cooperating with patients during different activities during their clinical practice. The project, which has a descriptive mixed method design, started in August 2011 and will end in May 2012 with registration of activity of the patients and filling out open qualitative questionnaires for students and staff.  
**Results:** By end of January activity is registered on 32 patients (Women: 19, Men: 13). Mean registration days are 22 (Range 1-63 days). Walks in the neighbourhood (53%), sit outdoor on a bench (18%), excursions (10%) and shopping (7%) are the most frequent outdoor activities. Women are in general more active than men, and older patients are more passive than younger patients. Likewise total activity is to a remarkable degree higher inversely correlated with age for men than for women, however not significant. The qualitative data from the students and staff are not analysed still, but will be provided on the conference.  
**Conclusion:** Data further show that the most frequent activities chosen are walking and more “passive” outdoor activities. Care should be taken to consider age and gender in order to activate and perform activity programs suitable for specific subgroups.

O1.4-2 11:45-12:00

### Quality registry in The Viken Research Network for Geriatric Psychiatry

Author: MSc Kari Midtbø Kristiansen  
*Diakonhjemmet Hospital*  
Co-authors: MD/Head of dep. Bernhard Lorentzen, MSc/Head of dep. Bodil McPherson, Head of dep. Terje Røst, Psych. Helene Skancke, Professor Knut Engedal, MD Inger-Marie Tjernæs, Head of unit Trude Teigene

**Objectives:**  
- To enhance our knowledge of old persons with severe psychiatric disorders.  
- To secure an optimal medical evaluation and treatment for old persons with severe psychiatric disorders.  
**Methods and theories:** The Viken Research Network for Geriatric Psychiatry (VirGeP) has initiated a joint quality registry (QualGeP) for patients in five departments of geriatric psychiatry. In the Oslo region, each hospital alone is too small to develop their own research unit within this specific field, and the number of patients in each diagnostic category is too limited to secure robust and reproducible findings. A collaboration between several hospitals, however, could contribute to valid and reliable research and documentation. QualGeP contains standard information about our patients provided in an ordinary clinical setting: demographic data; previous and present disorders and use of drugs; data from relatives regarding the patients' cognition, psychiatric health, behaviour, and activities of daily living, as well as the stress and care burden of relatives; tests of cognitive function; diagnosis; methods and duration of treatment; transfer to primary healthcare, and possible readmissions.

**Results:** The registration in QualGeP started 1 April 2011. By 15 September QualGeP had included 119 patients from all the participating departments, 29 from Oslo University Hospital, 42 from Akershus University Hospital and 29 from Diakonhjemmet Hospital. A total of 31 patients admitted to one of the departments were not included due to lack of consent from the patient or the next of kin. For 10 patients the consent was not provided or mislaid by the staff. Therefor, out of 160 patients, 119 were included in QualGeP during the first 6 months. The staff reported the work with QualGeP to be challenging and time consuming, but also clinically relevant in their day-to day contact with the patients. The data has not yet been registered electronically. Results will be provided before the conference.  
**Conclusion:** So far 74.4 % of all patients were included at admittance, despite the start-up challenges with such a substantial initiative. QualGeP may be essential in fascilitating research and ensure quality for the benefit of elderly patients with severe psychiatric disorders in the future.

O1.4-3 12:00-12:15

### Sticks – Innovative Concepts for Memory Support, Reminiscence and Health Promotion

Author: Professor Antti Karisto  
*Department of Social Research, University of Helsinki*  
Co-authors: MA Päivi Kuosmanen, PhD Helinä Melkas, PhD Satu Pekkarinen, PhD Raisa Valve

Human being is a biographical creature, whose memories are important resources in the later life. This is a starting point in a Finnish R&D project where simple gerontechnological devices are being developed.  
The memory or reminiscence stick (mStick) is a biographical tool, on which personal documents are stored (e.g., family photographs and materials linked to hobbies and interests). It can be used for memory testing and training, and it provides meaningful entertainment to active elderly people.  
The health stick (hStick) is a modernised version of the so-called SOS Passport, on which various health-related data are saved for cases like acute illnesses or injuries. It also functions as a means for self-care and promotion of one's own health, because comprehensive information on health behaviour may be saved on the stick.  
These USB-based sticks represent user-driven technology that empowers rather than labels. Twelve pilots have been launched in the Lahti Region to examine user experiences. The pilots are investigated in a systematic manner to assess impacts and usability of the sticks. Data are collected by means of interviews, learning diaries, photographs, memos, and participatory observation.  
According to the results, the hStick is accepted and adopted by the users especially when it functions as a means for monitoring one's own health, learning self-care and giving feedback (e.g., concerning physical exercise).  
The mStick prevents the world from becoming narrower which easily follows the deterioration of health in old age. It enables people who are confined to bed to be connected to other places and times. The stick may create "generational intelligence" by increasing intergenerational interaction and transmitting family history to younger generations. It also acts as an assistive device for care workers who organize reminiscence sessions and other joint programmes. It helps to see patients as whole human beings – thus potentially renewing the care culture.

O1.4-4 12:15-12:30

### Body Mass Index and Survival in the Very Old

Author: Dr. Anna Dahl  
*Department of Medical Epidemiology and Biostatistics, Karolinska Institutet*  
Co-authors: PhD Elizabeth Fauth, PhD Marie Ernsth-Bravell, PhD Denis Gerstorf, PhD Nilam Ram

Although the negative effect of being overweight in midlife is well researched and associated with negative health outcomes, the implications of weight in late life is less well understood. Most research has focused on current body weight in relation to health outcomes in late life. But current weight is only a snapshot. In the present study we aimed at evaluating both current body mass index (BMI) and changes in BMI with mortality across four Swedish studies in very old age, including 1581persons aged seventy and above. About half of the sample (52.4%) were underweight or normal weight (BMI<25), 35.6 were overweight (BMI 25-29.9), and 12% were obese (BMI>30). Over a two year period 60% had a stable weight, 24.1% declined, and 15.9% increased as defined as a five percent change in BMI. Regression analysis of survival data based on the Cox proportional hazards model (the PHREG procedure in SAS) showed that relative to those persons being underweight/ normal weight, both persons being overweight and obese have a reliably lower mortality risk. Likewise, relative to those with a stable BMI score, those with a 5% increase in BMI over two years have a lower mortality risk. Both being overweight or obese as well as weight gain in very old age are associated with survival. These findings add to the discussion whether there is a need for other weight recommendations in very old age.

## O1.5 Cognitive functioning

Chair: Jon Snædal  
11-06-2012, 11:30-12:30, Room 3/4

O1.5-1 11:30-11:45

### Functioning over time in persons with MCI Patterns of everyday technology use and involvement in activities

Author: PhD student, OT reg Annicka Hedman  
*Karolinska Institutet*  
Co-authors: PhD, Professor Louise Nygård, Associate professor, Professor Ove Almkvist, PhD, Associate professor Anders Kottorp

**Objectives:** Increasing demands of ability to manage everyday technology (ET) for participation in society is a potential dilemma for elderly. The aim of this study was to investigate patterns of functioning over time in elderly with mild cognitive impairment (MCI) mainly regarding perceptions of difficulty in using ET and involvement in activities.  
**Methods:** A longitudinal study was conducted assessing 37 older adults with MCI on four occasions over two years. The Everyday Technology Use Questionnaire (ETUQ) was used to identify their perceptions of difficulty in ET use, and self-perceived involvement in everyday activities was rated using the Frenchay Activity Index (FAI). In addition, screening of mood state and cognitive function was done and conversion to dementia or not was followed. A person-oriented approach with visual inspection of longitudinal case plots was used to explore and analyze patterns of functioning over time.  
**Results:** The preliminary results show that functional patterns in persons with MCI are heterogeneous over time: the participants could be categorized in three main patterns of functioning, characterized as ascending/stable, fluctuating/stable or descending/stable. More than half of the sample showed descending or fluctuating longitudinal case plots on the ET use variable, while activity involvement, depressive symptoms and cognitive functioning exhibited less fluctuation for the majority over time. In patterns with descending ET use the proportion of participants who converted to dementia was higher.  
**Conclusions:** The results indicate that assessing perceived difficulty in ET use may capture subtle decline in functioning in persons with MCI, helping to discover needs otherwise at risk of being unattended. The results suggest that increasing difficulty in ET use might be associated with a higher risk of disease progression.



O1.5-2 11:45-12:00

Evidence of sleep apnea in MCI/Mild dementia

Author: Dr. Jon Snaedal  
*Geriatric Department, Landspítali University Hospital*  
Co-authors: PhD Kristin Hannesdottir, Prof Thorarinn Gislason, PhD Annie Arvidsson, Atli Josefsson

**Background:** The vulnerability of the brain to hypoxic conditions is well recognized. Sleep apnea (SA) is a sleep disordered breathing disorder characterized by fragmented sleep and abnormal pauses in breathing or shallow breathing accompanied by substantial drops in arterial oxygen saturation. The cardiovascular sequel is well documented and studies suggest that the cognitive and neuropsychiatric consequences of SA may be wide ranging including difficulties in memory, learning, concentration and language as well as symptoms of depression and anxiety. Sleep apnea is a common yet perhaps an under-diagnosed disorder in the ageing population. Thus early identification and treatment of this risk factor may be of key importance in this population. This study tested the hypothesis that SA is common in individuals with MCI or mild dementia.

**Methods:** 29 recently diagnosed MCI/mild dementia Memory Clinic patients with an MMSE score > 23 points, participated. All participants underwent a standard over night sleep apnea study (Embletta®) including pulse oximetry and assessment of movements, oxygen flow and breathing patterns. Blood pressure, BMI as well as neck and waist circumference measurements were collected. Participants completed questionnaires on signs of SA such as physical symptoms, daytime sleepiness and snoring.

**Results:** Out of 29 participants, 24 (14m/10f) of the SA assessments were evaluable. The results revealed a high frequency of SA in this study sample. Eight out of 10 MCI patients and 13 out of 14 mild dementia patients had SA. Out of the total 24 analyzed cases, males had a mean apopnea/hypopnea index of 15.46 ± 9.35 while females had a mean apopnea/hypopnea index of 8.96 ± 5.98.

**Conclusion:** There was a high frequency of SA in this small MCI/ mild dementia population. Further research is needed to explore the occurrence of SA in this population, its relation to cognitive functioning and dementia progression and the effect of SA treatment.

O1.5-3 12:00-12:15

Occupational and Leisure Time Engagement at Midlife and Cognitive Functioning in Advanced Old Age

Author: Dr. Ross Andel  
*University of South Florida*  
Co-authors: Merrill Silverstein, Ingemar Kareholt

**Objective:** To examine the interplay of occupational and leisure time engagement at midlife and its relation to cognition in advanced old age.

**Methods:** We used all 805 participants from SWEOLD, a Swedish nationally representative study of individuals aged 77+, with information about occupation and midlife leisure activity participation from 1968, and cognitive assessment (an abridged version of the Mini-Mental State Exam) administered in-person in 1992 and 2002. Occupational categories were matched to previously validated ratings for complexity of work with data, people, and things. The self-reported intellectual discretion at work was also assessed. Generalized estimating equations adjusted for repeated observations were used as some individuals underwent cognitive testing twice.

**Results:** Controlling for age, sex, education, and income, those with higher complexity of work with people (p=.019) and greater intellectual discretion at work (p<.001) were more likely to engage in leisure activity overall and specifically in political and mentally stimulating activity (p's<.05), but not in physical, cultural, or organizational activity (p's>.05). When overall, mental or political leisure activity scores were combined with each measure of engagement at work, the combination of high (above-median) leisure activity/high work engagement was consistently associated with better cognition in advanced old age controlling for age, sex, education, income and year of cognitive testing (p's<.001). High work engagement was not associated with better cognition when combined with low leisure activity (p's>.05), whereas high overall leisure activity was associated with better cognition even when combined with low work engagement (p's<.001).

**Conclusions:** Engaged life during midlife, whether through work or during leisure, is related to better cognition in late life. Engagement during leisure may compensate for lack of engagement at work but not vice versa.

O1.5-4 12:15-12:30

The joint association of physical activity and BMI in mid-life with cognitive function in late life  
Age Gene/Environment Susceptibility - Reykjavik Study

Author: Dr. Milan Gudjonsson  
*Landspítali University Hospital, Gerontological Research Institute*  
Co-authors: MD Sigurbjorn Bjornsson, MD Bjorn Eirnarsson, MD Jon Snaedal, PhD Jane Saczynski, PhD Thor Aspelund, MD Vilmundur Gudnason, MD Tamara B. Harris, PhD Lenore J. Launer, MD Palmi V. Jonsson

**Objective:** To examine the long term joint effect of midlife PA and BMI on late-life cognition.

**Methods and theories:** Physical activity (PA) and body mass index (BMI) are associated with cognitive function. However, the long-term joint effect of mid-life PA and BMI on cognition has not been extensively examined in an old population. A population based cohort (born in 1907–1935) of men and women participated in the Age, Gene/Environment Susceptibility - Reykjavik Study with an average of 25 years interval between midlife and late-life examinations. The four PA/BMI joint groups were defined as 1) No PA/overweight or obese (BMI ≥ 25), (NPAO, 34%), 2) No PA/normal BMI (18.5 < BMI < 24.9), (NPAN, 34%), 3) PA/ overweight or obese BMI (PAO, 15%), and 4) PA/ normal BMI (PAN, 16%). Composite z-scores of speed of processing (SP), memory (MEM) and executive function (EF) were created from a neuropsychological test battery.

**Results:** Analyses were based on 4777 participants (58% women, 42% men) after excluding people with dementia. Compared with NPAO group (reference), PAO and PAN groups had significantly faster SP (PAO, beta = 0.19; PAN, beta = 0.25, p < 0.001), higher MEM (PAO, beta = 0.14; PAN, beta = 0.20, p < 0.001) and EF (PAO, beta = 0.11; PAN, beta = 0.12, p < 0.001), after controlling for demographic, behavioral, cardiovascular factors and apolipoprotein E genotype. However, no significant difference was found with NPAN group.

**Conclusion:** Being physically active at mid-life even in persons who were overweight or obese BMI is associated with better cognitive function 25 years later.

O1.6 Psycho-social well-being I

Chair: Boo Johansson  
11-06-2012, 11:30-12:30, Room 12

O1.6-1 11:30-11:45

A Five-Year Panel Study of Relationships between Subjective Age and Mental Wellbeing in the Second Half of Life

Author: Marijke Veenstra  
*NOVA*  
Co-authors: Svein Olav Daatland, Astri Syse

**Background:** Wanting to be younger than one's actual age may operate as a maladaptive identity strategy whereas feeling younger may serve as a compensatory, adaptive, strategy in terms of ageing processes. There are few longitudinal studies assessing the stability of subjective age in general and its relation with mental wellbeing over time in particular. Hence, the direction of causality remains unclear and mental wellbeing may be a cause rather than a consequence of youthful identities. Objective: To assess stability and change in subjective age and its causal relation with mental wellbeing over a five year time period.

**Methods:** Two waves of data from the NorLAG panel study from 2002 and 2007; a community-based panel study of Norwegians aged 40+ (N = 2,400). Mixed models were used to assess five-year stability of subjective ageing and its relation with socio-demographic characteristics. We used Structural Equation Modelling (SEM) to assess the direction of causality between domains of subjective age and mental wellbeing.

**Results:** On average, respondents indicated that they felt 7.2 years younger than their actual age at T1 and 7.6 years younger at T2. Similarly, they wished to be 16.3 years younger than their actual age at T1, and 17.4 years younger at T2. Five-year declines in subjective age scores were significantly greater for men than women. Preliminary SEM results suggest the presence of reciprocal causation in the relations between domains of subjective age and mental wellbeing. Wishing to be younger than one's actual age has a negative effect on mental wellbeing five years later. Feeling younger than one's actual age is associated with less depression five years later. Conversely, good mental wellbeing is associated with feeling younger five years later and less discrepancy between ideal age and actual age.

**Discussion:** Our results are in line with lifespan theories indicating that a younger subjective age perception is an adaptive strategy in ageing.

O1.6-2 11:45-12:00

The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: A cross sectional study

Author: Associate Professor Hege Bøen  
*Diakonhjemmet University College, Department of Nursing and Health*  
Co-authors: Professor emeritus Odd Steffen Dalgard, Professor Espen Bjertness

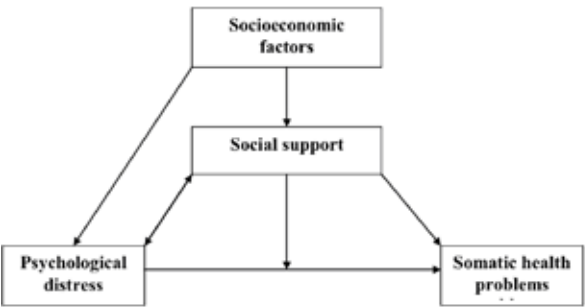
**Background:** The objectives of the present study were to investigate the associations of social support, somatic health problems and socio-economic factors with psychological distress. We also examined changes in the association of somatic health problems and socio-economic factors with psychological distress after adjusting for social support.

**Methods:** A random sample of 4,000 persons aged 65 years or more living at home in Oslo was drawn. Questionnaires were sent by post, and the total response was 2,387. Psychological distress was assessed using Hopkins Symptom Checklist (HSCL-10) and social support with the Oslo-3 Social Support Scale (OSS-3). Partial correlations were used, while associations were studied by logistic regression.

**Results:** After adjusting for socio-demographics and somatic health problems, we reported a statistically significant association between psychological distress and social support: “Number of close friends”, OR 0.61; 95% CI 0.47-0.80; “Concern and interest”, OR 0.68; 95% CI 0.55-0.84. A strong association between lack of social support and psychological distress, irrespective of variables adjusted for, indicated a direct effect. Social support had a mediating role between hearing impairment and psychological distress. Income was found to be an independent determinant for psychological distress.

**Conclusions:** Lack of social support and somatic health problems were associated with psychological distress in elders. It is likely that hearing loss, which is one of the most chronic somatic disorders in the elderly, leads to reduced social contact and support and therefore to increased psychological distress. The combination of poor social support, poor somatic health and economic problems may represent a vulnerable situation with respect to the mental health of older persons. Free interventions that highlight social support should be considered in mental health promotion.

**Keywords:** older adults, social support, psychological distress, somatic health, social inequality.



O1.6-3 12:00-12:15

Older persons with borderline mental disorders: risk factors in North of Russia

Author: Professor Andrey Soloviev  
*Northern State Medical University*  
Co-authors: Professor Irina Novikova, Victor Mestechko

The population of Russia in the last decade out of date, the low birth rate creates a situation of increasing the population aged 60 years and older (over 17%), the same trend and recorded in the European North (16%). Unstable socio-economic situation leads to a decreased quality of life and growth of borderline mental disorders in the elderly. Arkhangelsk Oblast is located in adverse climatic conditions of Northern European, among them - the sharp fluctuations in temperature and humidity, barometric pressure and wind speed, the presence of a peculiar photoperiodicity (Polar Day - Polar night), expressed in space and geomagnetic changes, etc. The greatest influence on the emotional state the elderly has a syndrome of “polar tension” - characterized by fatigue, “polar” shortness of breath, sleep disturbances, asthenia, etc. Socio-climatic tension contributes to the emergence of anxiety, emotional lability, irritability, depressed mood, impaired memory, reduced efficiency. Treatment is complicated by the fact that the elderly accumulate a number of medical conditions that require specific acceptance of drugs, with the possible side effects such as muscle weakness, drowsiness, incoordination, and sometimes inadequate reaction of excitement and sleep disturbances. The main objective in this situation - to choose products that are compatible with most other pharmacological agents and do not have side effects. This requires an integrated approach to study the implementation of medical and social support and supportive care to improve the quality of life and maintain the mental health of older persons.

O1.6-4 12:15-12:30

Shifts of normal aging phenotypes between young old and old -old.

Findings from SONIC study.

Author: Dr. Yasuyuki Gondo  
*Osaka University Graduate School of Human Sciences*  
Co-authors: Takeshi Nakagawa, Yoshiko Ishioka, Dr. Madoka Ogawa, Dr. Kei Kamide, Dr. Kazunori Ikebe, Yukie Masui, Dr. Mlshiyo Takayama, Dr. Yasumichi Arai, Dr. Ryutaro Takahashi

**Objectives:** Conceptualizing successful aging has long been debated in gerontology. To date three different successful aging models are the focus of discussion. These are; longevity without frailty (medical model), functional independence with social involvement (Rowe & Kahn’s model), and psychological adaptation and well-being (Baltes’s model) have been studied concurrently. Each model has advantages and disadvantages to

apply for long elderly period (65-100), because different age groups have different characteristics in successful aging components. The aim of this study is clarifying functional status differences in 4 dimensions of successful aging components between young-old and old-old.

**Methods:** Community-dwelling young-old (men 238, women 255, age ranged 69-72) and old-old (men 248, women 264, age ranged 79-81) participated in the invitation survey at the community centers. The participation rates were 25 % (young old) and 20 % (old-old), respectively. We performed medical and dental checkups, cognitive tests, physical assessments, and interviews based mainly on questionnaires which included psychological and social variables.

**Results:** Simple comparisons of average scores for each variable between two age groups and sex were performed. As results, higher disease prevalence except for diabetes and lower physical and cognitive function were observed in old-old. However, psychological well-being (WHO-5, positive and negative well-being, and life satisfaction) were higher in old-old. Perceived social support was not different between the age groups, even although the number of people living alone increased in old-old.

**Conclusion:** Functional phenotypes of normal aging differ between young-old and old-old. Regardless of multiple losses of successful aging components in functional dimension, old-old maintain higher psychological well-being. This result indicates the existence of psychological process which enables them to compensate for functional losses. To consider successful aging model in future super aged society, we should focus more on the psychological adaptation and psychological developmental process as well as functional maintenance. Further studies including oldest-old and centenarians are needed.

O1.7 Falls, risk and prevention

Chair: Susanne Stabel Gren  
11-06-2012, 11:30-12:30, Room 13

O1.7-1 11:30-11:45

Discursive constructions of falls prevention: discourses of active aging versus old age as disease

Author: PhD student Lotte Evron  
*Department of Communication and Psychology, Aalborg University*  
Co-authors: Dr. Anita Ulrich, Professor Lene Tanggaard

This study presents a discourse analysis of falls prevention among older people in a context of a falls clinic. Data are based on an empirical study of the ways in which fall prevention was realized and managed in a falls clinic at the political, recruitment and treatment level. Despite massive information and investment in falls prevention programs, many still drop out or decline to participate in such programs. The study explores how discourses cross swords in the domain of falls prevention. We identify two main discourses in the field: Discourses of active aging opposed to discourses of old age as disease. In discourses of active aging falls are constructed as preventable and not necessarily related to old age; in discourses of old age as disease falls are constructed as a disease of old age. Specific agent positions are created within discourses. Discourses of active aging construct self-responsible citizens who are physically active and motivated to participate in falls prevention programmes; discourses of old age as disease on the other hand construct “fall patients” who accept being passive in the health care system. Older citizens who are not in need of treatment or less physically active are excluded from the discourses. Future falls-prevention strategies might try to invite different perspectives on aging and physical activities to improve participation rates in falls prevention programmes.

O1.7-2 11:45-12:00

Predictive validity and cut-off scores in four diagnostic tests for falls – a study in frail older people at home

Author: PT, MSc, PhD student Ulrika Möller Olsson  
*Lund University*  
Co-authors: RN, PhD, Associate Professor Ulf Jakobsson

**Background:** Healthcare providers need fall-risk assessment tools in order to be able to identify people at risk of future falls and to implement effective preventive interventions. Various



diagnostic tests to identify the risk of falls in older people should be used in different clinical settings. However, no study has investigated the predictive ability and cut-off scores for diagnostic tests used as a part of an in-home assessment in frail older people. Aim: To investigate the predictive validity for falls and optimal cut-off scores in the Downton Fall Risk Index (DFRI), Timed Up and Go (TUG) and Romberg, Semitandem Romberg and Tandem Romberg tests (RT, SRT, TRT) used in in-home assessment of frail older people (65+ years). **Method:** Data were extracted from a randomized controlled study involving 153 participants (women 67 %, mean age 81.5 years [SD 6.3]). To assess the predictive validity baseline data of the diagnostic tests were used and data on falls were collected at the 6- and 12-month follow-ups. Youden’s index was used to assess the optimal cut-off score in each test. **Results:** None of the tests showed a high predictive validity. The optimal cut-off in DFRI was 3 with 79% sensitivity and 24% specificity and in TUG 12 seconds was suggested with 78% sensitivity and 37% specificity. However, the validity indexes were generally low and only 40-50% were correctly classified. The RT and SRT showed low sensitivity and few were able to perform TRT. **Conclusion:** No test exhibited a high predictive validity. The acceptable sensitivity for DFRI and TUG indicates that these tests may be used to predict falls in in-home assessment of frail older people. Romberg tests are not recommended for use in predicting future falls in this context. To increase the predictive validity for falls in this context, the used cut-offs for DFRI and/or TUG suggested in this study as a part of a comprehensive fall-risk assessment tool should be investigated in future studies.

01.7-3 12:00-12:15

## Fear of falling and coexisting sensory difficulties as predictors of mobility decline in older women

Author: Anne Viljanen  
*University of Jyväskylä, Department of Health Sciences, Gerontology Research Center*  
Co-authors: PhD Jenni Kulmala, PhD Merja Rantakokko, MD, PhD Markku Koskenvuo, MD, PhD Jaakko Kaprio, PhD Taina Rantanen

**Objectives:** The purpose of the present study was to examine whether fear of falling (FOF) and sensory difficulties, either alone or together, are associated with walking difficulties in older women. **Methods:** Data on self-reported FOF, difficulties in hearing, vision, balance, and walking 2km were gathered with a structured questionnaire among 434 community-dwelling women aged 63-76 years at baseline and after a three-year follow-up. Logistic regression models were used for analyses. **Results:** Every third (n= 138, 32%) participant reported difficulties in walking 2km at baseline. At baseline women with FOF had two-fold age-adjusted odds (OR 2.1, 95%CI 1.4-3.3) for

walking difficulties compared to those without FOF. In women with one sensory difficulty the age-adjusted OR for walking difficulties was 1.3 (95%CI 0.7-2.2), in those with two sensory difficulties 2.1 (95%CI 1.2-3.9), and in those with three sensory difficulties 3.5 (95%CI 1.7-7.3), compared to persons with no sensory difficulties. Persons who reported FOF and who had three sensory difficulties had almost five-fold age-adjusted odds (OR 4.7, 95%CI 1.9-11.7) for walking difficulties compared to those who reported no FOF and no sensory difficulties. Among the 290 women without walking difficulties at baseline, 54 participants developed difficulty in walking 2km during the three-year follow-up. Age-adjusted OR for incident walking difficulty was 3.5 (95%CI 1.6-7.8) in participants with FOF and with 2-3 sensory difficulties compared to persons without FOF and with at most one sensory difficulty at baseline. **Conclusions:** Older women who have several coexisting sensory difficulties combined with FOF are particularly vulnerable to mobility decline. Avoidance of walking as a result of FOF is likely to be reinforced when multiple sensory difficulties hinder reception of accurate information about the environment, resulting in accelerated decline in walking ability.

01.7-4 12:15-12:30

## Title: Fall-related information seeking behavior among elderly internet-users

Author: Marjan Askari  
*AMC*  
Co-authors: S Eslami, S Medlock, S de Rooij, A Abu-Hanna

**Objectives:** Falls form a major health problem for elders, and increasingly strain the healthcare system. It is conjectured that elders’ involvement in their own care is beneficial. The internet provides a promising instrument for empowering elders but their information-seeking behavior about fall is unknown. The aim of this study was to investigate this among fallers and non-fallers. **Methods:** A survey was distributed among members of an association of elderly Internet users. Solicited were demographics; information seeking behavior; cause, consequence and prevention of falls. The questions were either dichotomous or designed on a 1 to 4 Likert-scale. Results of fallers and non-fallers were compared using statistical test. Results Ninety-seven persons completed our survey. The average age was 72 years. 84% respondents reported internet use for finding health-related information, and 32% reported they sustained a fall in the last 12 months. 65% fallers and 64% non-fallers (20/31 vs 42/66, p=0.84) were willing to search fall-related information on Internet. 28% fallers vs. 15% non-fallers have actually sought fall-information (p=0.23). The mean scores of fallers vs. non-fallers for having interest in receiving information about cause, prevention and consequence of falls were respectively, 3.0 vs. 2.7 (p=0.18), 3.4 vs. 2.8 (p=0.02) and 3.5 vs. 2.9 (p=0.01). This was for interest in having specific

information for medications, conditions that increase the risk of falling, fall anxiety and self management respectively 3.1 vs. 3.0 (p=0.72), 3.3 vs. 3.2 (p=0.37), 2.7 vs. 2.3 (p=0.14), 3.1 vs. 2.9 (p=0.47). **Conclusion:** About 2 out of 3 elderly internet users are interested in fall-related information. Fallers are especially more keen on receiving information on fall consequences and prevention than the non-fallers. There was no difference between the groups in receiving specific information. These findings can help the design of more effective fall-related media for the elderly.

## 02.1 Geriatric patients II

Chair: Ólafur Samúelsson  
11-06-2012, 16:15-17:30, Plenum 8/10

02.1-1 16:15-16:30

## Clinical data in a new perspective; Cross sectional identication of the older acute medical patient in risk of readmission and death?

Author: Dr. Henrik H Klausen  
*Clinical Research Centre, Copenhagen University Hospital, Hvidovre Hospital*  
Co-authors: ResearchPhysiotherapist Mette Merete Pedersen, M.D Ph.D Ove Andersen, Cand Scient Ph.D Janne Petersen

**Objectives:** Evaluation of clinical parameters potential to predict mortality and readmission among older acutely admitted medical patients. **Methods:** Registry study on 3883 Danish citizens older than 65 years of age with an acutely medical admission to the emergency department of Copenhagen University Hospital, Hvidovre in the period of 01/01 – 31/12 2010. Patients with malignance diagnose were excluded. The cohort and the biochemical analysis data was retrieved from the hospital database. Data regarding death were retrieved from the Danish Civil Registration. We study associations between length of stay (LOS), primary admission diagnosis, co-morbidity and standard biochemical analyses on the outcomes of mortality and readmission within 30 days of discharge. **Results:** Preliminary results: Of the 3883 elderly patients 42% where males. Mean age were 79 years. Mean LOS were 5.5 days. Within 48 hours from admission 54% were discharged. Among patients with no co-morbidity the 30 days readmission frequency were 12 % for LOS <= 48 hours and 16% if LOS > 48 hours. For patients with one or more co-morbidities the 30 days readmission frequency were 16 % for LOS <= 48 hours and 18% if LOS > 48 hours. Only 45% of the readmission diagnosis was identical with the primary admission diagnosis. We will extend these results with results from biomarkers, and use these in a Cox regression to predict readmissions and death. **Conclusion:** Usual information provide to the primary health sector at discharge is insufficient to identify the risk of readmission and death. We expect biochemical parameters can be clinical feasible parameter in risk assessment of readmission and death.

O2.1-2 16:30-16:45

Nursing Assessment and Intervention to Geriatric Patients Discharged From Emergency Department

Author: MScN, PhD-student Elizabeth Rosted  
*University of Southen Denmak and University Hospital Amager*  
Co-authors: Research Manager, Dr.Med.Sci. Ingrid Poulsen, Associate professor, Dr M Sc. Carsten Hendriksen, Professor, Dr. PH. Lis Wagner

**Background:** Geriatric patients recently discharged from hospital are at risk of unplanned readmissions and admission to nursing home. When discharged directly from Emergency Department (ED) the risk increases, as time pressure often requires focus on the presenting problem, although 80 % of geriatric patients have complex and often unresolved caring needs.

**Objective:** To examine the effect of a two-stage nursing assessment and intervention to address the patients uncompensated problems given just after discharge from ED and one and six months after.

**Method:** We conducted a prospective, randomized, controlled trial with follow-up at one and six months. Included were patients >70 at increased risk of readmission and functional decline (had an ISAR 1 score of 2-6 points) and discharged home in the period 16th of February 2009 to 31st of January 2011, N=271. Intervention: A nurse did a brief nursing assessment comprising a checklist of 10 physical, mental, medical and social items. The focus was on unresolved problems which require medical intervention, new or different home care services, or comprehensive geriatric assessment. Following this the nurses made relevant referrals to the geriatric outpatient clinic, community health centre, primary physician or arrangements with next-of-kin.

**Findings:** Primary endpoints will be presented as unplanned readmission to ED; admission to nursing home; and death. Secondary endpoints will be presented as physical function; depressive symptoms; health related quality of life; and hours of help received from the community.

**Conclusion:** The presentation at the conference will include results collected at one and six months follow-up, this will show if a two-stage intervention consisting of screening with the ISAR 1 tool followed by structured nursing assessment and intervention in the ED could be a way of discovering geriatric patients' unresolved problems and preventing further functional decline and readmission.

O2.1-3 16:45-17:00

Via Senectutis  
Fast track from ambulance to a geriatric unit

Author: Dr. Berit Larsson  
*Sahlgrenska University Hospital*  
Co-author: Senior Consultant Eva Sixt

**Objectives:** The aim of this study is to evaluate a fast track from ambulance to a geriatric unit for elderly with acute illness. Further to compare with a control group consisting of patients who were hospitalised after assessment at the emergency room. The purpose is to avoid moving elderly patients between different care units within the hospital.

**Methods:** The method of assessment used in the fast track is METTS (Medical Emergency Triage and Treatment System). The inclusion criteria is over 80 years of age, green triage according to MEETS with one exception: saturation down to 90% is accepted. Green triage means vital parameters as follows: alert, saturation: 90-95% without oxygen, normal respiration, pulse: 50-150, temperature: 35-38,5 degrees C, no alarm symptoms. Ambulance nurse is phoning senior physician in charge for decision about hospitalisation.

**Results:** The fast track from ambulance to geriatric care unit was introduced on February 15th 2010. After one year: 120 patients. 79 in the control group. Middle age is 88 years old in both groups. Gender distribution: about 60% women and 40% men. Cause of admission (fast track): 35% general weakness, 13 % fall at home, 8% dyspnoea, 6,5% confusion, 6,5% vertigo. The ambulance nurse is spending 19 minutes extra with the patient. Time to doctor was median 42 minutes (fast track) and 147 minutes (Emergency Room). Total time at the ER was mean 312 minutes. Totally the value of this fast track is 5,5 hours earlier to the hospital bed.

**Conclusions:** It is possible to admit older frail patient directly from ambulance to a geriatric unit. Time to doctors' assessment can be reduced with 1 ½ h. The fast track is an important improvement, with a large value for the elderly, while maintaining medical safety. We can already conclude that the fast track to a geriatric unit will be a future important part of the emergency medical service, to meet the need of the elderly.

O2.1-4 17:00-17:15

On the Threshold - Older Persons'Concerns Related to Hospital Discharge

Author: Doktorand Felicia Gabrielsson-Järhult  
*School of Health Sciences*  
Co-author: Docent Per Nilsen

**Background:** Discharge planning is a communicatively complex process, the aim of which is to identify and organize care and support to meet older persons' needs after discharge from the hospital. However, the concerns experienced by older persons in the discharge process have been studied insufficiently.

**Objective:** To identify older persons' concerns about everyday life after discharge and their expressed needs for further care and support.

**Methods:** Content analysis of videotaped discharge meetings and individual follow-up interviews with 27 older persons; 17 women, 10 men; median age 82 (range 67-93) years at a Swedish county hospital. Informants had a variety of causes for hospital care.

**Results:** Three themes emerged from analysis of the data, labeled "striving to attain security", "striving to regain independency" and "recognizing the need for further care". One person could express more than one concern. Many of the older persons being discharged from hospital raised somewhat conflicting concerns insofar that they wished to be independent and get back to a normal everyday life concomitant to realizing that they had to accept a certain amount of care and support to attain security.

**Conclusions:** The hospital discharge process brought strain and uncertainty to many older persons. Their main concerns were related to how support and care could be organized as to achieve an acceptable balance between their strive to regain independency and their wish to receive enough care and support to attain security in their post-discharge everyday life.

O2.1-5 17:15-17:30

The Cumulated Ambulation Score for the evaluation of basic mobility in geriatric wards

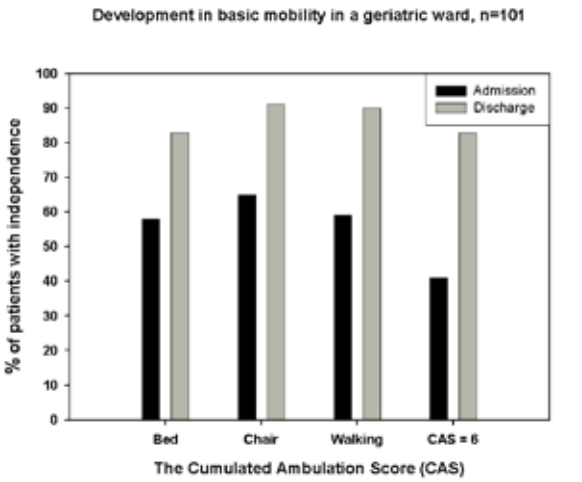
Author: Senior Researcher Morten Tange Kristensen  
*Department of Physiotherapy and Orthopaedic Surgery, Hvidovre University Hospital.*  
Co-authors: PhD-Student Thomas Linding Jakobsen, Physiotherapist Jesper Westphal Nielsen, Geriatric Consultant Lillian Mørch Jørgensen, Section Leader Robert-Jan Nienhuis, Physiotherapist, Development Line Rokkedal Jønsson

**Objectives:** To assess the feasibility of the Cumulated Ambulation Score (CAS) for the evaluation of changes in basic mobility in a geriatric ward.

**Methods:** The CAS assesses basic mobility defined as; getting in and out of bed, sit to stand from a chair and walking, with a score from 0-6 (a score of 6 indicative of independent mobility). All patients were evaluated objectively with the CAS by physiotherapists, upon admission and before discharge.

**Results:** A total of 101 consecutively admitted patients (74 women, 27 men) with a mean (SD) age of 84.9 (7.2) years, were included. The primary reasons for hospitalisation were medically illness (n = 56, 55%), falls or decreased functional level (n = 42, 42%) and surgical illness (n = 3, 3%). Number of patients independent in basic mobility increased significantly (P<0.001, Figure), after a mean of 17 (12) days in the ward. Fewer patients were independent in bed transfer as compared to chair and walking (Figure). Those not independent in basic mobility upon admission (CAS<6) died more often during admission (7 out of 8 who died), and were more often not discharged to their own home (13 out of 19 not discharged to own home) as compared to those independent (CAS=6) upon admission.

**Conclusions:** The CAS is feasible for use in a geriatric ward to evaluate changes in basic mobility for the majority of patients, and recommended to be used, nationwide in geriatric wards. It seems as if especially training of "bed" independence should be given a higher priority. Additionally, the CAS may be useful in predicting patients at risk of dying, or not being discharged to their previous residence.





# 02.2 Social and health care

Chair: Sigurveig Sigurðardóttir  
11-06-2012, 16:15-17:30, Plenum 9/11

02.2-1 16:15-16:30

## Dilemmas in home nursing care and for elderly based on analysis of health care reform in Denmark

Author: Ulla Skjødtt  
University College Sealand

**Abstract:** Dilemmas in home nursing care and for elderly based on analysis of health care reform in Denmark  
**Keywords:** home nursing care, elderly, New Public Management, management tool, health politics  
**Aim:** To draw attention to how management tools in health politics can create dilemmas for elderly in home nursing care. The effort is to produce understanding and dialogue about how management tools can create paradoxical scenarios in the municipal organisation in daily work for the community nurses and for elderly who are in need for home nursing care.  
**Methods:** The method is qualitative deductive content analysis of political material. The chosen material is analysed in connection with organisational management tool and changes of the welfare society and how this has an impact in a nursing and an elderly perspective. The theoretical framework consists of five categories: character of the management tools, paradox of the management tools, home nursing care between market economy, science and professional judgement, elderly between reality, continuity of care and standardisation and involvement and self-determination of the elderly. Research questions are formulated within each category with which the material is coded focused and systematic.  
**Results:** Estimated to bring out themes to explain how the presumptions are embedded in the aim of the study. This project is a part of a Ph.D. study in the context of New Public Management regarding impact on professional nursing in society and elderly in need of home care nursing.  
**Author:** Presenter, Ulla Skjødtt Mc.ethics and organisation, Diploma in nursing, Diploma in management, RN Supervisors: Britta Hordam, Ph.D., Merete Bender Bjerrum, Ph.D.

02.2-2 16:30-16:45

## Support to elderly care nurses – developing a knowledge centre

Author: Dr. Lena Olai  
Dalarna University

**Objectives:** Nurses working in elderly health care in the municipalities needs a broad competence. They have to deal with an extensive range of health problems, co-morbidity, medical and nursing treatment, supervision of patients, relatives and staff. They also have to follow national guidelines (NG) and evidenced based methods (EBM) and documenting the care process in patients' journals. The aim of the Knowledge Centre (KC) is to provide support and coordinate work and care development, based on research and evidence based practice.  
**Methods:** All 15 local authorities in the county of Dalarna and Dalarna University have developed a KC for elderly health care. A Senior Lecturer (SL) will supervise and develop the work in close collaboration with the nursing staff. The first step was identifying the nurses' needs, and that process is still in progress. The second step was working in small groups under the supervision of the SL. Local care programmes, and working routines from all authorities, together with NG's and EBM's, were compiled and developed to update regional care programmes, in consensus.  
**Results:** As of date, the work has contributed to a production of documents in nursing care related areas such as patient security, implementing guidelines, routines for delegating health care duties to unqualified staff, mentor-program for newly employed registered nurses, and networks for nurses. The production of documents produced by the KC is available on a Swedish web-site [www.du.se/kommunalvardutveckling](http://www.du.se/kommunalvardutveckling) with free access. The work has generated a number of suggestions for student thesis for nursing students as well as for researchers. The KC has contributed to cooperation between nurses in different authorities.  
**Conclusions:** The KC successfully contributes support regarding processes and structures for knowledge dispersion and practical issues with special focus on elderly care nurses.

02.2-3 16:45-17:00

## Early Nonspecific Signs and Symptoms of Infection in Nursing Home residents and the Clinical Decision Making Process: Perceptions of Nursing Assistants

Author: RNT, PhD Märtha Sund-Levander  
Hoegland Hospital  
Co-authors: MD, PhD Anna Milberg, RNT, PhD Pia Tongström

**Background:** Infectious diseases in nursing-home residents (NHR) is related to nonspecific signs and symptoms, contributing to a delayed diagnosis and treatment, hospital care and mortality.

Swedish nursing assistants (NA) provide most of the daily care and can observe subtle changes that may be early signs of infection. Outcome of good care is depending on the clinical decision making process and communication between professions. A possible contribution of NAs' observations, or their part in the clinical decision making process has not been earlier studied. Purpose: To explore early nonspecific signs and symptoms of infection in NHR and the decision making process, as described by NA. Method; Focus groups with 21 female NA. The interviews were analyzed with qualitative content analysis for manifest and latent content, with no preconceived categories. Findings: NAs' described nonspecific signs and symptoms of infection as two exclusive categories. Is not as usual explained general signs and symptoms, i.e. discomfort, unrestrained behavior, aggressiveness, restlessness, confusion, tiredness, feebleness, decreased eating. Seems to be ill related to signs and symptoms of established infection in terms of fever and pain or more specifically to specific infections. Confusion, aggressiveness, feebleness and decreased eating were significantly more frequent when an infection was suspected. The NA wished for partnership in the decision process with the nurses and the doctors. Their decision making process and choice of action was influenced by personal experiences and preconceptions, external support system, clinical experience, information search, reasons for choice of action and feedback from the nurse and physician.  
**Conclusion:** NA have a keen observational ability to detect early signs that might help to confirm suspected infections in NHR early on. Nurse's and physician's response to the NA's observations had great impact on their further actions.

02.2-4 17:00-17:15

## The view of illness of older persons with diabetes mellitus

Author: Dr. Tassana Choowattanapakorn  
Chulalongkorn University  
Co-author: Saipin Suriyawong

Diabetes mellitus is becoming a constantly increasing common chronic disease. Although many projects focus on solving this growing health problem, it still remains illusive. The important factors now being looked at are the differences of understanding of the illness and the health behaviors between persons with diabetes and health professionals. This study combined quantitative and qualitative approaches that investigated the view of older persons with diabetes in Chiang Rai Province, Thailand. Quantitative data were collected from 100 purposive sampling questionnaires. Data were then analyzed by frequency and percentage. Findings revealed that most older persons had high levels of knowledge about diabetes mellitus and self care behaviors ( 17.92). Content analysis was used to describe qualitative data from 20 in-depth interviews. Five themes with subthemes emerged:  
1) Perceived causes: eating too many sweet foods and monosodium glutamate, excessive eating, caused by genetics

2) Perceived disease: no cure but not serious, dry and wet diabetes, reduced energy, causes severe complications  
3) Effects to life: no effects, suffering and stressful, need to comply with the regimen  
4) Fearful: fear of amputation, fear of hypoglycemia and hyperglycemia, and fear of kidney complication  
5) Decrease in sexual drive  
Findings indicated that although most participants had high score knowledge about diabetes, the questionnaire measurement may not measure the real understandings they have. Qualitative data showed they had some associated insights of diabetes with those of the health professionals while others had different perceptions. In spite of this, they expressed different views of the illness from those of the health professionals. The health profession recommends being more diligent for educating and promoting diabetic elders on self care behaviors. Management people were also found to require more awareness of the current medical beliefs behind diabetes mellitus and a better understanding of the individuals' affliction with this disease.  
**Key words:** diabetes mellitus, illness, older persons

02.2-5 17:15-17:30

## Better cooperation- better care delivery for the frailest elderly Better cooperation-Better life!

Author: Marie Bergström  
The City of Stockholm, the district of Hägersten-Liljeholmen

Diabetes mellitus is becoming a constantly increasing common chronic This project is to improve care delivery for the frailest elderly in The city of Stockholm,the district Hägersten-liljeholmen with 74 000 inhabitants-12 % aged 65 or more. A large number of organizations delivering health- and social care are established in the district.  
**Purpose:**  
- To improve cooperation between healthcare and social care givers who are involved in delivering care  
- To deliver sustainable measures that improve the delivery of care in terms of improved quality and cost efficiency Target group Individuals aged 65 or more with social care delivery in there homes and:  
- Two hospital stays or more during the last 12 months and/or  
- Home health care with at least one homevisit a week  
The target group have needs of both health- and social care and is small-6% of age 65 or more. It accounts for: •31% of the county council's healthcare costs in the district for individuals aged 65 or more •56% of the district's social care costs for home care for individuals aged 65 or more  
The group is highly dynamic-more than 50% leave or enter the group during a year  
**Methods:** The project has focused on engaging employees from workplaces in the involved organizations to design special and strengthened routines using Lean methodology.  
**Follow up and evaluation process:**

- Costumer/employee satisfaction randomly selected intervui
- Acute hospitalization
- Number of individuals in the target group
- Home health care visits
- Perceived cooperation between the participating organizations

**Results:** Design of six routinareas with special routines for better cooperation and care delivery.They are being tested and evaluated since January 2012

**Discussion:** The diversity of actors supporting the elderly poses a challenge in coordinating the care to be delivered for the individual. It is important to involve the employees who meet the individual whithin caregiving in a complex and diverse organizational context for finding the easiest and best solutions for collaboration

## O2.3 Images of ageing

Chair: Myra Lewinter

11-06-2012, 16:15-17:30, Room 1

O2.3-1 16:15-16:30

### Constructions of age in variety of cultural contexts and the consequences for leading an ageing workforce

Author: Professor Cordula Braedel-Kühner

*Karlsruhochschule International University*

Co-authors: Constructions of age in variet Marjo Wallin

The increasing diversity of an ageing workforce demands leaders to support an open (non-stereotypical) attitude towards growing old and a willingness to reflect on ageing as an element of diversity. Objective of this explorative study is to increase understanding of the leaders' perception of ageing in different cultural contexts.

The leadership concept, our study is based on, is the concept of individualized, age-related leadership (Braedel-Kühner, 2005; Braedel-Kühner & van Elst, 2011, Ilmarinen, 2002). The perception of one's own ageing depends on cultural and social influences, on images of age and ageing. The concept considers the meaning of the construction of age and ageing in the context of an individual and interactive leader-employee relationship as well as in the evolving collective understanding of leadership. This research draws on Max Weber's social closure theory and Niklas Luhmann's inclusion/exclusion theory to explain age discrimination and unequal treatment as a cultural or ideological process (Weber et al., 1978; Roscigno et al.,2007). We used a mixed method research using a quantitative questionnaire (n=395) study and semi-structured interviews (n=24). The data (from Finland, Germany, Italy and Switzerland) was analysed by an exploratory principle component analysis and by deductive and inductive content analysis. It was possible to detect cultural differences in perceptions of the leaders. When reflecting their own ageing the leaders mentioned strategic and social leadership abilities, work ethics, mental and physical capacities. When reflecting the ageing of their employees in addition they described the attitudes towards change. For leaders it is important to reflect on the own ageing process, on finiteness and also to develop a realistic attitude towards own ageing. Knowledge about diverse and differenti-ated images of age in a corporate, social or private context is essential for behaviour towards ageing workforces.

O2.3-2 16:30-16:45

### "As time goes by"?

A contribution to the discussion of time in the study of ageing

Author: Dr. Myra Lewinter

*Department of Sociology*

The concept of time seems intrinsically related to the study of ageing. Yet there is an uncomfortable feeling among people working with social science and humanities approaches to ageing with the linear conception of time that dominates current discourses. Baars wants to integrate the chronological approach towards ageing with personal experience and narrative articulations of time. However, thoughtful, this approach doesn't seem to break the dominance of linear time. This paper will first argue that the current linear approach to time has deep roots in history and society and is deeply constructed by western societies. Next the paper will seek to complement this dominant discourse with a complementary one consisting of four elements of time: individual, social, symbolic and infinite time. These will be elaborated and developed so that they can be used in research on ageing in order to understand individual experience of ageing within a socially structured time frame.

O2.3-3 16:45-17:00

### Older people on the agenda

Author: Dr. Kirsi Lumme-Sandt

*University of Tampere*

Population is ageing and issues concerning older people are dealt with regularly in daily news. The images of old age and older people presented on the media have a significant role on shaping both our understanding of the role of older people and meaning of old age in the society. The aim of this presentation is to look at what is written about older people and population ageing on editorial pages of two Finnish leading newspapers, Helsingin Sanomat and Aamulehti. The data is collected during three separate months in 2011 and 2012. The articles dealing with old age and ageing are analyzed with content and discourse analysis. Most of the articles related on ageing focus on societal level, and older people are seen as anonymous mass. They are often seen as passive recipients of care and burden to economy. Population ageing is also used as a popular justification for very different aims without any explanations. Although the population ageing is seen as a problem, there are also tones that the civilized society has to take care of its' whole population no matter of the costs. The positive side of population ageing is taken into consideration very seldom. The resources of older people are ignored. Articles don't give much space for heterogeneity and active role of older people.

O2.3-4 17:00-17:15

### Conceptions and tendencies of age discrimination among elderly people in Finland and Sweden

Author: Fredrik Snellman

*Umeå University*

Co-authors: PhD Mikael Nygård, PhD Susanne Jungerstam

**Objective:** Ageism in its narrower meaning age discrimination is scrutinised in this article. We aim to examine tendencies in the conceptualisation of age discrimination among older adults in Finland and Sweden. We study whether the awareness of having faced age discrimination in the past as well as expectations of future age discrimination are shifting over time. Our study departs from theories that scrutinise the changes in an ageing society (modernisation theory and individualisation) and from age discriminatory tendencies shown in the Eurobarometer. **Method:** Identical items on self-reported age discrimination, and, conceived views (discriminatory expectations) of elderly people in 8 domains of society were surveyed in the GERDA study in 2005 (n 3370) and repeated in 2010 (n 6838). The respondents in our study were 65 and 75 years of age in the two years respectively. The analysis of the data was descriptive and differential (Chi-square), showing frequencies, tendencies over time and variations across subgroups.

**Results:** Our results showed a minor decline in self-reported age discrimination. Respondents reported age discrimination less frequently in 2010 compared to 2005. We show a reappearing pattern of declining age discriminatory expectations in the 8 studied domains. Respondents reported negative expectations less frequently, and positive and neutral expectations more frequently in 2010 compared to 2005.

**Discussion:** Our discussion is committed to interpreting the empirical tendencies that are observed in the data. We delve into tentative interpretations of design effects, political rhetoric (in a wide sense) and ageing awareness, and, the individualisa-tion of society.

O2.3-5 17:15-17:30

### The politicization of age discrimination

The parliamentary process relating to the enactment of anti-age-discrimination laws in Finland and Sweden in the 2000s

Author: PhD, university lecturer Mikael Nygård

*Åbo Akademi University*

Co-author: PhD, researcher Fredrik Snellman

The introduction of anti-age discrimination legislation in Sweden (2009) and Finland (2004) can in many ways be seen as important steps towards a more just society. In both countries, the backdrop to this new legislation was the policy imperative



set in motion by the EU anti-age-discriminatory directive (2000/78/EC). Among other things, this directive required EU member states to enact age discriminatory legislation. Society, however, encompasses different discourses – or forms – of age discrimination, i.e. different ways of defining age discrimination as well as different views on what should be done in order to curb such tendencies. The aim of this paper is to analyse how age discrimination was constructed on a political arena by scrutinising how the governments as well as MPs in Finland and Sweden, respectively, ‘talked’ about this particular issue during the legislative process. How was the extent and essence of the problem constructed discursively during this process, what groups were pointed out as particularly affected by age discrimination, and, what claims were made in order to rectify the problem? We argue that although age, among other things, was posed as a thinkable ground for discrimination in both countries, the documents and debates did not elaborate in detail on this problem (e.g. the causes and effects). For instance, the legislative process was not anchored in a scientific debate on age discrimination and ageism; instead it can be seen as a more or less direct policy offshoot of the EU directive in question. Moreover, the legislative process contained few concrete claims for rectifying the more concealed forms of age-based discrimination.

## O2.4 Nutrition and vitamin status

Chair: Anne Marie Beck

11-06-2012, 16:15-17:30, Room 2

O2.4-1 16:15-16:30

### Nutritional risk (NRS2002) and low BMI was associated with increased mortality for patients in a university hospital. A one year follow-up.

Author: Randi J Tangvik

*Haukeland University Hospital*

Co-authors: Professor Anne Berit Guttormsen, Professor Grethe S Tell, Biostatistician/PHD Roy Miodini Nilsen, Statistician Andreas Henriksen, Professor Anette Høyen Ranhoff

**Background and Aims:** Disease related malnutrition is common in hospitalised patients and is associated with adverse outcomes. To improve nutritional care and practice at Haukeland University Hospital, Bergen, Norway, a nutritional strategy was developed and a campaign entitled “Good nutritional practice” was introduced. Screening for nutritional risk was introduced to identify patients in need of improved nutritional care. The aim of this study was to investigate, by one-year follow-up, risk factors and consequences for patients at nutritional risk according to Nutritional Risk Screening 2002 (NRS2002). **Methods:** During eight repeated point prevalence surveys in 2008 and 2009, a total of 3280 adult somatic inpatients were screened by NRS2002. Patient characteristics and data on one-year-mortality were obtained from the patient-administrative database. **Results:** Of 3280 screened patients, 29% (952) were identified to be at nutritional risk (at risk). These patients were more often women than men (53.5% vs. 46.5%,  $p=0.007$ ), in average 6.2 years older (67.8 years vs. 61.6 years,  $p<0.001$ ), had a lower mean BMI (21.4 vs. 26.9,  $p<0.001$ ) and more co morbidity (24.8% vs. 12.3% with eight diagnoses or more,  $p<0.001$ ).

Compared to patients not at nutritional risk (not at risk), the patients at risk had increased mortality (OR=4.65 (3.87-5.58)), even after adjusting for age, sex and illness score (OR=2.13 (1.42-3.18)). Near half of the patients at risk, who were 60 years and older, died the following year. For patients aged 40-60 years, mortality was four times higher among patients at risk, compared to patients not at risk.

BMI>30 was associated with reduced mortality at one year follow-up, compared to the lower BMI categories.

**Conclusion:** Nutritional risk identified with NRS2002 was associated with increased one-year mortality. Higher BMI was associated with reduced one-year mortality. Strategies to prevent and treat malnutrition in the hospital and post-discharge are crucial.

O2.4-2 16:30-16:45

### Trends in nutritional status and caring practices among service house and nursing home residents in Helsinki 2003 - 2011

Author: Dr. Helena Soini

*SERVICES FOR ELDERLY CITY OF HELSINKI*

Co-authors: PhD Seija Muurinen, DSc Merja Suominen, PhD Niina Savikko, Med. student Marjo Halttunen, MD, PhD Kaisu Pitkälä

**Aims:** The aim of this study is to compare the older nursing home (NH) residents’ and service house (SH) residents’ nutritional status in 2003 and 2007, respectively, with that of residents in both settings in 2011.

**Methods:** In 2003 and 2007 we assessed the nutritional status all NH and SH residents in Helsinki, Finland and repeated the assessments in these settings in 2011. In 2003, 2114 (87%) NH residents and in 2007, of SH residents, 1475 (67%) were assessed, whereas in 2011, 1586 NH residents (86%) and 1592 SH residents (61%) were assessed with a personal interview and with the Mini Nutritional Assessment (MNA).

**Results:** The mean age of both later cohorts was higher in 2011 than in 2003 (NH: 84.4 vs. 83.7) and in 2007 cohorts (SH: 84.2 vs. 82.7), respectively. A larger proportion had dementia in 2011 cohorts than in 2003 (NH: 76.0% vs. 69.4%,  $p<0.001$ ) and in 2007 (SH: 69.5% vs. 59.3%,  $p<0.001$ ). A larger proportion of later cohorts were either malnourished or at-risk of malnutrition according to the MNA than in 2003 (NH: 93.4% vs. 88.7%,  $p<0.001$ ) and in 2007 (SH: 81.9% vs. 78.0%,  $p=0.007$ ). The use of nutritional supplements was significantly more common among the later cohorts than in 2003 (NH: 11.1% vs. 4.8%,  $p<0.001$ ) and in 2007 (SH: 10.7% vs. 3.1%,  $p<0.001$ ). The same applies to the use of vitamin D supplements (NH: 78.1% vs. 32.9%,  $p<0.001$ ), (SH: 68.7% vs. 60.2%,  $p<0.001$ ).

**Conclusions:** In 2011 institutionalized resident population in Helsinki is more frail, prone to malnourishment and suffer more often from dementia than 4-8 years ago. Institutions seem to be more aware of good nutritional care of vulnerable older people although there is still room for improvements.

O2.4-3 16:45-17:00

### Use of vitamins and trace elements among older people in helsinki – population based survey in 1999 and 2009

Author: RN, PhD Niina Savikko

*University of Helsinki*

Co-authors: MD, PhD Kaisu Pitkälä, MD, PhD Reijo Tilvis, MD, PhD Timo Strandberg

**Aims:** To study the prevalence of use of vitamins and trace elements among home-dwelling older people in Helsinki,

Finland in 1999 and 2009.

**Methods:** The data was gathered with a survey sent home-dwelling older people aged 75, 80, 85, 90, and 95 years at two time points: 1) in 1999-2000 (N=3219, n=2392 responded to vitamin and trace element question, response rate 74%) and 2) in 2009-2010 (N=2247, n=1515 responded the question, response rate 67%). Use of vitamins and trace elements were charted in both surveys with the same specific questions and the respondent was asked to name the products they used.

**Results:** Of the respondents, 48% in 1999 and 70% in 2009 reported using some vitamin supplementation or trace element ( $p<0.001$ ). Of 1999 and 2009 respondents, 96% and 60% named the products they used, respectively. The proportion using vitamin D supplementation increased from 13% (144/1150) in 1999 to 59% (378/642) in 2009 ( $p<0.001$ ). However when computing vitamin D, multivitamins and fish oil, both including vitamin D together (61% in 1999 and 79% in 2009) there was still significant increase in the use of vitamin D supplementation ( $p<0.001$ ). The use of all other vitamins had decreased. The reduction was most evidently seen in the use of multivitamins (45% vs. 25%). The use of vitamin A and E was nearly nonexistent in 2009. The proportion using calcium supplement had increased from 10% in 1999 to 24% in 2009.

**Conclusions:** Although the later cohort named their used products less often than the former cohort, the use of vitamin D supplementation seems to have increased significantly in ten years. However, its’ use is still inadequate in Finnish older population considering current recommendations. The use of vitamin E and A, that may be harmful to older people, has decreased and is very unusual.

O2.4-4 17:00-17:15

### Dental professionals’ identification of elderly patients at risk for cardiovascular diseases and high plasma glucose

Opportunistic medical screening in a dental setting checking the consistency with follow-up assessments by medical staff

Author: Dr. Göran Friman

*Department of Dental Medicine, Karolinska Institutet*

Co-authors: Associate Professor Inger Wårdh, Professor Gunnar Nilsson, PhD Margareta Hultin

**Objectives:** To identify elderly patients (&#8805; 65) at risk of cardiovascular diseases and high plasma glucose in a dental setting by opportunistic screening and to explore the coherence between screening results and follow-up assessments performed by medical staff.

**Methods:** 170 dental patients were consecutively included at their ordinary dental appointment in a dental clinic in a Swedish town. All patients were enrolled in individualized prophylactic care programs. Data on age, weight, height, use and amount of tobacco, and medication for cardiovascular diseases and diabetes

mellitus were gathered, as well as data about systolic and diastolic blood pressure, pulse and plasma glucose. Clinical and radiographic examinations revealed data about periodontal status by probing periodontal pockets and measuring marginal alveolar bone loss on X-rays. Patients who exceeded normal diastolic blood pressure and plasma glucose values were referred for diagnosis and care.

**Results:** Among the 170 patients we commonly found undiagnosed hypertension and diabetes. Forty patients with high values were referred and 23 (14%) of them required further care. The coherence was 64.5% between oral health care and medical health care concerning blood pressure recording, and 60.0% concerning plasma glucose. Among elderly subjects there was significant correlation between marginal alveolar bone loss and high systolic blood pressure. No significant correlations between plasma glucose and periodontal status were found. **Conclusions:** To identify elderly medical risk patients, the coherence between oral health care and medical health care registrations in this study based on blood pressure and plasma glucose, indicates that it is useful for dental professionals to perform opportunistic medical screening and refer elderly medical risk patients to the medical care system before medical complications occur.

O2.4-5 17:15-17:30

## Vitamin B6 deficiency and diseases in elderly – a study in nursing homes

Author: MD Ida Kindsbekken Kjeldby  
*Norwegian University of Science and Technology*  
Co-authors: Ida K Kjeldby, MPharm Gunvor S Fosnes, MSc Solveig Ligaarden, Prof Per G Farup

**Background:** Malnutrition, vitamin deficiencies and diseases are common in elderly. **Objectives:** Assess the prevalence of vitamin B6 (B6) deficiency and the associations between B6 deficiency and diseases in elderly. **Methods:** Residents in five nursing homes with 190 beds were invited to this cross-sectional study. Demographics, nutritional status (Mini Nutritional Assessment MNA® score; range 0-30, < 17 = malnutrition, 17-23.5 = risk of malnutrition), activities of daily living, physical activity (steps per day), dietary habits, all use of drugs, and psychiatric and somatic diseases were recorded. A blood sample including B6 (p-PLP) was collected, and p PLP values < 20 nmol/l indicates B6 deficiency in elderly. The participants or their next of kin gave informed consent. Results are given as mean with SD. **Results:** 61 residents (men/women: 22/39) with a mean age of 85.3 (6.8) years and BMI 25.7 (4.5) kg/m<sup>2</sup> were included. MNA-score was 21 (3.6); malnutrition and risk of malnutrition were present in 12% and 62% respectively. Dietary intake of B6 (mg/day) in men and women were 1.60 (0.30) and 1.18 (0.31) (recommended 1.6 and 1.2 respectively), and 14 (23%) used B6 supplements in addition. p-PLP was 34.4 (33.0), 30 subjects (49%)

had B6 deficiency. B6 deficiency was associated with alanine aminotransferase (ALAT) below reference value (p=0.02), low s-albumin (p=0.03) and inactivity (steps per day) (p=0.03). p-PLP is correlated to MNA score (rho=0.27, p=0.05). B6 deficiency was not associated with any somatic and psychiatric disorder, and not observed in subjects given vitamin supplements. **Conclusion:** B6 deficiency was present in half of the residents and associated with inactivity and malnutrition, which together with low values for ALAT and s-albumin are reminders for vitamin B6 deficiency. Although no association was seen between B6 deficiency and somatic and psychiatric diseases, vitamin supplement should be recommended all frail elderly in nursing homes.

## O2.5 Inequality and health

Chair: Charlotte Nilsson  
11-06-2012, 16:15-17:30, Room 3/4

O2.5-1 16:15-16:30

## Occupational status and education are associated with health in nonagenarians

Author: Linda Enroth  
*Gerontology Research Center and School of Health Sciences, University of Tampere*  
Co-authors: Professor Marja Jylhä, Professor Antti Hervonen

**Objective:** To better understanding in the dynamics of socioeconomic differences in health, in very old age, the impact of occupational status and educational attainment on self-rated health, functional ability and morbidity were investigated, with a special focus at gender differences. **Methods:** In the population-based Vitality 90+ study, mailed questionnaire was sent to all inhabitants aged 90+ in Tampere, Finland, irrespective of the place of living. Data consisted of 1283 participants (81 % women, 19 % men) with age range from 90 to 107 years. The response rate was 80 %. Data were analyzed in cross-sectional design by using cross tabulation and logistic regression. **Results:** Highly educated and those in upper social classes were more independent in activities of daily living and mobility than those having lower education or belonging to lower social classes. Differences were not observed only between the extreme ends but a social gradient was found. A similar trend was discovered in comorbidity for both genders and in self-rated poor health for women according to social class and for men according to education. Women were less independent in functioning, had higher comorbidity and poorer self-rated health than men. **Conclusions:** Socioeconomic health differences as well as gender differences still persist in nonagenarians. Results are likely to reflect influences of social status on health, not vice versa.

O2.5-2 6:30-16:45

## Social relations and mobility-related fatigue

Author: MD, phd, assistant prof Charlotte Nilsson  
*Section of Social Medicine, Department of Public Health, University of Copenhagen*  
Co-authors: MD, phd, associate prof. Rikke Lund, Professor, DMSc Kirsten Avlund

Weak social relations are predictive of mobility limitations and functional disability. It has not been studied if social relations are

associated with self-reported mobility-related fatigue, which is an important predictor of mobility limitations and disability. **Objectives:** To study the effect of cohabitation status, social participation and satisfaction with one's social relations on 1) onset of mobility-related fatigue in mobility activities after 3- and 4- years in a cohort of older adults who did not report any fatigue at baseline, and 2) changes in fatigue between 3- and 4- year follow-up. **Methods:** 2000 75/80-year-old men and women, enrolled in the Danish Intervention Study on Preventive Home Visits, constituted the study population. Data were collected by mailed questionnaires in 1998/1999, 2001-2002 and 2003. Logistic regression and multinomial logistic regression analyses were performed. Analyses were stratified by gender and adjusted for age, financial assets, and feeling down or aggressive without a specific reason. **Results:** Compared to men with high social participation, men with low social participation had significantly increased odds of onset of mobility-related fatigue after 3- and 4- years(OR(95% CI): 2.07 (1.37-3.15)) respectively, and significantly increased odds of developing fatigue or sustained fatigue between 3- and 4-year follow-up. Compared to women who were satisfied with their social relations, women who were unsatisfied with their social relations had significantly increased odds of onset of mobility-related fatigue after 3- and 4- years (OR: 1.51 (1.09-2.09)), and also significantly increased odds of developing fatigue or sustained fatigue between 3- and 4-year follow-up. **Conclusion:** Some aspects of weak social relations appear to increase the risk of mobility-related fatigue among older adults, but might vary according to gender. Social relations might thus have an effect on the earliest steps in the disablement process.

O2.5-3 16:45-17:00

## Alcohol consumption among men and women.

The impact of education, values and urbanization  
Author: Dr. Britt Slagsvold  
*NOVA- Norwegian Social Research*  
Co-author: Researcher Ivar Lima

**Objectives:** Alcohol consumption is increasing in the elderly population in Norway, especially among elderly women. Because a higher consumption will lead to relatively more people with problems related to alcohol, the situation has become a source of public health concern. Higher alcohol consumption is assumed to be associated with modern ways of life. How strong are these associations? Are they equally strong among men and women? More specifically we explore the relationship between alcohol consumption and three aspects related to modernization; education, values of self-enhancement, and urbanization. **Methods:** The analyses are based on cross-sectional data from the Norwegian NorLAG and LOGG study in a sample of 6988 men and women aged 40 to 85. Data were collected in 2007-08. **Results:** Frequent alcohol consumption is almost twice as high



among women aged 40-49 compared to 50-59. Men consume more than women, but the proportion of women with an intake above WHO's recommendations is higher among middle aged women than among middle aged men. Education is associated with alcohol consumption, more strongly among women than men. Values of self-enhancement and urbanization are also significantly associated with alcohol intake, more strongly among men than women.

O2.5-4 17:00-17:15

### Paying the price? The impact of smoking and obesity during mid-life on health inequalities in later life.

Author: Dr. Stefan Fors  
*Aging Research Center*  
Co-authors: Dr Neda Agahi, Dr Benjamin Shaw

A growing body of research now shows that substantial inequalities in health prevail into late life. However, the mechanisms generating these health inequalities have yet to be conclusively determined. The aim of this study was to explore the contribution of smoking and obesity in mid-life (ages 56 to 76) on socioeconomic inequalities in health in later life (ages 69+). Late life health is assessed by impaired cognition and mobility. Data on social class, education, smoking, BMI and mobility impairment during mid-life was gathered from the 1991 Swedish Level of Living survey (LNU). Data on cognitive status and mobility impairment in late life was gathered from the 2004 Swedish Panel Study of Living Conditions of the Oldest Old (SWEOLD). The main results were threefold: i) both smoking and obesity during mid-life were socioeconomically patterned (the lowest prevalence were found among higher non-manuals and among those with an education beyond grade school), ii) social class, education, smoking and obesity in mid-life were all associated with impaired cognition and mobility in later life, and iii) smoking and obesity explained a minor part (between 4 and 24 percent) of the socioeconomic inequalities in cognitive and mobility impairments during old age. Thus, the results suggests that, despite being both substantially socially stratified and hazardous to health, smoking and obesity during mid-life contributed only partly to the socioeconomic patterning of physical and cognitive functioning in later life. These findings illustrate the multifactorial nature of health inequalities in later life and stress the importance of using a life-course perspective when exploring the mechanisms generating socioeconomic inequalities in health in later life.

O2.5-5 17:15-17:30

### Perceived work-related stress in midlife predicts disability in old age

Author: Dr. Jenni Kulmala  
*Gerontology Research Center, University of Jyväskylä*  
Co-authors: Dr. Mikaela von Bonsdorff, Dr. Sari Stenholm, Dr. Monika von Bonsdorff, Prof. Clas-Håkan Nygård, Dr. Matti Klockars, Dr. Jorma Seitsamo, Prof. Juhani Ilmarinen, Prof. Taina Rantanen

**Objectives:** Work-related stress has been acknowledged as a determinant of adverse health events. The aim of this study was to examine work-related stress in midlife as risk factor for old age disability.

**Methods:** Data for this study come from a 28-year follow-up study of municipal professionals in Finland, which began in 1981 (Finnish Longitudinal Study of Municipal Employees, FLAME). Study includes a total of 2994 FLAME participants aged 44 to 58 years at baseline, whose self-reported stress symptoms were assessed in 1981 and 1985 and who responded to disability questionnaire in 2009. Principal component analysis was used for exploration, data-reduction and differentiation into stress symptom profiles in midlife. The Odds Ratios (OR) for ADL- and IADL-disability and mobility limitation were computed using logistic regression.

**Results:** Four midlife stress profiles were identified: avoidance of work and lack of energy; perceived decrease in cognition; sleep disturbances; and somatic stress symptoms. Approximately half of all participants reported occasional stress symptoms. The proportion reporting high level of stress symptoms in 1981 and 1985 varied between 14-23% depending on stress profile. After 28 years, 12% had ADL disability, 42% IADL disability and 22% mobility limitation. We saw a clear gradient of increasing old age disability for increasing intensity of midlife stress symptoms. The extensively adjusted logistic regression models showed that those with disability in old age had reported constant work-related stress symptoms two to almost three times more often in midlife than those without disability in old age.

**Conclusions:** Among occupationally active 44- to 58-year-old men and women stress symptoms in midlife correlated with disability 28 years later. Work-related stress symptoms may be the first signs of decompensation of individual functioning relative to environmental demands, which may later manifest in disabilities.

## O2.6 Psycho-social aspect

Chair: Knud Ramian  
11-06-2012, 16:15-17:30, Room 12

O2.6-1 16:15-16:30

### Inner strength of older people in Finland and Sweden

Author: Kerstin Viglund  
*Umeå University*  
Co-authors: RN, PhD Elisabeth Jonsén, RN, Professor Berit Lundman, RN, Professor Gunilla Strandberg, RNT, PhD Björn Nygren

**Background:** This study forms part of the GERontological Regional DATabase (GERDA) - Botnia project that investigate healthy ageing with focus on the dignity, social participation and health of old people. The theoretical framework for the study was Lundman's Model of Inner Strength, where in the meta-theoretical analysis four interrelated and interacting dimensions of inner strength were identified: firmness, creativity, connectedness, and flexibility. Inner strength was measured using a newly developed Inner Strength Scale (ISS) based on the model.

**Objectives:** The aim was to examine inner strength in relation to age, gender and culture among old people in Finland and Sweden. Design: A cross-sectional design was used. Participants: The 6,119 participants were 65, 70, 75 and 80 years old and living in Västerbotten County in Sweden or Österbotten County in Finland.

**Methods:** The ISS consists of 20 items relating to the four dimensions, and it is rated on a 6-point Likert-type scale. The range of possible scores on the ISS is 20–120, a higher score denoting higher inner strength. Independent t-test and analysis of variance were used to test the mean ISS scores.

**Results:** The 65-year-olds had the highest mean ISS score, 100 (SD = 11.6), with a decrease in score for every subsequent age group. The lowest score, 95.8 (SD = 14.0) (p<0.001), was achieved by the 80-year-old participants. A high educational level was associated with the highest mean ISS score, 101.1 (SD = 11.4), while participants with a low educational level scored the lowest, 97.1 (SD = 13.3) (p<0.001). Mean ISS score was higher among women, 98.9 (SD = 12.7), than among men, 98.1 (SD = 12.4) (p = 0.008).

**Conclusions:** The main results were the finding of lower inner strength with age, and a tendency to higher inner strength among women compared with men. The study population came from Finland and Sweden; still, despite the different backgrounds, patterns in the distribution of inner strength were largely similar.

O2.6-2 16:30-16:45

### Older people's accounts of their mental well-being and resources

Author: Suvi Fried  
*The Age Institute*  
Co-authors: PhD, Line Manager Sirkkaliisa Heimonen, MSc, Coordinator Pirjo Jokinen, Logotherapist, Planner Minna Laine

Mental health and mental well-being are essential resources of meaningful life in old age. This research is part of a research and development project Meaning in Old Age - Knowledge and Tools for Supporting the Mental Well-Being of Older People (2011-2014) at the Age Institute funded by the Finland's Slot Machine Association (RAY).

The study applies an interdisciplinary approach by applying psychological, gerontological and logotherapeutic theories. We will analyze older people's own descriptions and reflections of meaning in life in old age.

The data was collected in semi-structured interviews. The objective of the semi-structured interviews was to map the thoughts and resources of older people in recognizing and maintaining well-being and positive outlook on life. The interviews were conducted in the metropolitan area of Helsinki, Finland. The first ten interviews were performed in autumn 2011 and the preliminary results are based on these interviews. The total number of respondents was 11 (9 women and 2 men). The age range of the interviewees was 69-85 (mean 76). The data collection is on-going and will continue up to 30 interviews during the spring of 2012. The interviews were recorded, typed verbatim and analyzed thematically.

The preliminary results demonstrate certain shared elements in different ways of finding meaning in life and maintaining mental well-being. The most common was connections with other people. The key in maintaining meaningful and satisfactory relations with others seemed to include the chance to adjust the intensity and frequency of contacts based on own preferences. Experiences of personal growth sometimes required changes in earlier habits and may have been strenuous. Once implemented, the consequences were often positive.

O2.6-3 6:45-17:00

### Valuation of Life in old age and the role of intrapersonal factors

Author: Lia Araújo  
*UNIFAI*  
Co-authors: Valuation of Life in old age Lia Araújo, Oscar Ribeiro, Constança Paul

Valuation Of Life (VOL) is understood as a set of judgments, emotions and projections into the future, representing the "dynamic accommodation and assimilation process by which



people meet the threat of illness and decline” (Lawton et al., 1998: 23). In order to analyze the differences of VOL in young-old, old-old and very-old people and identify the factors that explain its variance, a study with a sample of 207 community-dwelling participants aged between 65 and 96 years (mean age 77.2, SD 7.5) was conducted. Data collection included a multidimensional protocol comprising validated and recognized instruments as the Positive Valuation of Life Scale (Lawton, 1999), the Meaning of Life Questionnaire (Steger et al., 2006), the Geriatric Depression Scale (Yesavage, 1982), the NEO-FFI (Costa & McCrae, 1992) and the OARS (Fillenbaum & Smyer, 1981), as well as socio-demographic information. Results demonstrated differences on life evaluations between the three age groups ( $p<0.05$ ), with better results in the youngest. After testing the individual contribution of each variable with unadjusted linear regressions for the Positive Valuation of Life (Pos-VOL), we conducted an adjusted linear regression model using the significant ones, namely gender and age. In the final model, extraversion, conscientiousness, meaning of life and depression explained 57% of the dependent variable variance ( $R^2=0.565$ ). The results for extraversion, as one of the contributors of Pos-VOL is in line with previous work (e.g., Lawton et al., 1999, 2001; Rott, Jopp, D’Heuresse & Becker, 2006), which could be related with the tendency of extroverted persons to positive mood, sociability, and activity (in the sense of an active, busy, or engaged lifestyle). Conscientiousness appears as a dimension to be further investigated due its association with VOL and with greater longevity and lower all-cause mortality risk (e.g., Chapman, Roberts, & Duberstein, 2011). Together, these results reinforce the importance of intrapersonal factors in the way people judge their present and anticipate their future life.

02.6-4 17:00-17:15

## Life Course Transitions and Changes in Alcohol Consumption in the Second Half of Life

Author: Ivar Lima  
*Norwegian Social Research*  
Co-author: Senior researcher Britt Slagsvold

**Background:** Alcohol consumption in Norway is increasing, especially among people 50+. This has led to a public health concern about a potential rise in alcohol related problems among the elderly. Few studies have adressed the relations between life course transitions and changes in alcohol consumption in the second half of life.  
**Objective:** To analyse the association between important life course transitions and alcohol consumption in the second half of life. The following life-course transitions are analysed: empty nest, at retirement from work and at divorce and death of a partner.  
**Methods:** The analyses are based on cross-sectional data (2007,

N=7,100) and panel data (2002 and 2007, N=2,300). We use OLS regression and repeated measures models to analyze levels of, and five-year changes in, alcohol consumption in relation to life course transitions.  
**Preliminary results:** Frequent use of alcohol, is associated with empty-nest households. Widowed women drink less frequent. Frequent use of alcohol, drinking alcohol at least twice a week or more, increased from 27.7 percent at wave 1 to 31.6 percent at wave 2. Frequent drinking of at least 3 alcohol units increased from 11.8 to 13.3 percent. However, five year change in frequent use of alcohol is age-related, as increase is strongest among respondents aged 40 to 69. Longitudinal analyses indicate that the association of life course transitions with change in alcohol consumption is not statistically significant.  
**Conclusion:** The increasing alcohol consumption among respondents aged 40-69 deserves a closer attention. The cross-sectional data show a higher consumption among persons that have are in an empty nest household, and a less frequent consumption among widowed women. Retirement is not associated with increased alcohol consumption, neither in the panel data nor in the cross-sectional data.

## 02.7 Hip fracture I

Chair: Timo Strandberg  
11-06-2012, 16:15-17:30, Room 13

02.7-1 16:15-16:30

## Will comprehensive geriatric work-up during the index stay improve mobility at 4 months in hip fracture patients? The Trondheim Hip Fracture Trial.

Author: Professor Olav Sletvold  
*Norwegian University of Science and Technology*  
Co-authors: Anders Prestmo, Pernille Thingstad, Kristin Taraldsen, Lars Gunnar Johnsen, Jorunn L Helbostad, Ingvild Saltvedt

**Background:** Hip fractures in old age have serious consequences on function, mobility and mortality. The aim of the study was to investigate if treatment of old hip fracture patients in an orthogeriatric ward during the hospital index stay has advantage over standard care in an orthopedic ward. Primary endpoint is mobility at 4 months after the fracture.  
**Methods:** A randomized clinical trial (RCT) enrolled 400 home dwelling patients aged 70 years +. Randomization was performed before surgery while the patients were in the emergency room. The intervention group received comprehensive geriatric assessment including a work-up by geriatricians, nurses, physiotherapists and occupational therapists. Control patients received standard orthopedic care. Information on demographic characteristics, pre-fracture use of walking aids, cognitive function, activities of daily living (ADL), instrumental ADL (IADL) and medical condition was collected during index stay from patients and caregivers and review of medical records. ADL was evaluated by use of Barthel Index (0-20) and IADL by use of Nottingham extended IADL scale (0-66). Mobility was assessed by use of Short Physical Performance Battery (SPPB) and Timed Up and Go (TUG) at the 5th postoperative day and at 1, 4 and 12 months  
**Results:** Data collection will be closed in January 2012. Group allocation is therefore unknown. Preliminary analyses show that the study sample has a mean age of  $83\pm 6$  years, 75% are female, and 10 % lived in sheltered housing before the injury, and that the participants had a prefracture median Barthel Index value of 20 (interquartile range 17-20) and median IADL score of 45(interquartile range 28-57). The mean SPPB score at 4 months was 5.11 points (SD 3, 04) (range0-12).  
**Conclusions:** Preliminary data demonstrate a study sample of old hip fracture patients with restricted mobility 4 months after the fracture. Data comparing mobility and ADL/I-ADL in the two treatment arms will be presented at the congress.

02.7-2 16:30-16:45

## Rehabilitation to Elderly Patients with new Hip Based on Patient Reported outcome measurement

Author: Dr. Britta Hørdam  
*University College*

**Objective:** Based on results of a clinical randomised trial aimedto study the effect of rehabilitation nursing to patients with new hip after early discharge.  
**Method:** Two post docs randomised clinical trials of 260 patients focusing on patients’ health status by using SF-36 at 4 weeks pre- and 3 and 9 months postoperatively were carried out. Patients were randomised 4 weeks preoperatively to either to control or intervention groups. Both groups received the conventional surgical treatment, but the intervention groups 1 and 2 were either interviewed by telephone 2 and 10 weeks (group1) or 1, 3 and 7 weeks (group 2) after surgery by a nurse specialist. Patients were given counselling within eight main dimensions with reference to their postoperative situation based on specific developed counselling and clinical guidelines to patients after hip replacement.  
**Results:** All patients experienced improvement in health status. The counselling significantly reduced the time patients needed to reach their habitual levels: the intervention patients reached their habitual levels at least 3 months whereas the control patients reached theirs after 9 months.  
**Conclusion:** Nursing intervention and innovation by telephone interviews and support in the postoperative phase seems to benefit patients’ improvement within rehabilitation.  
**Relevance to clinical practice:** Rehabilitation nursing based on research in patients self-rated health and intervention program by using patient reported outcome measurement(PROM) postoperatively after early discharged. Key-words: nursing rehabilitation - PROM - self-rated health – early discharge – post-operative intervention.

02.7-3 16:45-17:00

## Progressive strength exercise is feasible and seems very effective when commenced shortly after hip fracture surgery

Author: Physiotherapist Jan Overgaard  
*Team Rehabilitation, Lolland Community*  
Co-authors: Ph.d., Senior Researcher Morten Tange Kristensen

**Objectives:** We want to examine the feasibility and effect of a 6-weeks progressive strength-training program for patients with hip fracture in an outpatient geriatric health centre.  
**Methods:** This prospective cohort study with thirty-one subjects (5 men and 26 women) with a hip fracture, at a mean (SD) age of 77.9 (9) years who followed a standardised 6-weeks rehabili-

tation programme, twice weekly. It started approximately 2 weeks after surgery and included functional exercises, balance training and 3 sets of progressive strength training for lower limb muscle groups (2 weeks with 15RM, 2 with 12RM, and 2 with 10RM). The weight load was adjusted after each of the 3 training sets in each of the 12 sessions to secure training at the respective RM-level. Pain was measured with the Verbal Ranking Scale during each training and test session. Maximal isometric knee-extension strength for both limbs was monitored with a hand-held dynamometer, the New Mobility Score (NMS) evaluated the functional level, while the Timed Up & Go (TUG), and six minutes walk test (6MWT), performed as fast as safely possible were used to evaluate changes in functional mobility. **Results:** The knee-extension strength in the fractured limb improved (P<0.001) from 0.49 to 0.82 Nm/kg (67%), while strength deficits % non-fractured was reduced from 60% at baseline to 83% after the 6-weeks program. The TUG and NMS improved significantly with 31% and 59%, in addition to 61% (201-323m) for 6MWT (all, P<0.001), after six weeks training. Weight loads for 15, 12 and 10RM for fractured limb knee-extension and bilateral leg press training increased with 52% and 81%, 25% and 19%, and 13% and 12% respectively (all, P<0.001). Hip fracture related pain was no limiting factor for training or follow-up testing. **Conclusion:** Progressive strength training is feasible and seems very effective when commenced shortly after hip fracture. Still, an extended program seems necessary as patients experienced a fractured limb strength deficit of 17% after 6 weeks of training.

O2.7-4 17:00-17:15

### Changes in quality of life among older patients one year after hip fracture

Author: Associate professor Else Vengnes Grue  
*Diakonhjemmet University College, Department of Nursing and Health*

**Background:** Older persons who experience a hip fracture are at high risk of impaired quality of life. Our aims were to identify characteristics in hip fracture patients with impaired health related quality of life and changes during the following year. Also we intended to discover indicators that might predict high quality of life at twelve month after hip fracture. **Methods:** A total of 331 patients were admitted to two acute-care hospitals during 2004-2006 for hip fracture. Inclusion criteria were age 65 years or older and admitted from their own home. Information about premorbid period, three days prior to the incidence, was collected retrospectively using the Resident Assessment Instrument for Acute Care (InterRAI-AC) and SF12 Health Survey also at three and twelve month after the hip fracture. The Mental and Physical Health Composite Scores (MCS & PCS) were computed using scores of the SF 12. **Results:** Persons with premorbid values lower than the mean score MCS [43.8 (SD 6.2)] had more often discouraged mood than patients with higher mean score. The twelve month follow

up mean MCS did not changed compared to premorbid and three month assessment (p=0.088, p=0.279 respectively). Patients with less than the mean score PCS [42.8 (SD 11.3)] prior to the admission had more frequently cognitive and combined sensory impairment, ADL and IADL loss compared to patients with higher mean score. The mean value on PCS at three months [36.9 (SD10.6), p<0.001], showed a lower value than the initial assessment. At twelve month mean PCS showed a poorer value [39.5 (SD10.2) p<0.001], than premorbid. Eighteen percent had high quality of life (PCS>49.7) twelve month after the hip fracture. Predictors for high quality of life were younger age, independent in ADL and homecare. **Conclusion:** Interdisciplinary intervention programs aimed at empowering home dwelling older people with hip fractures in maintaining daily activity may improve health related quality of life. **Keywords:** Hip fracture, 65 years or older, 12-month follow-up study, SF12 Health Survey, interRAI-AC, comprehensive assessment

## O3.1 Migration

Chair: Anne Leonora Blaakilde  
12-06-2012, 08:30-10:00, Room 1

O3.1-1 08:30-08:45

### Aging and Health Practices Between Two Cultures

Author: Visiting scholar Suzan Yazici  
*Akdeniz University*  
Co-authors: Research assistant Signe Gronwald Petersen, postdoc Anne Leonora Blaakilde

**Background/purpose:** Since labour migration from Southern Europe to the North started in the 1960s, host countries like Denmark are facing new demographic challenges regarding this population of retired migrants who do not necessarily age and live like other Danish retirees. No one – and least of all the migrants themselves – expected the move to be permanent, and potential problems following migration were not foreseen and not dealt with. Many of them obtained low-paid, physically demanding jobs, did not learn the language of the host country, did not receive further education, did not invest in real estate, and now as they age, do often not possess the same positions and legal rights regarding the Danish pension system as the in-born Danes do. Such aspects of otherness can eventually cause a range of problems such as social isolation, poor financial situation, reliance on children or relatives for translation purposes, and, not the least, a suffering from multiple, interacting health problems, which because of the above mentioned cases may be treated in various and incomplete ways. Health perceptions and practices of Turkish elderly people living in Denmark are studied in order to gain knowledge about how these practises are influenced by circular migration processes, cross-boarder health-care, and what kinds of specific problems they are facing due to migration. **Methods:** 20 semi-structured interviews with Turkish migrants, aged 42 -80, and fieldwork in health settings and local, public centers. **Findings/results:** The interviewees feel old, ill, and worn-out. Many of them are involved in circular migration as returning migrants to Turkey. They are “in-between” two cultures and consider remigration, but having children in Denmark make them hesitate. **Conclusion:** Retired Turkish migrants are not likely to remigrate, and their health situation calls for more attention in order to meet their needs.

O3.1-2 08:45-09:00

### Living In-between and Doing Health Elderly Pakistani Women in Norway

Author: PhD Candidate Beate Lie Sverre  
*Buskerud University College*  
Co-authors: PhD, RN Grethe Eilertsen, PhD Kari Nyheim Solbrække

**Objectives:** This qualitative study investigates the stories of socialization of elderly Pakistani women living in Norway to understand their specific challenges and how they deal with them. Migration studies indicate that elderly migrant women are passive, ill victims caught in a marginalized position due to age, ethnicity and gender, and thus have little or no access to opposition and agency. To broaden the picture it is necessary to develop an innovative approach to understand what is implicated in the process of migration. The importance of considering life conditions that surrounds potential health promotion behaviors of immigrants is stressed by several researchers. However, up to now limited research guided by this perspective has been done in Norway. Therefore, this study explored how elderly Pakistani women in Norway promote their health and well-being through some distinct social interactions. The intention is to bring awareness to how health, even by so-called disadvantaged social groups, may take place. These practices are important to take into consideration when developing health-promoting policies for elderly immigrants. **Design:** An ethnographic study of 15 Pakistani women, aged 53-75, was carried out in a multisided fieldwork in Oslo using participant observation and ethnographic interviews. The concepts of health, ethnicity, gender and age are viewed relationally and as dynamically constructed in social interactions. The analytical approach was inspired by the constructivist theoretical framework of narrative ethnography. **Results:** The elderly Pakistani women in Norway construct stories of living in-between cultures and experiences of acculturative stress caused by being elderly, immigrants and women. However, this analysis also suggests that through distinct social relationships, primarily in the context of a voluntary organization, elderly Pakistani women do health and they appear as active agents in relation to their health and lives. **Conclusions:** The healing practices taking place among elderly Pakistani women may counteract the negative health outcomes associated with age, migration and gender. Implications for immigrant health-promoting policy in Norway: increase the establishment and allocate funds to sustain voluntary organizations run by and for immigrants.

O3.1-3 09:00-09:15

Aging and Health Practices Between Two Cultures

Elderly Turkish Migrants in Denmark

Author: Postdoc, Ph.d. Anne Leonora Blaakilde  
*Center for Healthy Ageing, Univeristy of Copenhagen*  
Co-authors: Visiting Scholar, Dr. Suzan Yazici, Research Assistant, MA Signe Gronwald Petersen

**Background/purpose:** Since labour migration from Southern Europe to the North started in the 1960s, host countries like Denmark are facing new demographic challenges regarding this population of retired migrants who do not necessarily age and live like other Danish retirees. No one – and least of all the migrants themselves – expected the move to be permanent, and potential problems following migration were not foreseen and not dealt with. Many of them obtained low-paid, physically demanding jobs, did not learn the language of the host country, did not receive further education, did not invest in real estate, and now as they age, do often not possess the same positions and legal rights regarding the Danish pension system as the in-born Danes do. Such aspects of otherness can eventually cause a range of problems such as social isolation, poor financial situation, reliance on children or relatives for translation purposes, and, not the least, a suffering from multiple, interacting health problems, which because of the above mentioned cases may be treated in various and incomplete ways. Health perceptions and practices of Turkish elderly people living in Denmark are studied in order to gain knowledge about how these practises are influenced by circular migration processes, cross-boarder health-care, and what kinds of specific problems they are facing due to migration. **Methods:** 20 semi-structured interviews with Turkish migrants, aged 42 -80, and fieldwork in health settings and local, public centers. **Findings/results:** The interviewees feel old, ill, and worn-out. Many of them are involved in circular migration as returning migrants to Turkey. They are “in-between” two cultures and consider remigration, but having children in Denmark make them hesitate. **Conclusion:** Retired Turkish migrants are not likely to remigrate, and their health situation calls for more attention in order to meet their needs.

O3.1-4 09:15-09:30

Ageing in South Australia: Continuity and change in the caring practices of ageing Italian migrants in South Australia.

Author: Dr. Daniela Cosmini-Rose  
*Dept. of Language Studies, Flinders University*

The Italian South Australian ageing population, which mirrors the pattern of the wider Italian Australian community, makes up the largest group of people over 65 from culturally and linguistically diverse backgrounds. In 2006 more than half of the Italians in South Australia were over 65. Therefore, a common concern for the Italian-Australians, one they share with other migrants groups and with the wider Australian population, is how to care effectively for their aged. This paper is an ethnographic examination of the ageing experiences of elderly Italian migrants in South Australia. The study analyses the perception of the ageing Italian migrants’ health and practical needs, their living conditions, their need for family and social contact, the importance of remaining independent, their language and communication difficulties and cultural challenges. The paper addresses the extent of family care-giving practices such as how and why care is exchanged, which practices are employed and by whom, and which factors facilitate or hinder care-giving focusing primarily on the parent-child relationship. Data has been collected through individual and focus interviews employing a multi-site approach which recognises that elders, their families, and communities are closely intertwined and need to be examined in relationship to one another. Preliminary findings show that informal family care is still the preferred pattern of care of the Italian migrants. This falls mainly on the adult children and especially on the daughters. However, the family support is not as readily accessible as it was in the past, considering that the second generation is also expected to conform to mainstream Australian lifestyles characterised by increasing labour market mobility and demanding personal lives that reduces their availability to care for their ageing parents. In addition, the study shows that the Italian elderly face language and cultural challenges that are relevant

O3.1-5 09:30-09:45

Ageing in a small archipelago in North-western Europe: Demographic conditions and future challenges

Author: Ása Róin  
*NISAL*

Ageing in a small archipelago in North-western Europe: Demographic conditions and future challenges  
The aim of this presentation is to reveal and discuss how future challenges regarding a growing number of older people are managed in a small archipelagic society. The presentation forms part of an ongoing doctoral study on ageing in the Faroe Islands. The study was prompted by an awareness of contextual conditions and an impression of a possible discrepancy between the meaning that older people attach to ageing in their daily living, and the view of ageing in public policy-making. The study material consists of documents and reports concerning public policy-making, and individual interviews with 20 older persons. Methodologically, the analyses are based on discourse theoretical and discourse psychological approaches. The Faroe Islands consist of 17 inhabited islands in the middle of the Atlantic Ocean, of which only half are connected by tunnels or bridges. There has been a vast migration, especially of young people, from the small islands and communities to e.g. the capital Tórshavn. This has left some areas with only a few older people as residents. With a population of only 48,574, a decline in income tax, and increasing expenses for care of the elderly, politicians and economists are warning of the necessity of changing some welfare institutions, e.g. the pension system and the primary health care system. As in other Scandinavian countries, a strategy directed at prolonging the period that older people remain in their own homes, for example by introducing rehabilitation in everyday life, has been proposed and drawn up. An important question that arises from this proposal is whether socio-political strategies from other Scandinavian countries are transferable to the Faroese society. Hopefully, the study of ageing in the Faroe Islands will elaborate on this important issue, and contribute to developing initiatives that are adjusted to the geographic and demographic conditions prevalent in the archipelago of the Faroe Islands.

O3.1-6 09:45-10:00

The invisibility leaders: Elderly ethiopian priests in israel

Author: Dr. Aviva Kaplan  
*Netanya Academic College*  
Co-author: Dr. Aviva Kaplan, Dr. Rachel Sharaby

Our lecture addresses a central topic, migration, which is one of the prominent characteristics of the borderless postmodern

society in which we live. The experience of migration imparts to all migrants a sense of marginality and social exclusion. The elderly Ethiopian kessoch (priests) who came to Israel over the past two decades constitute a singular population that underwent this jolting experience. They are of particular interest to us since through them we are able to learn about other elderly populations that experience similar processes. For thousands of years, the elderly Ethiopian kessoch were the undisputed leaders of the Jews who lived in Ethiopia. The great revolution that they led as they presided over their communities on the journey to the Promised Land (Israel) eventually radically transformed their status and in fact destroyed their social position in their old-new homeland. Our research was undertaken with the assistance of an Ethiopian social worker whose presence opened doors to us despite the prevailing suspicion and mistrust. He helped us overcome the language barrier and constituted a bridge to understanding the culture of the research subjects. By employing an interpretative sociological approach that adopts a phenomenological perspective and utilizes qualitative research methods, we examined interpersonal influences as we focused on the cultural dimension. This approach enabled us to reveal the meaning of life for the kessoch in a postmodern reality and to decipher the cultural shock that they experienced. This is the first such cultural anthropological study that addresses the problem of traditional elderly leaders who come into contact with “postmodern life materials” and are unable to contend with them. Our research shows how these elderly leaders, who were among those who generated a significant social revolution, are “devoured” by it at the end of the process.



# 04.1 Medication

Chair: Carsten Hendriksen  
12-06-2012, 10:30-11:30, Plenum 8/10

O4.1-1 10:30-10:45

## Does the increasing use of statins in older people reflect an indication creep?

Author: Post doc Helle Wallach Kildemoes  
*University of Copenhagen*  
Co-authors: Lektor Carsten Hendriksen, Post doc Mikkel Vass, Professor Morten Andersen

The use of statins (the most important group of cholesterol lowering drugs) increased considerably during the last decade. In 2009 the number of statin-users in Denmark increased to 530,663, corresponding to about 10% of the population. Introduced to reduce the high mortality in middle-aged men with myocardial infarction, statins are now also recommended for a range of other conditions, including individuals without cardiovascular disease (CVD) or diabetes (here termed asymptomatic individuals) at high risk of CVD. Yet, it has been questioned whether the beneficial CVD risk reducing effect among older people outweighs the adverse effects e.g. muscle problems.

**Aim:** The aim of this study was to explore trends in prevalence and incidence statin-use in elderly (age>=65) according to indication, age and gender.

**Methods:** We followed all Danish adults during 1996-2009 in the nationwide individual-level registries with respect to demographic information, dispensed prescription drugs and in-hospital information. The indication for statin prescribing was continuously assigned by means of register-markers for a range of CVD conditions and diabetes (applying prescription and in-hospital information). Prevalence and incidence of statin-use during 1996-2009 were computed according to indication, age and gender.

**Results:** During the period 1996-2009 statin incidence increased substantially more in older than in younger age groups and was especially observed in asymptomatic individuals. The prevalence increased to 320/1000 and 170/1000 in individuals aged 65-84 and 85+, respectively – asymptomatic statin-users amounting to 27% and 10%, respectively. Incidence and prevalence in asymptomatic individuals were highest in women.

**Conclusion:** Statins are increasingly prescribed for asymptomatic older persons, despite the dubious net-beneficial effect. Are we facing an indication creep for preventive drugs with an inverse ageism transforming elderly care into disease/death preventio

O4.1-2 10:45-11:00

## Dilemmas in discontinuing medication among elderly people

The example of discontinuing statins in primary care

Author: Michael Nixon  
*Copenhagen University*

Among elderly patients the usage of statins has increased exponentially over the last 10 years. There are several problems with this increased usage, including: overprescription of statins, a weak evidence base for effectiveness of statins for those over 65 years of age, especially women, as well as the risks of increased polypharmacy and reduced adherence to existing medication. There is also evidence of patients having general moral stance against taking drugs. One potential strategy for addressing these problems is the discontinuation of the medication (statins), especially in primary care where most of the medication is prescribed. However, little is known about the decision-making process of general practitioners (GPs) in decisions to discontinue or continue. Therefore this study used a qualitative methodology to examine the decision-making process of GPs to identify how appropriate discontinuation could be encouraged. Data used in the study included interviews, focus group discussions, document analysis and participant observation. The results led to three types of recommendations related to: the GPs, professionals who work together with GPs and national bodies, including those who produce guidelines. Suggestions for further research are given, including qualitatively examining the role other professionals have in enabling the process of discontinuation.

O4.1-3 11:00-11:15

## Life-Threatening Drug Use, Misuse And Abuse Among Male And Female Older Adults In The United States: 2005-2010

Author: Victoria Albright  
*RTI International*  
Co-authors: Dr Jerry Hedge, Dr Al Woodward, Victoria Scott

By many credible measures, prescription drug use has been on the rise in the United States as well as the globe over the last decade. More prescriptions are being written; more individuals, and especially seniors (adults aged 65+), are on maintenance medications to treat chronic conditions; and individuals are living longer on these treatment programs. These forces create a marked increase in the opportunity for drug interactions as well as intentional drug abuse. The Drug Abuse Warning Network (DAWN) is an ongoing national (USA) public health surveillance system that monitors emergency department visits and deaths that involve illicit

drugs, prescription drugs, and pharmaceuticals used for therapeutic purposes. DAWN identifies the visits/deaths as resulting from drug misuse/abuse, drug-related suicide attempts, accidental ingestion or adverse reaction. DAWN data offer a rich trove of information on the intentional and unintentional ingestion of legal and illegal drugs that result in life-threatening medical emergencies and death. The information can be used in a multitude of ways to support public health messaging and design of intervention programs targeted at the older and more vulnerable segment of the population. The presentation will use DAWN data to (1) identify the characteristics of older persons experiencing life-threatening medical emergencies and fatalities that are drug-related, (2) learn about drugs and drug combinations that are most life threatening, and (3) identify opportunities for formulating public health messages that are targeted at seniors and the problems they have with drugs. The presentation will present the demographic characteristics of older patients, identify the drugs and drug combinations most often involved in life-threatening emergencies and death, and identify directions for formulating public health messages targeted at reducing misuse/abuse, avoiding adverse reactions, and reducing drug-related suicide.

O4.1-4 11:15-11:30

## No cognitive impact of reduced anticholinergic drug score in a frail elderly population

Author: Hege Kersten  
*Oslo University Hospital, Department of Geriatric medicine*  
Co-authors: Prof Torgeir Bruun Wyller, Prof Espen Molden, Prof Knut Engedal

**Introduction:** Large observational studies have reported that anticholinergic drug exposure in the elderly display a high risk of cognitive impairment, but the potential cognitive improvement of an interventional reduction of drug-induced anticholinergic burden is not previously studied in randomized controlled trials. In present study, we assessed the impact of pharmacist-initiated reduction of anticholinergic drug use on cognitive function in nursing homes residents.

**Methods:** The study was a randomised, controlled, single blinded trial including long-term residents from 21 nursing homes with anticholinergic drug scale (ADS) score >=6; 3, stratified by center, and randomly allocated (1:1) to intervention or control. Exclusion criteria were inability to perform the tests, i.e. patients with severe dementia were excluded. The intervention was a pharmacist-initiated reduction of ADS score in multidisciplinary drug reviews. Primary endpoint was CERAD-10 wordlist test for immediate recall. Secondary cognitive endpoints were CERADs wordlist tests for delayed recall and recognition,

and MMSE. Saliva production and serum anticholinergic activity (SAA) were included as peripheral measures. The subjects were re-tested after 4 and 8 weeks following intervention. **Results:** 87 patients were included. The median ADS score was reduced by 2 units (IQR= 3-5) in the intervention group and remained unchanged in the control group. The adjusted mean difference in immediate recall between interventions and controls was 0.54 words, 95% CI: 0.97, 2.05, p = 0.48, and there were no significant differences in any of the cognitive test performances or peripheral measures after adjusting for confounding baseline scores. **Conclusion:** Pharmacist-initiated intervention significantly reduced ADS score in nursing home residents, but this reduction did not significantly improve cognitive function or reduce the peripheral measures; SAA and mouth dryness.



## O4.2 Professional care workers

Chair: Hanne Marlene Dahl  
12-06-2012, 10:30-11:30, Plenum 9/11

O4.2-1 10:30-10:50

### Nurses’ self-assessed competence in gerontological nursing

Author: Dr. Pirjo Tiikkainen  
*JAMK University of Applied Sciences*  
Co-authors: Dr. Sari Teeri, Sirkka-Liisa Karttunen

**Background:** People working in the service provision for aged people have very different educational backgrounds and levels of competence. Developing professional competence both improves the quality of care and makes the field more attractive for potential staff. In Finland, apprenticeship-type continuing education in gerontological nursing is a new form of adult education (30 ECTS credits) that offers professional development based on the needs of working life for registered nurses who are in employment. Object: The purpose of this study was to describe the self-assessment of competence in gerontological nursing of the registered nurses (n=51) who participated in apprenticeship-type continuing education programme in 2010-2011.

**Methods:** Data were carried out by Digium internet-based software for surveys by using a Likert-scale self-assessment questionnaire at the beginning and at the end of the programme. Eight competencies are divided into statements describing more specific the content of each competence. The respondents assessed their level of competence on a scale “The statement describes me” 6 = very good, 5= good, 4= quite good, 3= to some extent, 2= only slightly, 1= not at all.

**Results:** Nurses regarded their level of global competence in gerontogical nursing as good at the beginning (mean 4.72) and at the end of programme (m 5.54). Both at baseline and at the end the nurses self-assessed their level of competence highest in ethics (mean 5.21, 5.73). The lowest self-assessed competence at baseline was health promotion (m 4.35) and at the end geriatric competence (m 5.34). Competencies in gerontechnology, nutrition and research usage were assessed as satisfactory. The highest progress was perceived in health promotion competence.

**Conclusion:** By reinforcing and updating the nurses’ gerontological expertise we can prove the quality of elderly care. The results can be utilized in the further planning of the programme.

O4.2-2 10:50-11:10

### Physical pain in formal caregivers of dependent older people

Author: Dr. Margarida Pinto  
*Escola Superior de Saúde da Universidade de Aveiro*  
Co-authors: Prof. Dr. Daniela Figueiredo, Prof. Dr. Alda Marques, Dr. Vânia Rocha, Prof. Dr. Liliana Sousa

**Objectives:** Formal caregivers of dependent old people have a physically demanding job, as they are exposed to biomechanical difficulties associated with care giving tasks. This condition often leads to increased pain symptoms and work-related disabilities. This study aims to evaluate the presence/absence of physical pain among formal caregivers of dependent older people in care homes and/or day centres. And it explores the association between presence/absence of physical pain and subjective health perception, reduction in usual work activities, medication intake and sick leave.

**Methods:** A cross-sectional study was conducted in the central region of Portugal, with a convenience sample of 180 formal caregivers, who provide direct care to dependent old people in care homes and/or day centres. Data were collected using a structured questionnaire based on ICF checklist. Descriptive statistics and non-parametric test (Man-Whitney U Test) were used for data analysis. Results: The main findings suggest that 80% (n=144) of the formal caregivers present some type of physical pain. Pain was localized mainly in the spine (n=115; 63.9%), upper limb (n=65; 36.1%) and lower limb (n= 63; 35.0%). Those who report physical pain state a worse perception of physical and mental health, a greater reduction in their usual work activities and a larger consumption of analgesics and anti-inflammatories. No significant statistical differences were found between the presence of physical pain and the need for sick leave.

**Conclusion:** The physical pain and its underlying conditions, if not prevented, may affect the well-being of caregivers but also their performance. Therefore, it is required to invest in occupational health, by providing caregivers with strategies to care without prejudice about their health (e.g., adequate ways of lifting and transfer weights) and by raising awareness to self-care (e.g., relaxation techniques or dynamic muscle training).

O4.2-3 11:10-11:30

### The Strains in Dementia Care Scale

Author: Dr. Michael Bird  
*DSDC, Bangor University*  
Co-authors: Professor Anna-Karin Edberg, Dr Katrina Anderson, Annali Orrung-Wallin

**Background and aims:** By comparison with family carers, distress amongst residential staff in dementia care is much less investigated, even though providing practical and emotional support for this difficult work is known to improve quality of life both for staff and, by extension, those they care for. There is need for a well-researched scale.

**Method and Results:** We ran focus groups in three countries where, despite different systems and quality of care, there was strong agreement between participants. We produced a 64-item scale based on everything they told us stressed them about dementia care, asking how frequently respondents encountered each situation and how much it stressed them. We trialled the scale on 1000+ residential care staff in Sweden and Australia. Factor analysis enabled us to reduce the scale to 29 items and we administered the shortened scale to a new sample (n = 600). Confirmatory Factor Analysis produced the same factors and left us with 27 items. The factors are Frustrated Empathy – staff being unable to protect and care for people with dementia as well as they wish; Difficulty Understanding – when staff do not understand or ‘get’ dementia; Balancing Competing Needs – for example when staff have to give care to a demanding resident but others are equally in need; and, a systemic issue: Lack of Appreciation – when others (especially management) do not value or understand what staff do and give no support.

**Conclusions:** The scale will be made freely available with publication of a manuscript currently in preparation and should fill an important gap in outcome research in residential dementia care. We also hope it will raise awareness of this topic and the critical but largely neglected need to continuously support staff to enable them to provide optimum dementia care. (By way of illustrating neglect, every focus group said that this was the first time anybody had ever asked them how they felt about their work).

## O4.3 Death and dying

Chair: Peter Öberg  
12-06-2012, 10:30-11:30, Room 1

O4.3-1 10:30-10:50

### Slow codes - do we have a problem

Author: Trygve Johannes Sævareid  
*Diakonhjemmet hospital*  
Co-author: Prof. Susan Balandin

Abstract for 21st Nordic Congress of Gerontology, Copenhagen June 10-13, 2012. Slow codes – do we have a problem? Trygve Johannes Sævareid, Diakonhjemmet hospital, Oslo

**Background:** The use of slow codes has been reported outside of Scandinavia. Slow codes are cardiopulmonary resuscitative (CPR) efforts that intentionally are conducted too slowly for resuscitation to occur. Objective: The project explored nurses’ experiences and attitudes concerning CPR of the oldest-old hospitalized patients.

**Methods:** Ten nurses working in different hospital settings participated in in-depth interviews. The data was analysed according to a constructivist grounded theory tradition.

**Results:** Cardiac arrests present special challenges in the care of the oldest-old patient. Participants felt stress in end-of-life care, especially when resuscitation status is not decided for patients they think should have a do not attempt resuscitation (DNAR) order. The category “Appropriate availability of a DNAR” was treated as the theoretical concept, as it was of central importance to all participants. The participants were sympathetic towards doctors for making tough end-of-life decisions, but feel DNAR orders are underused and in some instances delayed. Slow codes had been suggested used for 5 out of 8 participants being asked about slow codes when asking a doctor about CPR status. None of the participants had experienced slow codes being performed on patients.

**Conclusions:** This small study indicates there is a need to address slow codes in research concerning end-of-life treatment of the oldest-old patients.

O4.3-2 10:50-11:10

Pain management in dying hospitalized patients: A comparison of the young old and the oldest old patients

Author: PhD Student Simen A. Steindal  
*Diakonhjemmet University College, Institute of Nursing and Health*  
Co-authors: RN, PhD, Associate Professor Inger Schou Bredal, MD, PhD, Professor Anette Hysten Ranhoff, RN, PhD, Professor Liv Wergeland Sørbye, RN, PhD, Professor Annars Lerdal

**Objectives of the study:** Pain is often underestimated and undertreated in older patients. Knowledge concerning pain in the oldest hospitalized patients during the last three days of life is deficient. The objectives of this study were to investigate healthcare workers’ documentation of frequency of pain characteristics, whether there were differences in documentation of pain characteristics in young old patients (65-84 years) and oldest old patients (85-100) and what types of analgesics were administered in the last three days of life.

**Methods:** The study included 190 patients; 101 young old patients and 89 oldest old patients from a general hospital in Oslo, Norway. Data were extracted from the patients’ electronic records using the Resident Assessment Instrument for Palliative Care.

**Results:** Median age for young old patients and oldest old patients was 79 years and 89 years, respectively. No significant difference was found between these two groups with regard to mean length of stay in the hospital, residential status and ward admittance. A higher proportion of the young old patients had a cancer diagnosis, were married, and lived with family members or others, while a higher proportion of the oldest old were women.

Pain was reported in 72.1 % of the total sample. No significant differences were found between the two age groups with regard to frequency of pain, intensity of pain breakthrough pain, pain control and type of administered analgesics. Not adequate pain control was documented among 9.4 % of the young old patients and 10.8 % of the oldest old patient group. Morphine was the most frequently administered opiate for both young old (52.7 %) and oldest old (50.0 %) patients.

**Conclusion:** No significant differences with regard to pain characteristics and types of administered analgesics between the age groups were found. Healthcare workers should be aware that pain is a highly frequent symptom in the oldest old hospitalized patients in the last days life.

O4.3-3 11:10-11:30 1

Existential issues in palliative care. Experiences of assistant nurses

Author: Dr. Elizabeth Åhsberg  
*Nathional Board of Health and Welfare*  
Co-author: PhD, Associate professor Maria Carlsson

Palliative care aims to ease pain and discomfort, when cure is no longer possible. The care may also offer social, psychological and existential support, to both patients and relatives. An increasing international attention has been given to patients, relatives and staff in palliative care during the last decades. Little focus has though been given to less educated staff, like assistant nurses, who are those who often spend most time with patients. Objective: to investigate nursing assistant’s experiences of existential issues in palliative care.

**Method:** Six female and one male nurse assistants participated in three group sessions (2,5 hours per session). The participants had a rather long work life experience as nursing assistants (m=15 years, range 3-29 years). The sessions were structured as focus groups, with literature giving three issues to discuss; (1) working close to death, (2) loneliness, (3) our need of meaning. The discussions were recorded, transcribed and analyzed with content analysis.

**Results:** Two overlapping domains were extracted, one considering practical care and one considering existential issues. The stories about practical care were interpreted in themes as (a) organisational boundaries, (b) meeting others, and (c) the patient’s body. The stories about existential issues were interpreted in themes as (a) the difficult part, (b) the valuable part, and (c) death and dying. One theme interpreted as communication seemed to be a part of both domains, why communication seemed to be a central theme.

**Conclusions:** The experiences that were reported in this study indicate that assistant nurses may give existential support to some patients, in addition to the practical care. The very personal situations that occur when staff helps patients to wash themselves, get dressed, bandage wounds, to eat etc., may create situations where meaningful conversations can take place. Such conversations, where staff primarily listens to patients, may constitute an existential support for patients and a meaningful task for staff.

O4.4 Informal care giving I

Chair: Gerdt Sundström  
12-06-2012, 10:30-11:30, Room 2

O4.4-1 10:30-10:50

Up against a challenge of providing pre-discharge resources for family carers of older patients: the process of developing a user-friendly eLIP website

Author: Lisa Low  
*The Chinese University of Hong Kong*  
Co-authors: Man-him Wong, Chi-fung Ling, Kim-pong Fan

**Background:** Against the dilemmas arising from the multiple concerns of providing timely, appropriate and relevant care for older persons following discharge from hospital, this 4-year study aims to examine the effects of an eLearning Information Package (eLIP) for hospitalised older people and families to make decisions about discharge locations.

**Objective:** This presentation describes an interim phase that used the qualitative data collected from elders, families and nurses in the phase one study, which identified the needs and challenges confronting them when planning older patients for discharge, to then undergo a process of developing a nurse-led, user-friendly and interactive eLIP website for family carers.

**Methods and theoretical underpinnings:** The content of the website is underpinned by the Ottawa Decision Support Framework (ODSF) which composes of three components: decisional needs, decision support and decision quality. Additionally, a set of guidelines was used to guide the development of user-centred website design and thereby obtained information about user/web interaction.

**Results:** We have managed to integrate the first two components of the ODSF framework into the eLIP website by creatively using the qualitative findings to heighten family carers awareness and understanding of the elders’ needs, and to help them think ahead and consider options in managing the elder’s situation before discharge. Decisional support was provided by developing new, as well as consolidating and integrating existing elderly resources into the website and then helping families to become familiar with resources that are available for their consideration. We will present our challenges of designing eLIP that attempted to address the multiple needs of elders, and how we prioritized and selected from our qualitative findings, and our choice of existing elderly resources to include.

**Conclusions:** eLIP hopes to become an interactive pre-discharge hospital package for older people by providing timely, appropriate and relevant information to family carers during a very stressful time. Its effectiveness in supporting families of older people during the pre-discharge period has yet to be determined, and will be tested in phase 2 of the study.

O4.4-2 10:50-11:10

The strains and gains of caregiving: The effect of providing personal care to a parent on a range of indicators of psychological well-being

Author: Thomas Hansen  
*NOVA- Norwegian Social Research*  
Co-authors: Britt Slagsvold, Reidun Ingebretsen

As the need for informal care rises it is important to know how caregiving affects well-being, to whom, and under which conditions. The literature so far has been limited by their scope of dependent variables and there has been little discrimination between groups of caregivers. This paper explores the effects of providing personal care to parents along a wide range of measures of well-being (life satisfaction, self-esteem, mastery, positive and negative affect, depression, and loneliness). We use cross-sectional data from the Norwegian Life Course, Ageing and Generation (LOGG) study (N~15,000, age 18-79), and two-wave panel data from the Norwegian study on life course, ageing and generation (NorLAG) (N~3,000, age 40-79). Among men, providing help with personal care to a parent has no effect on any indicator of well-being. Among women, the effect depends on the resident status of the care recipient. Providing such help to a non-co-resident parent, has no emotional effect among women, except a small positive effect on sense of control. Hence, there are psychological rewards associated with caregiving, a fact that tends to be ignored in theoretical and empirical work on caregiving. Providing such help to a live-in parent, however, relates among women to lower well-being (as measured by life satisfaction, negative affect, depression, and loneliness). There are few variations in these effects by age. Education, however, makes a significant impact. There are markedly more adverse effects of caregiving among low-educated than high-educated women. Education thus seems to buffer against the adverse consequences of caregiving. The panel analysis shows that caring for a non-co-resident parents is weakly associated with decreasing life satisfaction and increasing depression and sense of control over a few-year interval. The main conclusion is that providing personal care to a non-co-resident parents has few and weak effects on well-being. Caring for a live-in parent, however, has more detrimental consequences for well-being.



O4.4-3 11:10-11:30

Does Policy reflect Reality: Australian attitudes to the provision of formal and informal care

Author: Dr. Suzanne Hodgkin  
*La Trobe University*

Australia is reliant on a mixed economy of welfare, embedded in the ideology of supported familialism. However, it is being questioned whether this over-reliance on informal care can be sustained, and, it has been suggested that population ageing will have a profound impact on notions of intergenerational solidarity and the generational contract. Specifically, as the baby boomer generation approach their sixties, their willingness to assume the emotional and physical demands of caring for their parents has been questioned. In line with such an issue, this paper will explore from the Australian perspective, how population ageing will impact upon the future availability of informal care. In particular, it examines Australian attitudes to the provision of care to older people and whether informal care policies are in keeping with public attitudes and expectations. Findings are drawn from a secondary analysis of data collected from over 1500 respondents in the 2009 Australian Survey of Social Attitudes, which included a specific module on attitudes and expectations concerning elderly care. Findings demonstrate strong expectations for a continuing government role in the provision of formal care, and payment of income to full time and occasional carers. There is less support for the role of children in the payment of formal care, particularly coming from the baby boomer generation. Additionally, significant differences between genders are observed in relation to attitudes concerning the direct provision of informal care to ageing parents, with women demonstrating less support. In summary, these findings indicate that despite fiscal policies designed to shift costs from government to private households, public attitudes and expectations support a stronger governmental role. These findings have significant implications for future policies designed around the provision of formal and informal care.

O4.5 Depression

Chair: Hanne Pedersen  
12-06-2012, 10:30-11:30, Room 3/4

O4.5-1 10:30-10:50

Depressive symptoms among older people: a 15-year follow-up

Author: PhD Sini Eloranta  
*The Age Institute, HelsinkiFinland*

Co-authors: PhD, Adjunct Professor Seija Arve, PhD Suvi Rovio, MSc, Statistician Hannu Isoaho, M.D., Professor Matti Viitanen, M.D., Professor Aapo Lehtonen

**Aim:** This population-based birth year cohort study investigated the prevalence of depressive symptoms and factors associated with them among home-dwelling older people. Study Design: A prospective, population-based 15-year follow-up study of the age cohort of 70-year-olds living in the city of Turku, Finland. **Methods:** The data were collected in 1991 by a postal questionnaire that was sent to all residents, born in 1920 (N = 1530). Follow-ups using the same procedure were conducted in 2001 and 2006. All examinations included an identical study protocol; the participants’ self-reported health status and depressive symptoms were investigated via a questionnaire. Afterwards, thorough clinical examinations including the Zung depression scale were conducted by a nurse and physician. **Results:** The mean of the Zung scale total score was 34 at the age of 70 and a significant increase was found in both re-examinations. At the age of 80 the mean of the Zung score was 35.8 while it was 37.5 at the age of 85 years. Univariate and multivariate analyses showed that the factors that associated with self-reported depressive symptoms were mostly functional and/or social (e.g. suffering from loneliness and not meeting friends regularly) while only a few associations were found between medical conditions or objectively evaluated ill health. **Conclusions:** Our findings revealed an increase in prevalence of depressive symptoms throughout the course of the investigation. Mostly functional and/or social factors were associated with self-reported depressive symptoms, while few associations were evidenced between depressive symptoms and medical conditions or poor health. At a clinical level, this study highlights the need for preventive strategies and early identification of possible depressive symptoms among home-dwelling older people.

O4.5-2 10:50-11:10

A randomized controlled trial of a senior centre group programme for increasing social support and preventing depression in elderly people living at home in Norway

Author: Associate Professor Hege Bøen  
*Diakonhjemmet University College, Department of Nursing and Health*  
Co-authors: Professor emeritus Odd Steffen Dalgard, Associate Professor Rune Johansen, Professor Erik Nord

**Objectives:** Late-life depression is a common condition and a challenging public health problem. A lack of social support is strongly associated with psychological distress. Senior centres seem to be suitable arenas for community-based health promotion interventions, although few studies have addressed this subject. The objectives of the present study were to examine the effect of a preventive senior centre group programme consisting of weekly meetings, on social support, depression and quality of life. **Methods:** A questionnaire was sent to a random sample of 4,000 persons over 65 in Oslo, and a total of 2,387 completed questionnaires were obtained. These subjects served as a basis for recruitment of participants for a trial, with scores on HSCL-10 being used as a main inclusion criterion. A total of 138 persons were randomized into an intervention group (N=77) and control group (N=61). Social support (OSS-3), depression (BDI), life satisfaction and health were measured in interviews at baseline and after 12 months. Perceptions of benefits from the intervention were also measured. Mean scores, SD, SE and CI were used to describe the changes in outcomes. Effect sizes were calculated based on the original scales and as Cohen’s d. **Results:** There was an increase in social support in both groups, but greatest in the intervention group. The level of depression increased for both groups, but more so in the control than the intervention group. There was a decrease in life satisfaction, although the decrease was largest among controls. There were almost no differences in reported health between groups. However, effect sizes were small and differences were not statistically significant. In contrast, most of the participants said the intervention meant much to them and led to increased use of the centre. **Conclusions:** In all probability, the intervention failed to meet optimistic targets, but possibly met quite modest ones. Since intention-to-treat analysis was not possible, we do not know the effect on the intervention group as a whole. It is recommended that senior centres expand their activities with group programmes by strengthening social support, but a further evaluation of such programmes is needed. For the depressed, more specialized programmes to cope with depression may be a more appropriate intervention.

O4.5-3 11:10-11:30

The association of mid-life physical activity with late-life depressive symptoms  
Age Gene/Environment Susceptibility (AGES) - Reykjavik Study

Author: Dr. Milan Gudjonsson  
*Landspítali University Hospital, Gerontological Research Institute*  
Co-authors: PhD Jane Saczynski, MD Thordur Sigmundsson, MD Bjorn Einarsson, MD Jon Snaedal, MD Sigurbjorn Bjornsson, PhD Thor Aspelund, MPH Melissa Garcia, MD Vilmundur Gudnason, MD Tamara B. Harris, MD Lenore J. Launer, MD Palmi V. Jonsson

**Objective:** To assess the association of mid-life PA and depressive symptoms in late-life. **Methods and theories:** Physical activity (PA) decreases the risk of various health outcomes, but the long term association of mid-life PA with depressive symptoms in late-life has not been well examined. A population-based cohort from the Age Gene/Environment Susceptibility - Reykjavik Study was followed since 1967 as a part of the Reykjavik Study. Mid-life PA was defined at two activity levels, active and not-active groups. Main outcome was depressive symptoms assessed by a 15-item Geriatric Depression Scale (GDS) in late life. **Results:** After excluding those with dementia (n = 308) and history of depression (n = 234) 5222 participants (58% women, 42% men; 1588 active, 3634 non-active) were available for analysis. Of those, 4603 (57% women, 43% men) had available cognitive data for secondary analysis to assess association related to details of cognitive function. Level of weekly PA was ascertained by a questionnaire at mid-life, mean age 52 ± 7 years. Depressive symptoms were assessed on average 25 (±4) years later. After controlling for demographic and health related risk factors, those who were active at mid-life were less likely to have significant depressive symptoms (GDS scores 6 or higher) (Odds Ratio (OR) = 0.59, 95% Confidence Interval (CI) 0.44 ~ 0.78, P < 0.001) compared with those who were inactive in mid-life. In secondary analysis after full adjustment of three domains of cognitive function the results remained significant (OR = 0.67, 95% CI: 0.48 ~ 0.92, P < 0.05). **Conclusion:** Our study shows that mid-life PA is associated with reduced number of depressive symptoms on the GDS 25 years later. Participating in regular PA in mid-life may improve mental health in late life.

## O4.6 Physical exercise I

Chair: Minna Mänty

12-06-2012, 10:30-11:30, Room 12

O4.6-1 10:30-10:50

### Nordic Walking for Geriatric Rehabilitation: A Randomized Pilot Trial

Author: MSc Sabrina Figueiredo

*McGill University*

Co-authors: PhD Lois Finch, BSc (PT) Jiali Ming, PhD Sara Ahmed, MD Alen Huang, PhD Nancy Mayo

**Purpose:** There is a need to identify effective interventions to promote walking capacity in seniors. This study was the first to compare Nordic Walking and traditional walking. The primary objective was to estimate the relative efficacy in improving walking capacity of Nordic Walking and Overground Walking for the elderly.

**Method:** Single blind, site-stratified, randomized, pilot trial designed to estimate the amount of change with Nordic Walking and Overground Walking. Main outcomes were 6MWT and 5MWT. Explanatory variables were age, sex, number of comorbidities, walking aids, balance, pain and leg function.

**Results:** Nordic and Overground Walking participants improved 41 meters on 6MWT and increased their gait speed by 0.21 m/s and 0.08 m/s, respectively. Nordic Walking effect sizes were moderate for 6MWT (ES = 0.5) and large for gait speed (ES = 0.9). Overground Walking demonstrated moderate effect size for 6MWT (ES = 0.5) but small ones for gait speed (ES = 0.4). Relative efficacy, which was obtained from the ratio of Nordic walking and Overground Walking effects sizes, was 1 for 6MWT and 2.25 for gait speed.

**Conclusions:** Nordic Walking is 125% more effective in improving gait speed among elderly than Overground Walking.

O4.6-2 10:50-11:10

### Gait speed has a closer association with physical function when adding a cognitive task

Author: Physiotherapist, PhD-student Bård Bogen

*University of Bergen*

Co-authors: Geriatrician, dr.med Anette Hylen Ranhoff, Physiotherapist, PhD Rolf Moe-Nilssen

**Background:** Walking requires effort from the nervous system, the cardiovascular system, the pulmonary system and the musculoskeletal system. Failure in either system is likely to produce alterations in gait patterns affecting gait efficiency.

Hence, slow gait has gained interest as an indicator of health and function in elderly people. Gait speed is easily measured in clinical settings, and has been identified as a predictor of ADL decline, falls, hospitalization and death. However, unconstrained gait may not best represent the challenges elderly people face during walking on a daily basis, such as walking while doing another task at the same time. Hence, adding a second task when measuring gait speed may demonstrate weaknesses better than when measuring gait speed during unconstrained gait. In this paper, we investigate how gait speeds during unconstrained gait and during a dual condition are associated with other measures of function.

**Method:** Participants were elderly, home-dwelling cognitively intact volunteers. They walked back and forth a distance of 6.5 meters. Time was measured with photocells. They were first instructed to walk at preferred speed, and then they were instructed to walk at their preferred speed while counting backwards from 50 with intervals of 3. Gait speed from the two conditions was then investigated for association with the SF36 physical health scale, self-reported fear of falling (Falls efficacy scale), grip strength and Sit-to-stand performance. Association was investigated by linear regression; with adjustment for age and gender.

**Results:** 51 persons (66% women) with mean age 75.8 years (SD 3.5) participated. They walked at 1.16 m/s (SD 0.20) during unconstrained gait, and at 0.85 m/s (SD 0.31) during the dual task condition. Gait speed measured during unconstrained gait was only significantly associated with Sit-to-stand performance ( $p < .001$ ), while gait speed measured while doing a secondary task was significantly associated with all the variables of interest. **Conclusion:** Adding a secondary, arithmetic task during walking disclosed functional difficulties in the participants to a greater extent than unconstrained walking. We believe this has clinical value, since procedures for measuring gait speed during dual task walking may easily be implemented in clinical settings.

O4.6-3 11:10-11:30

### The association between older adults' personal goals and physical activity

Author: Milla Saajanaho

*Gerontology Research Center, Department of Health Sciences, University of Jyväskylä*

Co-authors: PhD Anne Viljanen, PhD Sanna Read, PhD Merja Rantakokko, MSc Li-Tang Tsai, MD, PhD Jaakko Kaprio, MD, PhD Marja Jylhä, PhD Taina Rantanen

Personal goals are defined as goals that people have chosen for themselves. By setting and pursuing personal goals people are able to direct their own actions and life course. Some evidence exists that physical inactivity may be related to problems in managing exercise and other valued life goals simultaneously. However, among older adults, the association between personal goals and physical activity is yet unknown. The aim of this study was to explore how older adults' personal goals correlate with

physical activity.

The participants were 308 older women (M = 71.2, SD = 3.3). They were interviewed using a revised version of the Personal Project Analysis. Physical activity was assessed with self-reported amount of leisure time exercise, ranging from none (1) to a great deal (5) of activity. The data were analyzed using logistic regression modeling.

Most of the participants (80%) had at least one goal related to health and functioning, 48% to social relationships, 45% to physical activity, 39% to leisure activities and 29% to self-development, lifestyle or ideology. 26% of the participants reported exercising quite a lot or a great deal (=high level of physical activity) and 74% moderately or less. The analysis showed that high level of physical activity was associated with having at least one physical activity goal (OR 3.47, 95% CI 1.99-6.04). The association remained strong when adjusted for age, education, economic situation, depressive symptoms and mobility limitations. Other personal goals did not correlate with physical activity.

The results indicate that having personal goals related to physical activity correlate with higher physical activity. Encouraging older adults to set relevant goals for physical activity could be a key factor for increasing their physical activity level.

## O4.7 Rehabilitation

Chair: Jette Thuesen

12-06-2012, 10:30-11:30, Room 13

O4.7-1 10:30-10:45

### Identity Work in Geriatric Rehabilitation

Author: Jette Thuesen

*Roskilde Universitet, Center for Sundhedsfremmeforskning*

Medical sociology and anthropology address how illness and disability accentuates questions of subjectivity and identity and report that an important aspect of rehabilitation comprises questions like “who am I, and who will I be?”. An ongoing phd-study examines identity work in geriatric rehabilitation processes, drawing on a social constructionist approach. Identity work comprises the ways in which institutions such as geriatric rehabilitation convey certain identities as ways of understanding and categorizing lived experience, and the ways this interpretation takes place in social interaction, as a discursive construction of selves. As a multidisciplinary and multi-sited intervention, geriatric rehabilitation offers a multiplicity of discursive resources for understanding and acting upon illness and functional decline in old age. In other words, geriatric rehabilitation offers a multiplicity of identities for self-construction. This study examines the production and use of identities in institutional talk, empirically focusing on a variety of encounters between professionals and older people, following 9 persons during hospitalization and after discharge to further rehabilitation in the municipality. The data is from institutional, multi-sited ethnographic fieldwork, including participant observation, patient and staff interviews, and gathering patient records and plans of action. The study's purpose is to document the connection between institutional identities and self construction as an unfolding narrative of the self. The presentation outlines these processes. In a preliminary analysis of two encounters, it is illustrated how institutional identities are promoted and used in institutional talk.

O4.7-2 10:45-11:00

### Training the frail body: An exercise of hope

An anthropological study of elderly going through physical rehabilitation in Denmark

Author: Louise Scheel Thomasen

*Dep. for Ethnology & Center for Healthy Aging, University of Copenhagen*

This abstract is based on a Ph.D. project about Danish elderly going through physical rehabilitation and training after illness



or operation. In a context of a growing number of elderly the purpose of the study is to understand how frailty and bodily changes are experienced and managed by elderly, and how we think old age and manage elderly as particular health subjects in Denmark.

The study is based on anthropological fieldwork in rehabilitation centers, and time spent with elderly in other contexts of their lives. Drawing on Vincent Crapanzano and his understanding of hope (2003) the study shows the paradoxical nature of life in this situation. Working their way through the ups and downs of rehabilitation, crises occur continuously. Some elderly also see the end of life as approaching. Physical decline and endings co-exist with striving for improvement. Feelings of insecurity turn into a hope for a return to normality, thus restoring a known sense of self. Hope in crisis induces a certain temporal quality to life. The past is both behind and ahead of you as it spills into images of the future.

Through rehabilitation and training, and an effort to engage elderly citizens in various activities, the welfare state both creates and organizes hope. Individual goals for training are negotiated between physio- and occupational therapists and elderly, shaping hope along the lines of a moral imperative of an active and healthy senior citizen. Training emerges as an exercise of a culturally informed hope, and a way of managing uncertainty. Measuring and testing installs training with an aura of certainty and objectivity, and holds out a promise of reaching your goals. The study offers an anthropological understanding of the temporality and workings of hope in individual crises. This permits a greater understanding of how Danish elderly manage crises initiated by illness or operation, and feeds into a discussion of how to help them through this process in the best way.

04.7-3 11:00-11:15

### Older Women’s descriptions of how they activate themselves in their everyday living and what will promote their activity abilities.

Author: Phd-candidate Sara Cederbom  
*Mälardalens university*  
Co-authors: Lektor Petra von Heideken Wägert, professor Anne Söderlund, associate professor Maja Söderbäck

**Background:** One common health problem among the older population is pain. About 50-70% of the older people live with some kind of pain. Living with persistent pain affects their ability in activities. Older people who are limited in their activities report decreased quality of life. There are generally more women, compared to men, who report a decreased quality of life. To develop rehabilitation programs, there is a need of more knowledge how older women living alone and have persistent pain describe their everyday activities and what will promote their ability in activities.

**Aim:** The aim was to gain knowledge about how older women,

living alone with persistent musculoskeletal pain, describe their ability in activities and what promotes or would promote their ability in activities.

**Method:** Qualitative interviews for content analysis were chosen for the study. Twelve women with musculoskeletal pain and living alone (ages 66-93) participated in the study.

The interviews focused on how the women described their ability in activities, and what they thought could promote their ability in activities in their daily life. The interviews were verbatim transcribed and analyzed with descriptive qualitative content analysis.

**Results:** As a preliminary result, a construction of a general theme demonstrates that these women have a daily program and daily rhythm of activities to either keep their ability, or they want to have a daily program or daily rhythm to promote their ability in activities. Activities beyond the daily rhythm include outdoor activities, social contacts and amusements activities. Important for their abilities in activities were support from the community service, as well as adjustments in their homes.

**Conclusions** Further results and conclusions will be presented at the conference.

04.7-4 11:15-11:30

### Examples of everyday rehabilitation – from a theoretical perspective

Author: Annsofie Mahrs-Träff  
*Linköpings University, National Institute for the Study of Ageing and Later Life*

**Objectives:** The rehabilitation needs of most people living in residential care are to a large extent met through rehabilitative work in everyday life. The analysis presented is based on rehabilitative activities in Norrköping Municipality in relation to activity theory and the theory of gerotranscendence. Most people who live in residential care are in the so-called fourth age. They have multiple illnesses, major disabilities and need care. Activities in nursing homes need to be varied according to the residents’ abilities and interests. Participation in everyday life is crucial for older people’s health and wellbeing.

**Theory and Method:** Two major theories explain in social gerontology how individual's adapt to the aging process; activity theory and the theory of gerotranscendence.

In Sweden an activity theoretical approach is taken to elderly care. The theory purport that older people who are active and have contacts with others are happier than those who are not active. The theory of gerotranscendence is based on the idea that values and ideas about life change and we get a more spiritual and cross-border perspective as we age. Social activities are less important. The elderly may have an increased need for self-imposed loneliness.

**Results:** An analysis was made of physical and social activities. This showed that the activities usually occurred in groups and for the most part were based on activity theory. Very few activities can be traced to the theory of gerotranscendence. The

user can choose whether to participate in activities or not. On the other hand is it not made clear that users are involved in planning the activities to be implemented. When an event occurs an interesting side effect is that staff are released and can be with those who do not want to participate in organized activities

**Conclusion:** Staff must meet the patient’s need for activity by offering activities that are based on the two theories.

## 05.1 Dementia care I

Chair: Elizabeth Rosted  
12-06-2012, 11:45-12:45, Plenum 8/10

05.1-1 11:45-12:00

### Cognitive development in adult children of Alzheimer’s patients. A neuropsychological reassessment: A seven-year follow up

Author: Magnus Johannsson  
*Landspítali University Hospital*  
Co-authors: Neuropsychologist Smári Pálsson, MD Jón Snædal, MD Pálmi Jónsson, MD Sigurbjörn Björnsson, Director at deCODE genetics Þorlákur Jónsson

Previous studies on first-degree relatives of Alzheimer’s disease (AD) patients have revealed a higher risk of developing dementia, and that subtle cognitive impairment can be detected before overt clinical signs appear using neuropsychological tests. Findings on children of AD patients are very scarce within the literature. The main aim of this study was to explore the cognitive development of adult children (AC) of AD patients in Icelandic pedigrees selected from an ongoing genetic research study, over a seven-year period. The subjects were 83 AC (age range 46-74) with a family history of AD and a control group (NC) constituting 30 individuals (age range 48-73) without any known first-degree relative with dementia. Cognitive abilities were assessed on two occasions seven years apart, using neuropsychological tests of orientation, verbal and non-verbal memory, abstract reasoning, language, concentration, mental speed, and visuo-spatial and constructional abilities. Participants with known central or peripheral nervous disorders were excluded from the study. Primary results revealed no statistical difference between the two groups on any of the neuropsychological tests, over the seven year period. These findings suggest that the onset of subtle cognitive impairments in adult children of AD patients occurs after the age of 60 years, contrary to many previous findings.

05.1-2 12:00-12:15

### People with dementia and the National Gallery of Australia “You do it for the moment”

Author: Dr. Michael Bird  
*DSDC, Bangor University*  
Co-authors: Annaliese Blair, Dr. Sarah MacPherson, Dr. Katrina Anderson

**Objectives:** People with dementia often have limited opportu-

nity to engage in higher level intellectual activities. This project investigated the effect of exposing them to art works at the National Gallery of Australia (NGA).  
**Methods:** Fifteen people from the community and eight from residential care attended the NGA weekly for six weeks. They were shown artworks by gallery educators, who had been briefly trained in dementia skills. Sessions were filmed and level of engagement analysed using time sampling. Focus groups were held for participants, family members, and gallery staff.  
**Results:** Participants were highly engaged, often becoming animated and able to interact with and discuss the artworks with confidence. This included the more impaired people from residential care, who were more behaviourally disturbed or withdrawn in their usual environment, raising the concept of excess disability. In focus groups they had no or grossly impoverished memory for the visits but, when given cues, community participants remembered the program with pleasure and wanted it to continue. Family members confirmed these sentiments but reported no lasting change in participants. NGA educators spoke mostly about what they had learned from meeting people with dementia, including developing a less fact-driven and more experiential and sensory way to present to other clients of the gallery.  
**Conclusions:** This activity went beyond many offered to people with dementia and all, even some who were losing speech, were able to engage and most appeared less impaired in this setting. This was mainly a feasibility study and we took no measures to assess lasting effect; we will have clearer ideas of what to measure next time. In any case, a family member quote: ‘You do it for the moment’, encapsulates a sense that an activity is worth doing even if benefits are only apparent whilst it is running. The program has continued and is expanding to other galleries in Australia.

05.1-3 12:15-12:30

## The importance of sensory garden and therapeutic horticulture in dementia care: A scoping review

Author: Dr. Marianne Thorsen Gonzalez  
*University of Oslo, Institute of Health and Society*  
Co-authors: Professor Marit Kirkevold

**Background:** Maintaining quality of life is important in dementia care. Sensory gardens and plants are increasingly used, but the effect is uncertain.  
**Purpose:** Examine and describe what is reported in the research literature about use of sensory gardens, therapeutic horticulture and the use of indoor plants for people with dementia.  
**Methods:** Modified scoping review with searches in Amed, Cinahl, Medline, ISI Web of Science, Embase, Scopus and SveMed +. Analysis of selected empirical studie.  
**Results:** Fifteen studies were included. Nine examined effects of sensory gardens, five examined horticultural therapy, one use of

plants indoors. The findings suggest that this type of environmental management can reduce disruptive behavior, use of psychotropic drugs, serious falls, improve sleep and increase wellbeing and functional level.  
**Conclusion:** Sensory gardens, therapeutic horticulture and other targeted use of plants may have a positive influence on function, behavior and well-being among people with dementia. More research is needed.  
Keywords: Dementia, sensory garden, therapeutic horticulture, environmental management, literature review.

05.1-4 12:30-12:45

## Physical activity for people with dementia Exploring the possibilities in physical activity for people with dementia who participate in municipal daycare

Author: Anders Møller Jensen  
*VIOLA / VIA University College*

**Objective:** Exploring the possibilities in physical activity for people with dementia who participate in municipal daycare.  
**Methods and Theories:** Physical inactivity is associated with increased disease risk and the ADEX study by The Danish Dementia Research Centre work to investigate whether physical exercise has an effect on the development of Alzheimer’s disease. This project takes hold of the challenges of implementing activities for demented containing increased physical activity. The goal is to generate knowledge about how staff in practice can support the demented person being physically active. Staff from two municipality dementia daycare centers in Denmark, participated in 4 workshops over a period of ¾ of a year. The content was a combination of presentations on training and dementia, group work and staff presentations of experiences from practice. The staff collected during the project experience around selected activities in a registration forms. The staff was mid-term interviewed about their experiences with the process, and presented the best activities they discovered at the closing workshop day.  
**Results:** Content of the registrations showed a structure where activities could be divided into 4 broad categories. The interviews and presentations on the last workshop day demonstrated that when activities were self-motivated - for example by including a competition or playing/games –that was when the staff saw that demented were most physically active. Planning and the ability to improvise and motivate are important characteristics of staff to achieve success.  
**Conclusion:** The project has shown that everyday life in dementia day care may come to include more activities designed to make people more physically active. Time for dialogue among staff about the possibilities and limitations, and ideas from other colleagues, are important elements to create a culture change to include planning physical activity as a natural element in everyday life.

## 05.2 Quality of home care services

Chair: Tine Rostgaard  
12-06-2012, 11:45-12:45, Plenum 9/11

05.2-1 11:45-12:00

## The exhausting dilemmas faced by home care service providers when enhancing participation among older adults receiving home care.

Author: Dr. Kjersti Vik  
*Sör-Tröndelag Univesity College*  
Co-author: Professor Anre Henning Eide

Older adults wish to stay at home, participate in society, and manage on their own as long as possible. Many older adults will, however, eventually become dependent on care and help to maintain their daily living. Thus, to enhance activity and participation also among older adults that receive home – based services, there is a strong need for development of knowledge based practice regarding participation. The objective of this study is to explore how service providers perceive conditions influence on their possibilities to promote participation among older adults, and more specifically, how they perceive the influence of their working conditions.  
**Methods:** A purposeful sampling strategy was applied, and six focus groups with professionals in two municipalities were conducted. The focus groups comprised four and six participants of varying ages, length of working experience, and professions. A total of 30 service providers participated. The data was analysed by a constant comparative method following the guidelines from Grounded Theory.  
**Results:** The analysis identified the four categories; ‘encountering needs that cannot be met’, ‘expectations about participation’, ‘organisation of services, and ‘professional standards’ influencing the service delivery and created exhausting dilemmas. During this analytical process, ‘being on the verge’ emerged as a core category that describes the service providers’ experience of a stressful workday, i.e., when they had the feeling of working against their own professional standards and being pushed to their limits.  
**Conclusion:** The results indicate how the professional standards of service providers are in line with health policy for in - home services for active aging. Policy objectives are however not always followed due to different constraints at the level of service delivery. Along the path from political ideals to the practical execution of services, external circumstances related to the organisation of services are perceived as crucial in order to minimise dilemmas for the service providers.

05.2-2 12:00-12:15

## Mapping systematic reviews in elderly care Considerations of content, quality and evidence

Author: Dr. Gunilla Fahlström  
*Swedish National Board of Health and Welfare*  
Co-authors: Programme officer Emelie Engvall, Programme officer Marie Nyström, Associate professor Gunnar Bergström, Dr Jenny Rehnman

**Objective:** The study objective is to map systematic reviews of effects of 1) support to informal carers, and 2) models of organizing care (discharge, care models or rehabilitation). Life in dignity and care for the most fragile elderly is a matter of high priority in Sweden. The study is part of a government commission.  
**Methods:** Scientific databases were searched and review articles were read in full text. The quality was assessed with a form based on recommendations in AMSTAR and PRISMA. The fragile population is seen as many subgroups such as persons with single diagnoses (e.g. dementia), multiple diseases or frailty. Information was extracted of e.g. population, the procedures for searching literature, screening, assessing quality and bias of included studies and country of origin. The reviews were categorized as either of three: systematic and updated, systematic in need of updating the literature search or of limited quality. Inclusion and quality was independently assessed by two reviewers.  
**Results:** Altogether 59 out of 119 included reviews were categorized as systematic. Psychosocial and education/training interventions for carers were most frequent and mainly for persons with dementia or stroke. Discharge arrangements and care models were often reviewed, sometimes for persons with single diagnosis, sometimes for a wider population. Lack of knowledge was identified for e.g. interventions supporting carers of persons with psychiatric or psychosocial problems respectively to how to organize non acute elder care.  
**Conclusion:** The amount of reviews suggests that these matters are of great interest. No intervention either about supporting carers or how to organize care covers the entire population of the most fragile elderly. Review areas and methodological aspects such as criteria for assessing review quality, origin of primary studies and a potential use of GRADE will be discussed.

05.2-3 12:15-12:30

Taking home care services into everyday life  
Older adults’ participation with home care services

Author: PhD student, Social Educator Aud Elisabeth Witsø  
*Sør Trøndelag University College*  
Co-author: Dr., Occupational Therapist Kjersti Vik

The aim of the study was to explore the experiences and descriptions of older adults’ participation with home care services when living in place. Ten older adults with a variety of age-related physical impairments and frequency of homecare were interviewed. A constant comparative method was applied to analyse the data.  
The core category was identified as ‘taking homecare services into everyday life’, including emotional and intellectual aspects of participation. Two main categories included the older adults’ descriptions and experiences of participation with the homecare services and home carers; ‘balancing agency – a process of giving, taking and letting go’ and ‘socialising with the home carers’. The older adults’ strategies for balancing agency included the subcategories ‘expecting joint responsibility for appropriate service delivery’, ‘being understanding and indulgent’ and ‘making one’s mark’. The older adults’ understandings of socialising with the home carers included two subcategories; ‘small talking in the passing by’ and ‘linking to society’. In general, the older adults were content with the home carers, but experienced that the service system they worked within created barriers for participation in daily life. In order to promote participation in older adults depending on home based care, the study highlights the importance of understanding and recognising their strategies for balancing agency in everyday life.

05.2-4 12:30-12:45

Care satisfaction among older people receiving public care and service, at home or in special accommodation

Author: Dr. Staffan Karlsson  
*Lund University*  
Co-authors: Professor Anna-Karin Edberg, Associate Professor Ulf Jakobsson, Professor Ingalill Rahm Hallberg

In order to be able to provide care and service of high quality to older people, knowledge about factors influencing their experience of satisfaction with the care is essential.  
**Aim:** The aim was to explore care satisfaction in relation to health related quality of life, functional dependency, health complaints and place of living among people 65 years or older, receiving formal care and service.  
**Methods:** 166 people receiving care and service from the

municipality were interviewed regarding demography, functional ability, perceived health complaints and care. Health related quality of life was measured with SF-12, and care satisfaction was measured with a questionnaire.  
**Results:** The people were in mean 84 years old and those at home were more often cohabitating, less dependent in activities of daily living, less cognitively impaired and had fewer health complaints regarding mobility, faeces incontinence and pressure ulcer, compared to those in special accommodation (equivalent to nursing home). Low care satisfaction was associated with IADL dependency, blindness, faeces incontinence and anxiety, while high care satisfaction was associated with PADL dependency. Those at home rated an overall higher care satisfaction and were more satisfied with care continuity, personal relations and that staff have plenty of time, are respectful and quiet, than those in special accommodation.  
**Conclusions:** Care satisfaction and health related quality of life (HRQoL) among older people was found to be more associated to functional impairment and health complaints than to whether care and service is received at home or in special accommodation.

05.3 Lifelong learning

Chair: Britt Slagsvold  
12-06-2012, 11:45-12:45, Room 1

05.3-1 11:45-12:05

The Development of an ICT-based Transgenerational Learning-Environment in Higher Health Care Education

Author: Kriemhild Leitner  
*Carinthia University of Applied Sciences*

Dynamic changes in the globalized world place complex demands on individuals and societies. ICT play a vital role in this context. At the same time, the aging societies present a major challenge especially with regard to social and intergenerational justice. This calls for a move beyond traditional boundaries in health care education.  
The EU funded project Primer ICT was dedicated to the development and evaluation of a concrete training program aiming at promoting ICT-competences of people of older age. Innovative pedagogic and geragogic approaches were developed and intertwined to meet the project’s overarching goal: to foster transgenerational understanding by ICT based learning. The main challenge was to actively involve senior citizens and students in the development of the course materials, so that, on one hand, the sustainable learning of ICT competences succeeded and, on the other hand, a dialogue between the generations emerged.  
The didactic methodology was based on ideas of cognitive and social constructivism and situational learning according to the model of self-directed learning (Hoidn, 2007). This was further developed taking into consideration theories of intergenerational learning, learning in older age (Kade, 2009) and learning and ICT in older age (Schäffer, 2006). The project’s quality was assessed using a mixed-methodology design (Cresswell, 2009). Special focus in the evaluation process was given to the concrete training process of students as well as the special needs of the elderly. The results of Primer ICT showed that the chosen approach strongly accommodated the learning of older people. The multipliers (students) did not assume an “instructive” but a co-constructive role. As a result the learner-multiplier gap was removed in favor of a transgenerational learning community. Based upon these insights, further research will focus on the development of a virtual platform linking higher education, health care professionals and client needs.

05.3-2 12:05-12:25

Four levels of complexity in reasoning among adults

Author: Dr. Sofia Kjellström  
*Institute of Gerontology, School of Health Science, Jönköping University*  
Co-author: PhD Sara Nora Ross

**Objective:** Many lay people and non-developmental specialists still assume that development ends once adolescence is completed. This may account for gerontology’s emphasis on decline in aging process without considering the development that may continue in later years. The development may result in different levels of complexity in reasoning. This study uses a mature theory to introduce how it can be used to examine levels of complexity in older persons reasoning.  
**Methods and theory:** The model of hierarchical complexity (MHC) is a formal general theory that accounts for increases in behavioral complexity applicable to all occasions when information is organized. Previous studies have shown that the following four stages are common in Western adults’ reasoning: concrete, abstract, formal, and systematic. We predicted that at least three different measures of stage of performance would be used by older persons. We conducted interviews with a small sample of Swedish older persons about responsibility for health, and analysed these qualitatively and quantitatively by MHC.  
**Results:** Results indicated that older persons were using the four adult stages. Each level suggesting a qualitatively different way of reasoning about the issue: two where there is no actual reasoning about health and responsibility, and two where reasoning does occur, each qualitatively different.  
**Conclusion:** Results suggest a long-standing blind spot in gerontology, that people reason at different levels of complexity, and this can be generalized to other domains. We cannot expect that all people are able to comprehend responsibility and other issues as assumed by society. Societal institution needs to be aware of this and construct their information at several levels of complexity in order for adults to understand messages as intended. Researchers need to be aware of the complexity dimension in analysis of data.



O5.3-3 12:25-12:45

Intergenerational Interaction and Learning

Author: Professor Antonio Fonseca  
*Universidade Católica Portuguesa*

The Calouste Gulbenkian Foundation in Lisbon and London has launched a joint programme of work on Innovative Approaches in Intergenerational Interaction and Learning. This programme of work involves funding a series of projects in the United Kingdom and in Portugal respectively as a means of trialling either especially innovative approaches and/or “importing” best practices in intergenerational interaction and learning. This would particularly focus on projects which are not only intergenerational in nature but also address how lifelong learning and modern technologies can both enhance older peoples lives and mitigate loneliness and isolation, and furthermore enhance the quality of life of younger generations, while also strengthening communities and increasing social cohesion. This paper presents the implementation process and the main results of the seven Portuguese funded projects. Some STRENGTHS/OPPORTUNITIES and WEAKNESSES/THREATS can be highlighted. As STRENGTHS/OPPORTUNITIES: innovation and pertinence of the idea; creativity of methodologies considered; diversity of settings used for the implementation of the projects; involvement of local authorities and institutions (public, private, religious, political); development of systematic actions against loneliness involving different generation's members; promotion of planned and organized interaction initiatives between people of different ages and different social background. On the other hand, as WEAKNESSES/THREATS: lack of experience in diverse domains: community work, older people's work, intergenerational work; confusion between intergenerational approach and topic approach (environment, ethnography...); lack of coherence: aims – activities – human resources involved; adhesion of the community below the expected. Three conditions appear to be vital for the mainstreaming and sustainability of the projects: solid base in the community, good management and flexibility.

O5.4 Informal caregiving II

Chair: Anneli Sarvimäki  
12-06-2012, 11:45-12:45, Room 2

O5.4-1 11:45-12:00

Co-residential parental care-giving  
Views of adult daughters in late midlife

Author: Dr. Anu Leinonen  
*Jyväskylä University*

In the Nordic countries, adult children and their parent(s) usually live in own households. Older people receive long-term help from social care services, but family members' responsibilities have increased. However, it is not totally uncommon to live together with an ageing parent who needs help and care. International studies indicate that co-residential carers with intensive care responsibilities have more health problems than other carers. What do middle-aged adult daughters who care for their parent(s) think about living together with them? What are their rationales for co-residence and for living separate? How can the assessments related to co-residential care be understood in terms of relationships between the generation in late midlife and the generation needing help and care? The views of 33 Finnish women born in 1955 or earlier are examined. Various rationales are categorised, and principles of qualitative content analysis are used. The rationales for co-residence included, for example, the aim to avoid difficulties related to long distance caring, and the individual choice to live with one's parent. When the interviewees talked about the unwillingness or impossibility to live together with their parent(s) they referred to the inability to provide intensive caring when still working themselves, or the inability to move themselves due to work and family commitments. The wish of having own autonomous space as adult persons and the need to counter caring responsibilities with own time were prevalent rationales. In addition, some interviewees did not explicitly comment co-residential care but referred to care at parent's own home or in an assisted living facility as solutions when care needs increase. To conclude, interviewees' rationales are connected to their individual wellbeing in late midlife and in years of retirement. Further, well-being of caring persons through the life course is a significant societal question across ageing countries.

O5.4-2 12:00-12:15

Caregiving situation and quality of life of older family carers: A comparative study on family care in Finland and Estonia

Author: Lic.Soc.Sc Åsa Rosengren  
*Arcada, University of Applied Sciences*  
Co-authors: M.Soc.Sc, PhD student Krista Tammsaar

There is currently little evidence on the circumstances of family carers who are themselves elderly. The objectives of this study is to describe, analyse and compare the caregiving situation and quality of life of older family carers in Finland and Estonia. Structured interviews with older family carers (aged 65+) in Helsinki, Turku and Salo (n=101), Tallinn and Lääne-Viru county (n=448) were carried out within the frame of the research project SUFACARE (2009-2011). The caregiving situation of the older carers was investigated in relation to duration of caring, number of hours support per week provided, caregiving tasks, principal reason for caring, positive and negative aspects of caregiving, carers willingness to continue caring and quality of life. The results show that many of the Finnish and Estonian family carers in the study have a long career in caregiving and are engaged with caregiving more than seven hours per day (76% and 45%). A high proportion of the carers in both samples (70% and 75%) are alone in the caregiving situation and note that it would be difficult to find a substitute in case of illness or if they needed a break from the caregiving role (54% and 31%). The most frequent motive for family caring in the Finnish sample are emotional bonds and a personal sense of duty or obligation. Over 80 percent of the family carers in the Estonian sample feel responsibility to care for their dependent relative and economic aspects play also an important role for the decision to care. Caring obligations put significant pressure on many of the Finnish and Estonian family carers in the study. The most negative impact of caring to family carers in the Finnish sample is that they feel trapped in their role as a carer. In the Estonian sample many family carers note side-effects on their own health and social relations. Most of the family carers in the Finnish and Estonian sample are willing to continue to provide care. Many of family carers in both samples state their quality of life as predominantly positive. The results strengthen the knowledge base of family caregiving by specifically highlighting the caregiving situation of older family carers in Finland and Estonia. This comparative study could be used for developing care policies and practices for older family carers in the two different welfare regimes.

O5.4-3 12:15-12:30

The role of social networks on elderly caregivers' wellbeing: a European cross-country approach

Author: Daniela Craveiro  
*CICS, Centro de Investigação em Ciências Sociais*  
Co-authors: Alice Delerue Matos, Roberto Martinez-Pecino, Maria Schouten, Sara Silva, Rita Borges Neves

Informal caregiving has been identified as an essential contribution to the sustainability of long-term care systems in all countries in Europe, particularly in a context of economic and financial crisis and restructuring of the welfare state. As the phenomenon of the ageing of the population evolves, the number and the age of informal caregivers will increase over time. In this sense it is important to analyse the characteristics of these actors, the family dynamics frequently associated with them, and factors connected to the quality and the maintenance of the provision of this kind of care such as caregivers' health and wellbeing. Caregiving has often been associated with a deterioration of work conditions, economic situation or health status, but also with some positive outcomes such as improvement of the caregiver's wellbeing. In this scope several researches have pointed out the role of social networks (as one indicator of social support) as a protective factor for health and wellbeing of caregivers. This influence may also vary according to gender. Based on the preliminary results of the fourth wave (2010) of SHARE project (Survey of Health, Ageing and Retirement in Europe) a gender approach that takes into account the differences in structure, interaction, family dynamics, exchange and emotional closeness of social networks of men and women is adopted. Analyses will allow to identify to what extent these characteristics of social networks are more or less promoters of wellbeing of 50+ years old individuals that provide help and care in 20 different European countries. Because the data used are recently collected is given an opportunity to report a very updated perspective about the issues in question. For the same reason the results will be available only in March.

05.4-4 12:30-12:45

Living with Chronic Obstructive Pulmonary Disease in later life: dilemmas of family carers

Living with Chronic Obstructive Pulmonary Disease in later life: dilemmas of family carers

Author: Dr. Raquel Gabriel  
*Escola Superior de Saúde da Universidade de Aveiro*  
Co-authors: Dr. Daniela Figueiredo, Dr. Alda Marques, Dr. Cristina Jácome

**Background:** Approximately 210 million people worldwide present Chronic Obstructive Pulmonary Disease (COPD). The impacts of COPD on the quality of life of patients are well documented; however a progressive chronic illness also affects the family, especially the primary carer. The impacts of COPD on family carers remain relatively unexplored, when compared to other chronic diseases, such as dementia or cancer. This study aimed to explore the impacts of COPD on family carers' lives, actual concerns and perceived support from formal services. **Methods:** A qualitative, cross-sectional study was conducted with family carers of patients at advanced grades of COPD (GOLD 3 and 4). Semi-structured interviews were performed with 25 family carers (n=22; 88% female), with a mean age of 62.1±12.0 years old. The majority were spouses (n=16; 64%), caring for more than 4 years (n=23; 93%). All interviews were audio-recorded, transcribed and submitted to thematic analysis by 2 independent judges. **Results:** The main impacts reported by the carers were: i) a restriction on social activities (n=18; 72%); ii) an increased interaction with the patient, but less contacts with other family members (n=14; 56%); iii) emotional distress (n=13; 52%) and iv) a decrease in social contacts (n=10; 40%). Their main concerns were related to the worsening of the symptoms (n= 23; 92%) and patient having an afflictive death, related to asphyxia (n= 14; 56%). Participants also considered to receive limited support from health and social services, which they thought to be targeted mostly to patients treatment needs (n=10; 40%). **Conclusions:** Caring for a patient with COPD poses several challenges to family carers, who often feel unsupported in their caregiving role. The results highlight the need to develop educative and supportive interventions in order to prevent burden and empower carers in their caregiving role.

05.5 Preventive home visits

Chair: Kirsten Avlund  
12-06-2012, 11:45-12:45, Room 3/4

05.5-1 11:45-12:00

Health-Promoting Interventions for Persons Aged 80 and Older are Successful in the Short Term

Results from the Randomized and Three-Armed

Author: Susanne Gustafsson  
*Sahlgrenska akademin, University of Gothenburg*  
Co-authors: PhD, MD Katarina Wilhelmson, PhD Kajsa Eklund, A/ prof, PhD Gunilla Hedström, PhD Lena Zidén, PhD Greta Häggblom Kronlöf, MS Betina Højgaard, PhD Frode Slinde, PhD, Prof. Elisabeth Rothenberg, MD, PhD, Prof. Sten Landahl, PhD Synneve Dahlin-Ivanoff

**Objectives:** The study Elderly Persons in the Risk Zone was designed to evaluate if it is possible to delay deterioration if a health-promoting intervention is made when the older adults (80+) are at risk of becoming frail, and if a multiprofessional group intervention is more effective in delaying deterioration than a single preventive home visit. This paper examined the outcome with regard to frailty, self-rated health, and activities of daily living (ADL) at the three-month follow-up. **Design:** A randomized, three-armed, single-blind, and controlled trial performed between November 2007 and May 2011. **Setting:** Two urban districts in Gothenburg, Sweden. **Participants:** A total of 459 older adults were included. They were 80 years or older, living in their ordinary housing, and not dependent on the municipal home help service. **Intervention:** A preventive home visit or four weekly multiprofessional senior group meetings with one follow-up home visit. **Measurements:** The change in frailty, self-rated health, and ADL between baseline and the three-month follow-up. **Results:** Both interventions delayed deterioration of self-rated health (OR=1.99, 95% CI=1.12 to 3.54). As regards postponing dependence in ADL, senior meetings were found to be the most beneficial intervention (OR=1.95, 95% CI=1.14 to 3.33). No effect on frailty could be demonstrated. **Conclusion:** Health-promoting interventions, made when older adults are at risk of becoming frail, can delay deterioration of self-rated health and ADL in the short term. Also, a multiprofessional group intervention such as the senior meetings described seems to have a greater impact on delaying deterioration in ADL than a single preventive home visit. Further research is needed to examine the outcome in the long term, and in different contexts.

05.5-2 12:00-12:15

Are acceptance rates of a national preventive home visit programme for older people socially imbalanced?

Author: Dr. Yukari Yamada  
*University of Copenhagen*  
Co-authors: Anette Ekmann, Charlotte Nilsson, Mikkel Vass, Kirsten Avlund

**Background:** to investigate 1) whether socioeconomic status was associated with acceptance of preventive home visits among older people and 2) whether municipality invitational procedures for the preventive home visits modified the association. **Methods:**The study population included 1,023 community dwelling 80-year-old individuals from the Danish Intervention Study on Preventive home visits. Information on preventive home visit acceptance rates was obtained from questionnaires. Socioeconomic status was measured by financial assets obtained from national registry data, and invitational procedures were identified through the municipalities. Logistic regression analyses were used, adjusted by gender. **Results:** Older persons with high financial assets accepted preventive home visits more than persons with low assets (adjusted OR=1.5 (CI95%: 1.1-2.0)). The odds ratio for accepting preventive home visits was larger among persons with low financial assets invited by a letter with a proposed date than among persons with high financial assets invited by other procedures, though these estimates had wide confidence intervals. **Conclusion:** High socioeconomic status was associated with a higher acceptance rate of preventive home visits, but the association was modified by invitational procedures. The results indicate that municipalities might decrease some of the social inequality in acceptance of preventive home visits, if they change their invitational procedures.

05.5-3 12:15-12:30

Preventive home visits for non-westerne elderly citizens in Denmark  
Danish municipalities experiences of mediating, implementing and evaluating preventive home visits

Author: PhD, Occupational Therapist Mette Andresen  
*University College Zealand*  
Co-authors: BA in Occupational Therapy Lisa Krogh Bonde, BA in Occupational Therapy Ditte Binsky

Danish law offer one yearly preventive home visit to elderly citizens aged 75 years and older. Elderly people with non-western background/heritage are a minority, but their number is expected to triple by 2050. Knowledge about the population of non-western background who participate in preventive home visits as well as experiences

among staff who undertakes these visits is yet to be studied. Furthermore, it has to be investigated in which ways cultural differences plays a role before, during and after the home visits. The aim of this study was to give a descriptive overview of experiences among home-visitors in all 98 municipalitiesin Denmark of mediating, impelmenting and evaluating preventive home visits to elderly with non-western background - and to descride the meaning of culture. The method used was a survey design based on an electronical questionnaire, SurveyXact, which was posted by e-mail to all 98 municipalities. The questionnaire consisted of 25 questions,all developed on the basis of a through literature review. In total 69% of the municipalities completed the questionnaire. Results showed that less than half (45%) of elderly non-western citizens accept the invitation to participate in a preventive homevisit. The municipalities assess that the reason for not participating has cause in differences in culture and poor communication. Almost 80% of the respondents assess that additional focus on these elderly is required. Moreover, the municipalities suggest that culture and language are important barriers in participation and impelmentation of preventive home visits. A greater focus on culture in home visitors' training and education programmes is needed. This presentation will reveal the most important results of the study and discuss perspectives in how to oppose the health and economical challenges of a growing group of non-western elderly in near future.

05.5-4 12:30-12:45

Older peoples' experiences with preventive home visits in a Norwegian municipality: How do preventive home visits affect older peoples' health and possibility for a good life in their own home?

Author: hD student, MNSc, RN Mette Tøien  
*Buskerud University College*  
Co-authors: Master student, OT Morten Heggelund, MPH, MScPH, RN Bjørg Landmark, PhD, RN Lisbeth Fagerström

**Backgroun:** The main aim of preventive home visits (PHV) is to uphold home dwelling older people's health and wellbeing, and to prevent or postpone functional decline and need for comprehensive health care. Varieties of PHV are offered in several countries, including some Norwegian municipalities. The interest in PHV is increasing due to expected demographic changes. Even though the potential of PHV to improve older peoples' health is well documented, the knowledge base to guide the design of the visits is limited. Studies that shed light on experiences, attitudes and perceptions of recipients of PHV are missing and are therefore called for. **Aim:** The aim of this study was to explore and describe older persons' experiences with and perceptions of PHV. The



knowledge gained may contribute to further development of the service.

**Methods:** The study presented here was part of a larger Norwegian evaluation study of PHV with an explorative case study design. The municipality that formed the case had offered PVH for 11 years. The present study was based on qualitative research interviews with 20 recipients of PHV, selected through stratified random sampling. Ten seniors aged 75 had received one visit and ten seniors between 78-89 years of age and had received multiple visits during several years. The interviews are now in process of being analyzed according to manifest and latent content analysis.

**Preliminary Results:** The PHV provided security and was highly valued by the majority of the respondents. For frail elders, the PHV provided help to maintain role and preserve important functions and activities that helped them to uphold a good life at home. However, the perceived benefit and need for PHV varied, and some younger, healthy seniors did not identify with the topics introduced during the visit. Continuity and relationship over time was considered as positive and important, but not essential.

More results will be presented at the conference.

**Preliminary Conclusion:** PHV helped older people to maintain good lives in their own home through individually tailored information, facilitation and support. More differentiated follow up may be valuable.

## 05.6 Physical exercise II

Chair: Nina Beyer  
12-06-2012, 11:45-12:45, Room 12

05.6-1 11:45-12:00

### Effects of Nintendo Wii training on mechanical leg muscle function and postural balance in older adults: a randomized placebo-controlled trial

Author: Martin Grønbech Jørgensen  
*Department of Geriatrics, Aalborg Hospital*  
Co-authors: Uffe Læsøe, Carsten Hendriksen, Ole Nielsen, Per Aagaard

**Background:** It is well documented that older adults have an increased risk of falling and that major risk factors comprise of reduced muscle strength and impaired postural balance. It is unknown whether biofeedback based Nintendo Wii training (WII) can improve isometric maximal voluntary contraction (MVC) and/or postural balance in older adults.

**Methods:** The present study was conducted as a randomized, placebo-controlled trial with older adults comparing 10 wks. of WII (20 sessions in total) with daily use of Ethylene Vinyl Acetate Copolymer insoles (CON).

**Results:** Of 212 subjects screened for eligibility, 154 (73%) were ineligible or did not wish to participate; thus, 58 (74.8 &#61617; 5.9 yrs.) subjects underwent randomization. The absolute change in MVC from pre-to-post intervention was 249.6 Newton (N) (+17.0%) for those assigned to WII and -19.9 N (-1.3%) for subjects assigned to CON (absolute between group difference, 269.5 N; 95% confidence interval, 126.2 to 412.8; P<0.001). For Center of Pressure Velocity Moment (CoP-VM) the absolute change from pre-to-post intervention was -1.6 mm2/s (-7.8%) for the WII group and -1.6 mm2/s (-8.3%) for the CON group (absolute between group difference, 0.002 mm2; 95% confidence interval, -4.8 to 4.8; ns.). In the secondary endpoints a statistical difference favoring the WII group over the CON group was evident in muscular Rate of Force Development (RFD), Timed Up and Go (TUG), Falls Efficacy Scale-International (Short FES-I), 30-s Chair Stand Test (P<0.05). Subjects rated the WII highly motivating (5-point Likert scale) at 5 and 10 weeks of intervention.

**Conclusions:** Ten weeks of biofeedback-based WII that involved both balance and strengthening exercises led to significant improvements in MVC, RFD and functional performance in older adults. Static bilateral postural balance remained unaffected. The high level of motivation suggest that WII may ensure a high degree of compliance to home based exercise programs using this system.

05.6-2 12:00-12:15

### What factors influence physical activity of older women in retirement communities? Phenomenological study

Author: Gudfinna Bjornsdottir  
*Hrafnista*

**Background:** Older people benefit from being physically active for as long as possible as a preventive measure against disease and function decline. However, older people are not as active as recommended, particularly not women. Information on how living in retirement community influences physical activity (PA) is rare and the subject needs more research.

**Purpose:** To deepen understanding of factors that influence physical activity of older women living in retirement communities.

**Methods:** The study was qualitative, built upon the Vancouver-School of doing phenomenology. Twelve in-depth interviews with ten women were conducted. Interviews were transcribed, and transcriptions were analyzed for themes and subthemes.

**Results:** The ecological system of Bronfenbrenner was used to explain the themes emerging from the results. Themes that fit into all systems of the Bronfenbrenner model were found and it turned out to be a helpful tool to make a holistic model explaining these factors and interaction between them. The Bronfenbrenner ecological system consists of a nucleus surrounded by layers or systems, which envelop each other. Innermost in the model are personal and genetic factors surrounded with the microsystem which has to do with factors that influenced the women directly like physical environment and familiar surroundings. Outermost in the Bronfenbrenner model are factors that had indirect influence on PA like media and culture (exo- and marcosystem).

In special interest regarding older women was the chronosystem (the third dimension in the model) which had to do with the time and life-course and explained how former experience influenced PA today.

**Conclusion:** Factors influencing PA in retirement communities are found in all systems of the Bronfenbrenner's model. To facilitate older women to be more physically active professionals need to be acquainted with influencing factors of PA and apply a holistic approach.

05.6-3 12:15-12:30

### Effect of a 12-week resistance exercise program on body composition, muscle strength, physical function and glucose metabolism in healthy, prediabetic and diabetic elderly Icelanders. Resistance exercise and diabetes

Author: Dr. Alfons Ramel  
*Unit for Nutrition Research*  
Co-authors: Dr Olof Geirsdottir, MSc Atli Arnarson, Dr Kristin Brim, Dr Palmi Jonsson, Prof Inga Thorsdottir

**Background:** Insulin is a stimulator of skeletal muscle protein anabolism and insulin resistance might therefore negatively affect muscle protein metabolism. We investigated muscle mass and physical function before and after a resistance exercise program in subjects with pre-diabetes or type 2 diabetes mellitus (T2DM) in comparison to healthy controls.

**Methods:** This was a secondary analysis of a randomized controlled intervention designed to investigate resistance training among older adults. Glucose metabolism status was not a selection criteria for the trial and group designation was done retrospectively. Subjects (N=237, 73.7±5.7 years, 58.2% female) participated in a 12-week resistance exercise program (3 times/ week; 3 sets, 6-8 repetitions at 75-80% of the 1-repetition maximum), designed to increase strength and muscle mass of major muscle groups. Body composition, muscular strength, timed up and go test, six-minute walk for distance and blood chemical variables were measured at baseline and endpoint.

**Results:** Participants completing the study (n=208) experienced significant changes in muscle strength or muscle function, which did not differ significantly between healthy (n=198), pre-diabetic (n=20) and T2DM participants (n=17). Changes in serum glucose during the intervention differed by group: only glucose improved significantly in the pre-diabetic group; glucose and triacylglycerol improved significantly in the healthy group; whereas no serum parameter improved significantly in the T2DM group.

**Conclusions:** A 12-week resistance exercise program improves muscle strength and muscle function to a similar extent in healthy, pre-diabetic and T2DM elderly people. However, according to our data T2DM participants do not experience favourable changes in fasting glucose or HbA1C.

05.6-4 12:30-12:45

### Exercise and physical fitness post stroke

Author: Dr. Birgitta Langhammer  
*Oslo University College*  
Co-author: Professor Birgitta Lindmark

**Background:** It is argued that all stroke patients, indifferent of disability, have the same possibility to improve with training. On



the other hand no study has had a sole focus on this difference in a stroke population. The aim of the study is to follow and register functional improvements of motor function, balance, mobility, walking capacity and activity patterns in two groups with different functional capacities at baseline for a 36 months period. **Methods:** Persons with stroke were recruited and divided into two groups related to their functional status at baseline. Outcome measures were the Motor Assessment Scale, Berg Balance Scale, Timed Up-and-Go, 6-Minute Walk Test and the Barthel Index of Activities of Daily Living. The participants were tested on admission, three, six, twelve and thirty-six months after the onset of stroke. During the acute phase of rehabilitation at the hospital both groups received functional task-oriented training, followed by regular self- or therapeutic driven training the first year post stroke and varied exercise patterns the following 24 months. **Results:** Both groups improved their motor function (p<0.001), activities of daily living (p<0.001), balance, and mobility (p<0.001) till six months for so to stabilize at twelve months and decline at thirty-six months post stroke. Walking capacity (6MWT) improved up till twelve months, for so to slightly deteriorate in both groups at thirty-six months. Change scores indicate a great potential for rehabilitation in the MAS<35 in relation to group MAS>35, although the functional capacity was higher in the latter. The results indicate that the MAS group <35 improved their scores approximately with 46% in MAS, 73% in 6MWT, 65% in BBS and 53 in % BI in contrast to the MAS group>35 with a change of only 4% in MAS, 25 % in 6MWT, 8 % in BBS and 5 % in BI from baseline to three months post stroke **Conclusion:** The functional capacities in acute stroke patients have a major impact on motor function, balance, mobility and activity of daily living in a longitudinal perspective, where persons with MAS group<35 in comparison with Mas group >35 show a lower performance in all outcome measures from baseline to 36 months post stroke. However, stroke patients with MAS group<35 showed a higher improvement rate relatively, thus indicating the importance of maintenance of exercise and training post stroke for all persons with stroke.

## 05.7 Hip fracture II

Chair: Karen Andersen-Ranberg  
12-06-2012, 11:45-12:45, Room 13

05.7-1 11:45-12:00

### Balance confidence and functional balance are associated with physical disability after hip fracture

Author: MSc Johanna Edgren  
*Gerontology Research Center, Department of Health Sciences, University of Jyväskylä*  
Co-authors: MSc Anu Salpakoski, PhD Ari Heinonen, PhD Taina Rantanen, MD, PhD Mauri Kallinen, PhD Erja Portegijs, PhD Mikaela von Bonsdorff, PhD Sanna Sihvonen, PhD Sarianna Sipilä

**Background:** Hip fracture is a common trauma among older people, leading to balance impairments, decreased muscle strength, and loss of independence in daily activities. The incidence of hip fractures increases with age and the total number of fractures is expected to rise due to population ageing. This study investigated the associations between physical disability, balance confidence, and functional balance among older people after a hip fracture. **Material and methods:** The participants were 159 over 60-year-old community-dwelling men and women. Health, fracture status and contraindications for participation were assessed in a clinical examination. Physical disability was assessed by a questionnaire containing 14 questions on perceived difficulty in basic (ADL) and instrumental activities of daily living (IADL). Two sum scores were composed: ADL score (range 0–6) and IADL score (range 0–8). Higher score indicated more difficulties. Balance confidence was assessed by the Activities-specific Balance Confidence Scale and functional balance by the Berg Balance Scale. Knee extension force was measured using a dynamometer. Pain and use of walking aids were assessed by a questionnaire. The negative binomial regression analysis was used to explore the associations. **Results:** For ADL disability relative to balance confidence, the IRR was 0.99 and 95% CI 0.98–0.99 (adjusted for age and gender) and respectively for IADL 0.99 (0.98–0.99). There were similar associations between functional balance and ADL/IADL disability. The results remained the same when the model was adjusted also for time since fracture, pain, chronic diseases, muscle force, and use of walking aids.

**Conclusion:** Balance confidence and functional balance are important determinants of physical disability in older people with a previous hip fracture. In future, it would be essential to study what kinds of interventions are effective in enhancing balance confidence and functional balance among hip fracture patients.

05.7-2 12:00-12:15

### Increased hip fracture risk in older persons using antidepressants A nationwide cohort study in Norway

Author: Dr. Marit Stordal Bakken  
*University of Bergen*  
Co-authors: MSc PhD Anders Engeland, MD PhD Lars B. Engesæter, MD PhD Anette Hylen Ranhoff, MD PhD Steinar Hunskaar, MD PhD Sabine Ruths

**Background/objectives:** Hip fractures are highly prevalent in older persons, with great implications for morbidity and mortality. Hip fractures are usually caused by a combination of osteoporosis and a fall, and antidepressant drug use may affect both conditions. The aim of this study was to examine associations between antidepressant drug use and hip fracture risk in older persons. **Methods:** Nationwide prospective cohort study including the Norwegian population aged 65+. For the study period, 01.01.05-31.12.10, data was obtained from the Norwegian Prescription Database (all prescriptions of antidepressants released at Norwegian pharmacies, by drug name and drug volume) and the Norwegian Hip Fracture Register (date of primary hip fracture). We compared hip fracture incidence during person time exposed and unexposed to antidepressant drugs (any antidepressant; tricyclic antidepressants (TCAs), serotonin reuptake inhibitors (SSRIs) and other antidepressants) by calculating standardized incidence ratio (SIR). SIR >1 indicates increased hip fracture risk during antidepressant drug exposure. **Results:** The study population comprised approximately 906000 persons, of which 39938 (4.4%) experienced a primary hip fracture. Preliminary analysis revealed an increased risk of hip fracture for persons exposed to any antidepressant, SIR 1.8 (CI 1.8-1.9); TCAs, SIR 1.5 (1.3-1.6); SSRIs, 1.9 (1.8-1.9) and other antidepressants, SIR 1.6 (1.6-1.7). Hip fractures were more prevalent among women than men exposed to antidepressants. However, fracture risk was higher in exposed men, SIR 2.0 (1.9-2.1), than in women SIR 1.8 (1.7-1.8). Generally, SIR decreased with increasing age. **Conclusions:** This study indicates increased hip fracture risk in persons using antidepressants, especially SSRIs. These associations need to be explored further by clinical studies. SSRIs are extensively prescribed for older persons, necessitating careful evaluation of potential risks and benefits for individual patients.

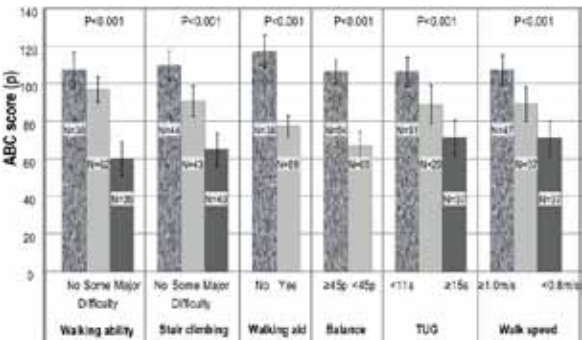
05.7-3 12:15-12:30

### Activity-specific balance confidence as a proxy for mobility and balance in older people with a fall-related hip fracture

Author: Dr. Erja Portegijs  
*Gerontology Research Center and Department of Health Sciences, University of Jyväskylä*  
Co-authors: MSc Johanna Edgren, MSc Anu Salpakoski, MD PhD Mauri Kallinen, PhD Taina Rantanen, MD PhD Markku Alen, MD PhD Ilkka Kiviranta, PhD Sanna Sihvonen, PhD Sarianna Sipilä

**Objectives:** To study the relationship between balance confidence, a concept close to fear of falling, and performance-based as well as self-reported mobility and balance in older people with a history of a fall-related hip fracture. **Methods:** Cross-sectional analyses of pre-trial data of two randomized controlled trials of physical rehabilitation in community-dwelling people with a hip fracture between 6 weeks and 7 years earlier (ISRCTN34271567;ISRCTN53680197)(1,2), including 130 persons with fall-related fracture. Pre-trial assessments included Activity-Specific Balance Confidence(ABC) scale, use of walking aid outdoors, self-reported ability to walk outdoors and climb one flight of stairs, and laboratory assessments of self-preferred walking speed, timed get-up-and-go(TUG), and Berg Balance Scale. Correlation and univariate general linear model analyses were performed. **Results:** Table 1 shows the participant characteristics, 75% was female(N=98) and osteosynthesis was used to repair 46% of hip fractures(N=60). Higher ABC scores correlated with better performance (R>0.47,P<0.001) and self-reported (R>0.53,P<0.001) mobility and balance measures. Figure 1 shows a gradient of increasing ABC scores in all groups with better mobility and balance. Group differences remained significant also after adjustment for age, gender, time since hip fracture, number of diseases, and in addition either physical activity or knee extension strength of the fractured limb. **Conclusions:** Lower balance confidence is strongly and independently associated with poorer mobility and balance (measured and self-reported) in older people with a fall-related hip fracture. Lack of balance confidence may compromise rehabilitation and recovery.(3) The ABC scale may help to identify hip fracture patients with or at risk of poor mobility and balance. References:

- 1) Portegijs et al.J Bone Joint Surg Am 2009;91:1720
- 2) Sipilä et al.BMC Musculoskelet Disord 2011;12:277
- 3) Denkinger et al.JAGS 2010;58:664



05.7-4 12:30-12:45

Urinary retention in hip fracture patients

Author: Mette Irene Martinsen  
*Diakonhjemmet hospital*  
Co-authors: Anette Hysten Ranhoff, Ludvig Fjeld Solheim

**Objectives:** Hip fractures are a common trauma in the elderly and associated with complications, decline in function and mobility and high mortality. Urinary retention is a common postoperative complication. There are few studies on urinary retention in elderly hip fracture patients. The objective is to describe prevalence of urinary retention and complications related to urinary retention in elderly hip fracture patients.  
**Method:** This was an observational descriptive study. Data was obtained from a quality register where demographic and medical information are registered. Bladderscan were used to measure amount residual of urine preoperatively, the 1., 2. and 5th day after surgery. Residual urine  $\leq 150$  ml was defined as urinary retention.  
**Results:** 106 patients aged 66 - 98, 86 women and 20 men were included, from 01.04.2010 - 31.03.2011. An indwelling catheter was inserted preoperatively and removed the morning after surgery. Mean time of indwelling catheter was 23 hours. Prevalence of urinary retention was highest preoperatively 66(62%) patients had urinary retention preoperatively, 30(28%) patients had urinary retention day one after surgery, 37(36%) the second day and 25(24%) on day 5. Although patients were able to void some had up to 960 ml of residual urine after voiding. Neither age nor number of chronic diseases was associated with urinary retention in this study. Patients with urinary retention on day 5 had a higher prevalence of urinary tract infection, than the patients than the patients who did not have retention (55% vs 20%,  $p=0.005$ ). Patients with urinary retention on the 5th day stayed longer in hospital than the other patients (14 vs 12 days,  $p=0.051$ ).  
**Conclusion:** Prevalence of urinary retention was highest preoperatively. Although patients were able to void some had relative large amount of residual urine. Urinary retention on day 5 postoperatively was associated with more complications especially urinary tract infections and longer hospital stay.

06.1 Dementia care II

Chair: Marianne Schroll  
12-06-2012, 14:00-15:00, Plenum 8/10

06.1-1 14:00-14:15

The Marte Meo method in dementia care  
Evaluation of the effect of a six day Marte Meo practitioner course on the caregivers in longterm nursing home.

Author: Marianne Munch  
*NKS Olaviken alderspsykiatrisk sykehus*  
Co-author: Linn-Heidi Lunde

**Objective:** NKS Olaviken participated from 2008 to 2011 with Sykehuset Innlandet and the Norwegian Center for Health and Aging in a Dementia Care programme initiated by the Norwegian Ministry of Health. The objective was to examine the effect of a six day Marte Meo course on dementia caregivers communication skill and ability to perform person centered care. The method is based on communication and solution oriented theories and uses film footage of daily life interaction with patients as counselling tools.  
**Method:** 30 caregivers from four different nursing homes participated. During the course they learned elements of supportive communication and received counselling on film footage of interaction with patients. They completed two self-report measures, The Person Centered Care Assessment tool and a measure reading the psychosocial environment, before, immediately after and six months after the intervention.  
**Results:** There was a significant higher total score on both self-report measures. 12 participants and three leaders participated in either focus group or depth interviews. The interviewed participants described changes in their way of interacting, increase attention and discussions of care approaches, the importance of watching film to discover and understand both the patients behaviour and the consequences of their own behaviour. In addition they reported changes in patient behaviour such as change from resistance and helplessness to cooperation and initiative as well as a change from a negative to a more positive body language when interacting with the participants.  
**Conclusion:** The results showed an effect of the Marte Meo practitioner course on caregiving experience and behaviour, on perceived contentment with psychosocial work environment and perceived patient behaviour. Watching film in combination with counselling seems to facilitate the process of caregivers curiosity in finding new approaches in challenging daily life interaction situations

06.1-2 14:15-14:30

Suffering and pain in end-stage dementia

Author: Dr. Bechor Zvi Aminoff  
*Deriatric Division, Sheba Medical Center, Tel Hashomer*

**Objective:** to study possible interrelations between suffering and pain in end-stage dementia (ESD). Subjects: a cohort study of 200 ESD patients with a six-month follow-up period.  
**Methods:** Our recently developed Mini Suffering State Examination (MSSE) scale is the first objective clinical tool for evaluation of suffering level in end stage dementia (ESD) (Aminoff, 1999). The MSSE scale is available in English, Hebrew, Dutch and Spanish, and covers 10 items (range 0-10). Based on clinical experience, the following items were included in the MSSE: Not calm, screams, pain, decubitus ulcers, malnutrition, eating disorders, invasive action, unstable medical condition, suffering according to medical opinion, and suffering according to family opinion. The MSSE scale was tested using the Cronbach  $\alpha=0.798$ ; model, which demonstrated its significant reliability ( $\alpha=0.798$ ). Validity of the MSSE scale was proven by Pearson correlation with Symptom Management in End-of-Life in Dementia (SM-EOLD) scale ( $r=0.574$ ,  $P<0.0001$ ), and Comfort Assessment in Dying with Dementia (CAD-EOLD scale) ( $r=-0.796$ ,  $P<0.0001$ ). The results of clinical experience with this scale were presented at world and regional congresses in Berlin (1999), Jerusalem (2000), Vancouver (2001), Stockholm (2002), Tokyo (2003), Las Vegas (2004), Rio-de-Janeiro (2005), Madrid (2006), Saint-Petersburg (2007), Trondheim (2008), Paris (2009), Honolulu (2010) and in Athens (2011).  
**Results:** On the day of admission to the Geriatric Department, 10.5 % of ESD patients, diagnosed with pain (21/200) and 89.5 of ESD patients were free from pains. Patients diagnosed with pains had a higher Mini-Suffering State Examination scale score ( $7.0 \pm 2.4$ ) than those without pain ( $4.0 \pm 2.2$ ), with a significant difference ( $P<0.0001$ ).  
**Conclusions:** Pains contribute to higher suffering and the development of Aminoff suffering syndrome in ESD.

06.1-3 14:30-14:45

Creating relationships a way to understand personcentred dementia care

Author: Dr. Iréne Ericsson  
*Hälsöhgskolan Jönköping Institutet för gerontologi*  
Co-authors: Ass prof Sofia Kjellström, RN, PhD Ingrid Hellström

Swedish authorities recommended personcentred dementia care and this is considered a prerequisite for successful dementia care. An essential element of personcentred care is that the caregiver attempts to establish a relationship with the person with dementia.  
**Method and objective:** This Constructivist Grounded Theory

study describes how relationships are created with persons with moderate to severe dementia. The material comprises 24 video-sequences of Relational Time (RT) sessions and 24 interviews with persons with dementia carried out in direct relation to the video-taping. We also interview eight professional caregivers which had been involved.  
**Results:** The categories of 'Assigning time', 'Establishing security and trust' and 'Communicating equality' were strategies for arriving at the core category 'Opening up', which was the process that led to creating relationships. Both parties contributed to create a relationship; the professional caregiver controlled the process, but the person with dementia permitted the caregiver's overtures and opened up, thus making the relation possible.  
**Conclusions:** Interpersonal relationships significantly enhance the well-being of persons with dementia. Small measures like RT that do not require major resources can open paths to creating relationships. When a relationship is established caregivers receive the response needed for them to feel that their work is meaningful. Simultaneously persons with dementia feel a sense of well-being through the confirmation of their personhood. Creating relationships may also be a path to understand the practical application of personcentred care.

06.1-4 14:45-15:00

Enhancing dementia research by harmonizing the dementia work-up in the Nordic countries.  
Nordic Network in Dementia Diagnostics

Author: Dr. Anne Rita Øksengård  
*NVS- Department, Section of Clinical Geriatrics Karolinska Institutet, Karolinska University Hospital*

**Background:** Dementia is one of the most common mental diseases. It increases dramatically with the aging of the Nordic population. At the same time, even younger persons are being diagnosed with dementia. Early diagnostics is crucial, but unfortunately the actual causes of dementia are discovered far too late in the disease process.  
**Method:** The Nordic Network in Dementia Diagnostics (NIDD) consisting of a multidisciplinary consortium of nine research groups from five Nordic countries and Lithuania and funded by NordForsk aims to harmonize diagnostic working methods for dementia, and contribute to earlier and enhanced diagnostics.  
**Results:** Based upon a common diagnostic protocol and consensus in how to interpret the clinical information, several validation projects on diagnostics methods that are relatively reasonable in cost are carried out. The use of this protocol may contribute to enhancing the understanding and lead to a quality assurance of the dementia diagnostics. The network also focuses on recruiting PhD students and transferring the achieved new knowledge about dementia diagnostics. All participant groups are involved in the publishing of the results.



**Conclusion:** The potential for Nordic synergy in such research is considered to be great.  
The Nordic countries are often markets with too small a potential individually for the pharmaceutical industry to finance trials of new types of treatment. A closer Nordic collaboration in the development of improved methods might generate an earlier access to treatment of dementia and a better quality of life for persons with the dementia diagnosis and their caregivers.

## O6.2 Long term care

Chair: Morten Balle Hansen  
2-06-2012, 14:00-15:00, Plenum 9/11

O6.2-1 14:00-14:15 1

### Alcohol related cognitive and affective impairments in a sample of long term care residents in Luxembourg

Author: Dr. Jean-Paul Steinmetz  
*ZithaSenior - Department of Research & Development*  
Co-author: Dr Carine Federspiel

The aim of the present research is to demonstrate the wide-spread cognitive and affective impairments of a small sample of chronic alcoholics (N=8), residing in a long term care facility in Luxembourg. To date, research and literature on the necessity and benefits of specific long term care programs for alcohol related brain damaged individuals is limited. During the presentation, data of a large test battery composed of standardized cognitive and affective tests are discussed, demonstrating important impairments in executive functions, cognitive speed, cognitive estimation, and processing of emotional information. Additionally, data from self- and other-ratings are contrasted, with results suggesting that chronic alcoholics are incapable in correctly perceiving and thus, interpreting their personal health condition. Given these findings, we conclude that there is a necessity of developing specific 24h long term care programs for this highly deteriorated group of patients in Luxembourg, as the absence of such programs potentially increases the probability of relapse favouring further deteriorations in this group of individuals and increasing general costs to the public health system.

O6.2-2 14:15-14:30

### Insidious impact of Canadian elder’s (unspoken) perceptions of ageism in long term care facilities: Is home really a sweet home when coping strategies reinforce ageist attitudes?

Author: Professor Martine Lagacé  
*University of Ottawa*  
Co-authors: Annick Tanguay, Marie-Lyse Lavallée, Sarah Robichaud

In Western societies, while life expectancy is on the rise so are paradoxically, ageist stereotypes and age discrimination against seniors. However, ageism seems to be more tolerated than racism and sexism, although its consequences remain quite nega-

tive. Furthermore, ageism is often expressed in implicit modes, namely through communication. Building on postulates of Communication Accommodation Theory, the three goals that underlie the current exploratory study were a) to determine if ageism is implicitly expressed through interpersonal communication; b) when this is the case, if it is recognized and named as such, finally, c) to what extent does ageist communication have the potential to influence quality of life as well as type of coping strategies. A total of 33 semi-structured interviews were conducted from October 2010 to February 2011 with seniors living in long term care facilities throughout the province of Quebec, Canada. The issue of ageism has not been often studied in this type of living arrangement; more so, such research site seemed quite relevant in the light of previous studies suggesting that some caregivers’ attitudes in long term care facilities tend to reinforce senior’s dependent rather than independent behaviors. Qualitative and quantitative analysis of interviews revealed the following patterns: the majority of seniors provided examples of infantilizing and controlling communication, mostly through daily interactions with caregivers. A series of chi-square tests were performed to determine the potential relationship between ageism, quality of life and coping strategies. Results suggest that perception of ageist communication is negatively correlated to quality of life in the facility and positively correlated to usage of avoidance strategies (as opposed to confrontation strategies). Theoretical and practical implications of results are discussed.

O6.2-3 14:30-14:45

### Use and costs of long-term care among older people in the last two years of life 1996-2008

Author: Leena Forma  
*University of Tampere*  
Co-authors: Marja Jylhä, Jani Raitanen, Pekka Rissanen

The objectives were to describe and analyse, how use and costs of long-term institutional care in the last two years of life changed from 1996 to 2008 in Finland. Use and costs of long-term care were studied in total and separately for health centre, residential home and sheltered housing with 24-hour assistance. The data were derived from national registers. It contains all those who died at the age of 70 years or over in Finland in 1998 or 2002-2008, and a 40 % random sample of those who died at the age of 70 years or over in 1999-2001. Use of services were studied for last two years of life, thus from 1996. The costs were calculated using unit costs reported by National Institute for Health and Welfare. Binary logistic regression analyses were used to find out how age, gender and year of death were associated with use and costs of long-term care. The data contained 316 639 persons. 46.7 % of them used

long-term care at least once in the last two years of life. The proportion using long-term care increased in the study period (43.2 % of those who died in 1998, 48.9 % of those who died in 2008). The proportion using health centre did not change (16.8 %, 16.7 %). The proportion using residential home decreased (26.0, 22.0) and using sheltered housing increased (7.9, 14.0). The costs of long-term care in the last two years of life decreased in the study period. Underlying the change in the use and costs of long-term care might be changes in either the age structure of the population or in the service system. Year of death was associated with use of services also when age was adjusted for. Thus it seems that at least a part of the change is related to the change in service system. Care in residential home has been replaced by care in sheltered housing, whose unit costs are lower. However, it is not clear, if the unit costs include all costs of sheltered housing, especially those paid by the user of service.



## O6.3 Home, housing & environment

Chair: Eigil Boll Hansen  
12-06-2012, 14:00-15:00, Room 1

O6.3-1 14:00-14:20

### Retirement Villages: Residents and Non-Residents Perceptions of Environmental Control

Author: James Finn  
*University of Sydney*

Australia’s population, like many developed nations is ageing. Over the past two decades, the overall number of elderly people has increased at a rate of 5:1 when compared with the rest of Australia’s population. Housing this growing number of elderly citizens continues to present policy challenges for the Australian Government today and into the future. Retirement villages (RVs) are one such housing option for the elderly, and currently only five percent of seniors’ aged over 65 years old is housed in this form of accommodation. A nationally representative survey of 613 retirement village residents (RVRs) and a matched sample of 600 community residents (CRs) living in the same postcode as the RVRs was conducted to compare seniors accommodation choice. Qualitative interviews with retirees of both groups were conducted prior to the surveys, and they revealed a disconnect between RVRs experiences of independence, privacy, and safety & security and CRs perceptions of independence, privacy, and safety & security in a retirement village (RV) setting. It was hypothesised that this could be a significant reason for seniors not wanting to move into an RV, and subsequently a new measure – perceived environmental control (PEC) was designed and implemented in an attempt to capture this difference empirically. Statistical analysis confirmed the construct, convergent, and divergent validity and reliability of PEC. Further analysis revealed that RVRs actual experiences of PEC were greater than the CRs perceptions of same, and a multiple regression analysis demonstrated that resident type (where seniors’ lived) accounted for the most amount of variance of PEC. Many RVs base their marketing strategies around physical services; however, these results could potentially have major implications for the way RVs are designed and marketed to attract potential new residents into the future, and thus play a central role in solving Australia’s future housing challenges of seniors’.

O6.3-2 14:20-14:40

### Housing and moving decisions of older people in Finland

Author: Dr. Outi Jolanki  
*University of Jyväskylä*  
Co-authors: Suvi Fried, Sari Heikkinen, Dr. Kirsi Lumme-Sandt

Earlier studies have shown that the living environment and types of housing are linked to well-being, health and social participation of older people. However, research on this topic is scarce in Finland and little is known of the subjective meaning of living environment for older people, their reasoning for and experiences of moving – or consequences of these decisions to their well-being. In this study we are interested in housing and moving decisions of older people and their family members. The theoretical framework of ‘housing pathways’ introduced by Clapham (2005) directs attention to individual and family biographies, decision-making, and subjective meaning of housing and moving. Also, the emphasis is on the meaning of cultural issues and social norms and values in housing decisions and changing needs and values throughout life course. Agency is a central concept in the study, but it needs to be noted that the moving decision can be voluntary and planned or forced and unplanned (Golant 2003). Also, individual chances to enact agency can be enhanced or hindered by various issues such as financial status, functional ability and family relations. The study draws from three qualitative empirical data sets. The respondents were native older Finns, older immigrants, and adult children. The analysis was performed using content analysis and discursive-narrative approach. The study showed that housing pathways offers a useful theoretical framework to discern and open up the complexity of older people’s housing and moving decisions. They are guided by personal wishes and goals, health and functional ability, financial resources and availability of services. However, the study also showed that life history and family members’ wishes and needs guide older people’s decision-making. Policies regarding housing and service planning need to acknowledge that older people are a heterogeneous group of people with different needs, wishes and resources.

O6.3-3 14:40-15:00

### The association between self-reported environmental barriers and habitual walking activity among older people

Author: Li-Tang Tsai  
*University of Jyväskylä*  
Co-authors: PhD Merja Rantakokko, MSc Milla Saajanaho, MSc Johanna Eronen, PhD Erja Portegijs, PhD Anne Viljanen, PhD Taina Rantanen

We examined the association of self-reported environmental barriers with habitual walking activity among older people. The analyses are based on cross-sectional data of 632 community dwelling men and women aged 75-81 who took part in the Screening and Counseling for Physical Activity and Mobility (SCAMOB) project in Jyväskylä, Finland. Self-reported environmental barriers to outdoor activity were categorized into three groups: traffic (noisy traffic and dangerous crossroads), terrain (hilly terrain and poor street condition), and distances (long distance to services and lack of resting places). Habitual walking activity was assessed by self-reported distance and frequency walked within a week. Very low walking activity was defined as walking no more than 1.5 km/week or at most once a week. Participants walked on average 6.5 km (SD 5.2) and 4.0 times (SD 2.2) within a week. A total of 93 participants fulfilled the criteria for very low walking activity. Those who reported very low walking activity were more often men (p<.001), were not living alone (p<.001), had higher number of chronic diseases (p<.001) and slower walking speed (p=.004). They also reported distances as environmental barriers to mobility more often than those who were more active in walking (p=.001). Those who reported distance-related environmental barriers were over two times more likely to report very low walking activity even after adjusting for age, gender, depression, socioeconomic status, number of chronic diseases, and walking speed (OR=2.2, 95% CI=1.21-3.68). This study shows that older people who report long distances to everyday services and lack of resting places as barriers to their outdoor mobility are at an increased risk of very low walking activity – a risk factor for accelerated functional decline. In the future, prospective analyses based on objective assessments of the environment are warranted.

## O6.4 Nursing home residents

Chair: Eva Algreen-Petersen  
12-06-2012, 14:00-15:00, Room 2

O6.4-1 14:00-14:15

### A controlled trial of Snoezelen in a care home: Should we be talking to our residents more?

Author: Dr. Michael Bird  
*DSDC, Bangor University*  
Co-authors: Dr. Katrina Anderson, Dr. Sarah Macpherson, Annaliese Blair

**Objectives:** Despite poor evidence, there has been a rapid increase in use of Snoezelen, or multi-sensory therapy, for BPSD. We evaluated a Snoezelen room in a care home, attempting to control for social interaction with the clinician. **Methods.** Staff were trained in Snoezelen techniques and each allocated to a resident with moderate to severe dementia and challenging behaviour. They were to use the Snoezelen room when their resident was upset or withdrawn (PRN sessions) and record pre- and post-distress. To enable observation by evaluators, each staff/resident dyad also had scheduled sessions, equally split between the Snoezelen room and a control condition in the garden. Resident behaviour was observed before, during, and after each session and collapsed into four categories: ‘disturbed/disengaged’, ‘neutral’, ‘engaged’, ‘highly engaged’. Results and conclusions. Over 4 months no nurse used the room on a PRN basis (i.e. to calm/comfort a resident). Though some staff came in on days off to run scheduled sessions, overall there was a rapid decline in attendance. One senior nurse took a phone-call in week one, left the room and never did another session. Accordingly we had a reduced sample for analysis; making this yet another Snoezelen study with weak evidence. Levels of engagement were high in both the Snoezelen room and garden conditions from the outset, and there were no significant differences between them. There is limited evidence that disturbed behaviour declined slightly immediately after sessions. The main story is the difficulty undertaking interventions in residential care. Reasons given at focus groups for low attendance, mirroring other studies, were that staff were too busy, and pressures from others because: ‘talking to residents was not real work’. Conversely, staff who embraced the project admitted that they never engaged socially with residents, and that doing so had improved relationships and empathy. Thus it remains unknown whether the active fac

O6.4-2 14:15-14:30

Preventive conversations  
– how to ease the transition of becoming  
a nursing home resident

Author: Jette Lynnerup  
*Betaniahjemmet*

The project was inspired by a documentary “The Last Station” which portrayed three women. The documentary depicts the difficulties of adapting to a life as nursing home resident. At Betaniahjemmet, we are aware that the majority of new residents find it difficult to adapt to their new situation. Our hypothesis was that a preventive conversation in their home before moving followed by conversations regularly in the first 6 months after their move, would make a difference in the adaptation process.

The project included all new residents from Dec 2010 to Oct 2011, which amounting to 18 residents total. The new residents were divided into two groups, a main group and a control group. The first resident would be in the main group and every other resident would be in the control group. The main group would receive a visit in their home, as well as regular conversations after they had moved, and conversations with their relatives. The control group would only receive conversations prior to their move to Betaniahjemmet. Written evaluations would be made after each conversation, as well as all residents would be assessed using RAI 2-3 times during the first 6 months. The groups ended up being very similar, adapting to their new environment in much the same way. However, the main group was characterised by physical disabilities, whereas the control group was cognitively impaired and prescribed with antidepressants. The project found that the resident himself has to be open for moving, before the conversations have any effect. Also conversations with relatives were important to how relatives felt about the move. The conclusion was that this project would benefit from being performed on a larger scale. Also this project highlights the significant role that the care personnel play in the process, as their attention and care toward the new resident, was the same regardless of group.

O6.4-3 14:30-14:45

Comorbidity and poor physical  
functioning, but not cancer, predict  
mortality among nursing home residents  
without cognitive impairment: a five-year  
follow-up study

Author: Dr. Jorunn Drageset  
*Nurse*  
Co-authors: Professor, statistican Geir Egil Eide, Professor, MD Anette Hysten Ranhoff

**Objectives:** It is generally known that health-related quality of life (HRQOL) predicts cause-specific mortality. Few studies have explored whether generic self-reported HRQOL, sociodemographic factors and illness variables are independently associated with mortality among cognitively intact nursing home (NH) residents with and without cancer. We hypothesized that sociodemographic factors and illness variables would be associated with mortality and that HRQOL, measured using the SF-36 Health Survey, would predict mortality among NH residents with and without a cancer diagnosis.

**Methods:** We followed a cohort of 227 cognitively intact (Clinical Dementia Rating scale score  $\geq 0.5$ ) older residents (60 with a cancer diagnosis and 167 without) from 30 NHs from 2004–2005 to 2010. We collected data by face-to-face interviews. We obtained sociodemographic variables and medical diagnoses from the records.

**Results:** Survival did not differ between residents with and without a cancer diagnosis ( $P = 0.31$ ). Twenty percent of the residents with cancer and 13% without cancer were still alive after five years. After adjustment for sociodemographic and illness variables, increasing age ( $P < 0.001$ ), higher education ( $P = 0.009$ ), comorbidity ( $P = 0.04$ ) and the subdimension physical functioning ( $P = 0.009$ ) predicted mortality. Bodily pain was only marginally associated with mortality ( $P = 0.08$ ).

**Conclusion:** Independent of a cancer diagnosis or not, HRQOL and comorbidity predicted mortality among NH residents without cognitive impairment.

O6.4-4 14:45-15:00

Physical and daily activities for residents  
in Nordic nursing home settings – a  
randomized, controlled trial. Results  
after three months of intervention.

Author: Dr. Kerstin Frändin  
*Karolinska Institutet*  
Co-authors: Doctoral student Helena Grönstedt, Professor Astrid Bergland, Doctor Jorunn Helbostad, Doctor Lis Puggaard, Doctor Mette Andresen, Doctor Karin Hellström

**Objective:** To describe the impact of an individually tailored intervention program, for residents in a nursing home setting, on physical functions and daily life activities.

**Methods:** Nursing homes in Sweden, Norway and Denmark were involved, and 322 residents were randomised to either Intervention or Control group. The intervention lasted for three months and consisted of physical and daily activities, led by physiotherapists and occupational therapists, and was built on their evaluation and on goals expressed by each resident. Testing of muscle strength, mobility, balance function and confidence, ADL, level of physical activity, wellbeing and cognitive function was performed at baseline, directly after the intervention period and after another three months.

Results after three months of intervention demonstrate a significant improvement in the Intervention group compared to the Control group regarding ADL, balance function and physical activity level. Also, the Intervention group significantly improved their walking speed while the Control group significantly deteriorated in ADL and balance function.

**Conclusion:** Our study implies that functions can be improved and unnecessary decline be delayed, also in a frail nursing home population, through individually adjusted training programs and activities. As a consequence, residents should be entitled to an evaluation of physical function, by physiotherapists and occupational therapists, leading to adequate, individualized measures, early after admission to a nursing home or to a similar facility.

O6.5 Oldest old

Chair: Bernard Jeune  
12-06-2012, 14:00-15:00, Room 3/4

O6.5-1 14:00-14:15

The health of the oldest old in Sweden  
deteriorated between 1992 and 2002 - is it  
better or worse in 2011?

Author: Dr. Carin Lennartsson  
*Aging Research Center*  
Co-authors: Dr Ingemar Kåreholt, Dr Marti G Parker, Professor Mats Thorslund

**Objectives:** Sweden has one of the highest proportions of people aged over 80 in the world and life expectancy at higher ages is continuing to increase. At the beginning of the 21st century a Swedish study of the oldest old showed an increase in health problems in this group between 1992 and 2002. This study looks at data gathered in 2010/2011 to see if the health status in this very old population has continued to deteriorate.

**Material and methods:** The question was tested with the Swedish Panel Study of Living Conditions of the Oldest Old (SWEOLD) — a nationally representative interview survey of people aged 77+ (n~600). SWEOLD has a high response rate and includes institutionalized persons and persons, for example with cognitive impairments, who are interviewed indirectly using a proxy.

**Results:** Several health indicators, including objective tests of physical and lung function, showed a significant worsening of health for both women and men between 1992 and 2002. New cross-sectional analyses show neither an improvement nor deterioration in self reported health problems. For example, reports of pain in the shoulders, back pain, problems climbing the stairs, anxiety and nervousness, have not changed significantly since 2002. Also the proportion of people reporting poor self-rated health has been stable at a level of about 12% over the years 2002, 2004 and 2010/2011. By contrast, the objective test of lung function has continued to worsen over this period.

**Conclusions:** The preliminary conclusions are that the deterioration of health seen between 1992 and 2002 has not continued. Nor are there any signs of improvement, at least when considering subjective measures. These results will be discussed with a special emphasis on the type of health outcomes, gender differences and methodological issues.



O6.5-2 14:15-14:30

## Predictors of nine-year mortality in nonagenarians: The Vitality 90+ Study

Author: Dr. Kristina Tiainen  
*Gerontology Research Center and School of Health Sciences, University of Tampere*  
Co-authors: MSc Tiina Luukkaala, MD, PhD Antti Hervonen, MD, PhD Marja Jylhä

**Objectives:** With increasing age, the association of conventional risk factors with mortality seems to weaken. Information about the predictors of mortality among the oldest old is limited. Possible gender differences are also poorly known. The aim of this study was to examine the predictors of mortality during nine years in a representative population sample on individuals aged 90 and older, focusing on differences between men and women. In addition, we examined the gender differences in survival at different levels of mobility and activities in daily living (ADL). **Methods:** This nine-year follow-up study is part of the Vitality 90+ Study, a population-based study of people aged 90 and older. All inhabitants aged 90 and older in the area of Tampere, Finland were contacted, irrespective of health or place of living. The study population consisted of 171 men and 717 women. Data was collected with mailed questionnaire asking questions concerning about ADL, mobility, self-rated health, chronic conditions, occupation, place of living, and phone contacts. Cox regression enter models were used for statistical analysis. **Results:** Older age, male gender, difficulties in ADL and mobility, poor self-rated health, and institutionalization increased the risk of mortality in the total study group. In men, difficulties in ADL and mobility were strong predictors, while in women, comorbidity and poor self-rated health were more important. At each level of functioning, women survived longer than men; the differences were significant only for those who had some limitations but were not totally dependent or independent. **Conclusions:** Health indicators similar to younger old age predict mortality also in the oldest-old, but predictors differ between genders. Even at very old age, women survive longer with disability than men. This study points out the role of functional status as primary indicators of health and as the most important target for interventions at very old age.

O6.5-3 14:30-14:45

## The importance of children in old age 95-year-olds from the 1914-population in Glostrup, Denmark

Author: Professor Marianne Schroll  
*Center of Preventive Medicine, Glostrup University Hospital*  
**Aim:** To understand quality of life in old age as a function of the life course.

**Objectives:** The importance of children in old age  
**Population:** Thirteen 95-year-olds were interviewed, according to the following criteria: Alive 2009, participants in the health surveys in 1964, 1974 and 2004 of the 1914-population in Glostrup;still living in the Glostrup area;able to go through an intensive interview lasting 2 hours regarding the life course.  
**Methods:** I took myself the interviews in the participants’ homes regarding actual life situation, course of life, and health - and afterwards the transcription to text.  
**Results:** The 1914-population in total Denmark had 2 children, 11% of the women were childless. The 802 from the 1914-population surveyed in Glostrup, age 50, had 2 children and 10% of the women had no children. Two of the seven women interviewed age 95 were childless, the 11 other 95-year-olds had between 1 and 4 children. Three had lost a child. The interviews deals with: Thoughts about having children around World War II, fertility and birth (“I would not marry, because I had to,but because I wanted to”).  
- Having children and thoughts about their education (“It was always my honor to keep the children in clean and nice clothes”).  
- When the children have problems/are problems (“when my son calls me; he never calls me, his wife does not allow him to”). – To lose one child (“You never come to grips with it”).  
- Importance in old age, for practical purposes, support and the meaning of life (“I probably would have liked to have a child or two”; “If my grand children would all visit me once in a while, or call me up and ask how I am”).  
**Conclusion:** Among the 95-year-olds, children were the most important life content.

O6.5-4 14:45-15:00

## Leptin as a predictor of mortality in nonagenarians

Author: Inna Lisko  
*University of Tampere, Finland*  
Co-authors: PhD Kristina Tiainen, PhD, MD Terho Lehtimäki, PhD, MD Antti Hervonen, PhD, MD Marja Jylhä

**Objectives:** Leptin is an adipokine produced mainly from the adipose tissue. High circulating levels of leptin are associated with obesity and related disorders whereas low levels of leptin are associated with malnutrition. Accordingly both high and low levels of leptin seem to be associated with increased mortality risk. However, data regarding the oldest old are scarce. The objective of this study was to find out if leptin levels predict mortality in nonagenarians.  
**Methods:** This study is part of a prospective population-based study, Vitality 90+, carried out in Tampere, Finland. Leptin levels in blood were measured from 60 men and 180 women, aged 90 ± 1 year. All-cause mortality was followed up for four years. Data regarding height and weight (body mass index), functional status (Barthel Index), smoking status and history of diseases

were also obtained and used as covariates in the Cox proportional hazards models.  
**Results:** In the adjusted analyses, mortality risk in men was significantly lower (p = 0.047) in the middle tertile of leptin (hazard ratio [HR] 0.44, 95 % confidence interval [CI] 0.19–0.99) and borderline significantly lower (p = 0.056) in the lowest tertile (HR 0.37, 95 % CI 0.13–1.03) compared to the highest tertile. In women no significant associations for leptin were found but the direction for association was opposite to that of men: in women the HR for the middle tertile of leptin was 1.40 (95 % CI 0.79–2.46) and for the lowest tertile 1.47 (95 % CI 0.81–2.67), respectively.  
**Conclusions:** In nonagenarian men, low and moderate level of leptin seems to protect from mortality. In nonagenarian women, no significant associations between level of leptin and mortality risk were found. The findings of this study should be confirmed with a larger sample, and in future studies it is important to perform analyses separately for men and women.

## O6.6 Physical capacity in later life

Chair: Anette Ekman  
12-06-2012, 14:00-15:00, Room 12

O6.6-1 14:00-14:15

## Midlife physical activity is associated with lower extremity function in late life Age Gene/Environment Susceptibility (AGES) - Reykjavik Study

Author: Dr. Milan Gudjonsson  
*Landspítali University Hospital, Gerontological Research Institute*  
Co-authors: MD Jon Snaedal, MD Sigurbjorn Bjornsson, MD Bjorn Einarsson, PhD Jane S. Saczynski, MPH Melissa Garcia, PhD Thor Aspelund, MS Kristine Siggeirsdottir, MD Vilmundur Gudnason, PhD Lenore J. Launer, MD Tamara B. Harris, MD Palmi V. Jonsson

**Objective:** To examine the long-term association between mid-life physical activity (PA) and lower extremity function (LEF) in late-life.  
**Methods and theories:** Having both low levels of PA and cognitive function is associated with reduced mobility in old age. Both physical and cognitive function is associated with LEF, but it’s relative contribution is unclear if the effects of midlife PA on LEF are independent of cognition. A large community-based population of 4753 men and women (mean age 76±6 yrs) from the Age Gene/Environment Susceptibility - Reykjavik Study was followed since 1967 as a part of the Reykjavik Study. On the basis of weekly hours of regular PA reported at the mid-life examination, participants were classified as active and not-active. Measures of LEF in late-life included gait speed from 6m walk (meter per second, m/s), Timed Up and Go (TUG, second), and Knee Extension (KE) strength (kg) tests. Cognitive function was extensively evaluated. Linear regression analysis was used to examine the association.  
**Results:** Participants who were active in mid-life had significantly better LEF (faster gait speed, beta=0.05, p <0.001; faster TUG time, beta=-0.53, p <0.001;&#61472;stronger KE strength beta=1.3, p <0.001) in late-life compared with those who were inactive in mid-life after adjusting for socio-demographic and cardiovascular risk factors. After adjustment for cognitive function in late life (speed of processing, memory, and executive function), participants who were active in mid-life still had significantly faster gait speed (beta=0.04, p <0.001), faster TUG time (beta=-0.34, p <0.001) and greater KE strength (beta=0.87, p <0.001) in old age compared with those who were inactive in mid-life.  
**Conclusions:** Regular PA reported in mid-life is associated with better performance of LEF in later life and is independent of late life cognition.



06.6-2 14:15-14:30

Associations of anemia and physical function in Georgia Centenarians

Author: Dr. Dorothy Hausman  
*University of Georgia*  
Co-authors: Alyson Haslam, Dr. Adam Davey, Dr. M. Elaine Cress, Dr. Mary Ann Johnson, Dr. Leonard Poon, the Georgia Centenarian Study

**Background:** Anemia is a common among older individuals and has been associated with lower levels of physical function. Most studies of anemia and physical function have focused on a “younger” older-adult population and it is unknown whether this association holds true in the very old.

**Objective:** To determine associations between anemia and selected measures of physical function in a population-based sampling of centenarians with a high (~50%) prevalence of anemia.

**Setting:** North Georgia, USA Study design: This study was a secondary analysis of data from the Georgia Centenarian Study, and included participants with complete data for hemoglobin and creatinine concentrations and physical function measures (n=129).

Anemia was defined according to the WHO definition (hemoglobin <13 g/dl for males and <12 g/dl for females). Analyses were also based on hemoglobin concentration increment (<12 g/dl; >12 and <13 g/dl; >13 and <14 g/dl; and >14 g/dl, respectively). Physical function measurements include grip strength, leg strength, Physical Performance Mobility Examination score, and Direct Assessment of Functional Status, scores on activities of daily living and instrumental activities of daily living.

**Results:** Logistic regression analysis indicated that centenarians with anemia have lower average grip strength (0.96, 95% CI 0.9 to 1.0, p=0.04) in fully adjusted models (demographics, number of diseases, BMI, renal function and cognitive score) and lower average leg strength (0.93, 95% CI 0.9 to 1.0, p=0.05) in partially adjusted models, than in those without anemia. Analysis by hemoglobin concentration increment indicated that grip strength was significantly greater in those with hemoglobin >14 g/dl as compared to those with hemoglobin <13 g/dl, in fully adjusted models, including gender. Lower scores on other physical function measures were not associated with having lower “normal” hemoglobin concentrations or anemia.

**Conclusions:** Anemia in centenarians is associated with significant decreases in grip strength and leg strength. However, no associations were found between anemia and other measures of physical function. Perhaps as people age, physical function is influenced to a greater extent by other factors than simply anemia, making it difficult to detect functional associations in the very old.

06.6-3 14:30-14:45

Low-Grade Chronic Inflammation and Superoxide Anion Production by NADPH Oxidase are the Main Determinants of Physical Frailty in Older Adults

Author: Dr. Gregory Baptista  
*Gerontology Center, University Hospital of Montpellier, France*  
Co-authors: Dr Anne-Marie Dupuy, Dr Richard Durant, Pr Jean-Paul Cristol, Pr Claude Jeandel

**Background:** Physical performance measured by gait speed is being recognized as a major instrument for clinical evaluation in older adults, because it predicts physical frailty, loss of autonomy, hospitalization, and decreased survival. Low-grade chronic inflammation and oxidative stress, mediated partly by the superoxide anion produced by NADPH oxidase, are closely linked and could be involved in age-related physical decline.

**Objective:** To determine whether slow gait speed is associated with anion superoxide overproduction by NADPH oxidase and low-grade chronic inflammation.

**Design and setting:** Observational study among 280 elderly of an ambulatory geriatric care unit (191 women, 89 men, 79.9 ± 6.1 year-old). Methods: Gait speed was evaluated by walking at self-chosen usual pace. Usual gait speed under 0.8 meter per second was defined as slow gait speed. Superoxide anion production was evaluated using a lucigenin-based chemiluminescence method. Inflammation was evaluated by CRP, fibrinogen and leukocyte count.

**Results:** Among the 280 participants, 179 (63.9%) walked with a gait speed < 0.8 m/s (slow walkers) and 101 (36.1%) with a gait speed ≥ 0.8 m/s. Superoxide production and inflammation markers such as fibrinogen were more important in slow walkers (p = 0.004 and p = 0.006 respectively). In multivariate analysis, superoxide anion overproduction and fibrinogen were independently associated with physical frailty assessed by slow gait speed (p = 0.028 and p = 0.007 respectively).

**Conclusion:** Physical frailty in older people is associated with superoxide anion overproduction by NADPH oxidase and low-grade chronic inflammation.

06.6-4 14:45-15:00

Accumulation of disparity in physical activity in old age

Author: MSc Johanna Eronen  
*University of Jyväskylä*  
Co-authors: PhD Mikaela von Bonsdorff, PhD Merja Rantakokko, Professor Taina Rantanen

**Background and objectives:** The level of physical activity often declines in old age, although many older people would like to be more active than what they are capable of. This leads to unmet physical activity need, the feeling that one’s level of physical activity is inadequate, which is a manifestation of disparity in physical activity in old age. The accumulation of risk factors, including mobility limitations, low socioeconomic status (SES) and lack of social support may increase disparity in physical activity. The aim of this study was to investigate how the accumulation of risk factors is associated with unmet physical activity need in older community-living people.

**Methods:** The study was based on cross-sectional analyses of an observational study with 632 participants. Socioeconomic status, mobility limitations and availability of social support were self-reported by standardized questionnaires. The outcome of the study, unmet physical activity need, was also self-reported. Analyses were performed with logistic regression analyses.

**Results:** In older community-dwelling people, the risk of unmet physical activity in people who had mobility limitations but no other risk factors was almost four-fold (odds ratio [OR] 3.86, 95% confidence interval [CI] 1.86-8.03), compared to those with no mobility difficulties; having mobility limitations and either low SES or not having social support increased the risk over four-fold (OR 4.11, 95% CI 2.09-8.09) and having mobility limitations, low SES and no social support further increased the risk over seven-fold (OR 7.10, 95% CI 2.71-18.57).

**Conclusions:** The results of this cross-sectional study indicate that accumulation of risk factors increases disparity in physical activity in older people. Older people, who report unmet physical activity need, represent a potential target group for physical activity interventions as long as the interventions are tailored to meet their resources for participation.

06.7 Social life and participation

Chair: Mette Andresen  
12-06-2012, 14:00-15:00, Room 13

06.7-1 14:00-14:20

Never too late to learn  
Elderly Women’s Club

Author: Dr. Svetlana Aslanyan  
*Center for the Development of Civil Society*

The paper is designed to elaborate relationships between feminist theory and practice. From my perspective to be more effective the feminists must closely collaborate with the women advocate and activists of women’s NGO. The best relationship between feminist theory and practice is the case when theoretical findings serve the base for designing practical activities directed to establishment of real gender equality. I am a researcher and leader of women’s NGO, which allows me to put into practice my theoretical findings.

The paper consists of three parts: in the first part I intend to make a short overview on the situation of elderly women in soviet and post-soviet Armenia based on the research. The research conducted to assess the situation reveal the incredibly vulnerable situation in which elderly women found themselves appeared after downfall of Soviet Union, it also revealed totally social exclusion of target group.

In the scnd part I will present the project: Elderly Women’s Club, its goal, objectives and results and refer to case studies. The long term goal of the project is: to promote elderly participation in public life and civil society development, to improve their social state and protect their rights and the short term goals are: to find their place in changed social and economical environment, to share their life and professional experience with younger generation, to change the attitude of the society. The objectives of the project are: to help elderly women to stay active persons; so they can find their own place in changed social environment by increasing their active participation in the social/civic life; to help them learn healthy and constructive ways to spend their leisure time, to share their life and professional experience with younger generation, to change the attitude of the society to older person and increase public awareness on elderly issues.

Third part is our conclusion: The older generations are in danger of being left out of the society. It is necessary to evaluate elderly women’s role in society and to facilitate and encourage participation by the elderly in public life. In this regards establishment of club where women could meet, exchange views, discuss an interesting topic pertaining to issues of concern such as health or social relations topics and do something with the knowledge and experience they have accumulated over the years is very important and can be disseminated as a good practice

O6.7-2 14:20-14:40

Does social capital enhance political participation of older adults?  
Evidence from Finland and Sweden

Author: PhD, university lecturer Mikael Nygård  
*Åbo Akademi University*  
Co-authors: PhD, researcher Fredrica Nyqvist

High levels of civic engagement have been seen as prerequisites for an active or successful ageing. Allegedly, politically active seniors stand a better chance of safeguarding their interests in society as well as enjoying well-being. Whether or not older adults engage politically is not merely a question of individual characteristics, such as the level of education, but also on the level of social capital, both individually and contextually. According to Putnam (1995: p. 67) social capital, such as networks and social trust, can be expected to “facilitate coordination and cooperation for mutual benefit”. We can therefore expect communities with higher levels of social capital not only to provide a higher incitement for collective action in general but also to encourage citizens to engage in political action. This relationship, however, is far from straightforward. Social capital may provide the glue that holds communities together, but does it also provide driving forces for engaging in politics? Political engagement of older adults may also represent a variety of sentiments and be determined by different factors. Therefore a closer assessment of the relationship between social capital and political participation is warranted. In this paper we test the association between individual- and contextual-level social capital and political participation of older adults (65+ years) by using unique survey data from Western Finland and Northern Sweden (the GERDA 2010 survey, N =10 427). We argue that although active engagement in voluntary associations as well as high levels of social trust are positively associated with both voting and nonvoting activities of older adults, the explanative logic differs between the two. When it comes to voting, social capital provides both glue and driving forces for action, whereas only the latter is true in the case of nonvoting activities.

O6.7-3 14:40-15:00

The impact of new intimate relationships in later life on social and filial relationships

Author: Dr. Torbjörn Bildtgård  
*Stockholm University*  
Co-author: Dr Peter Öberg

Lots of prior social gerontological research has focused on filial relations in informal care as well as the impact of widowhood on social relationships in later life. In this paper we instead ask how a new intimate relationship in later life effect relationships with children, relatives and friends. In particular we focus on the effects that a new intimate partner in later life has on filial, social and care obligations. To answer these questions, qualitative interviews were conducted with a strategical sample of 28 Swedes, 63–91 years, who had established a new intimate relationship after the age of 60 (or who are dating). We found that the respondents describe changes over their life-time in what we conceptualize as the ‘relationship chain’ – a hierarchy in social and care responsibilities – where the new partner in established relations steps in at the very front of the chain. This is positively perceived by the informants, who recurrently describe their partners as a resource for their own autonomy as well as that of their children, relatives and friends.

O7.1 Social life

Chair: Anna Siverskog  
12-06-2012, 16:00-17:30, Room 13

O7.1-1 16:00-16:15

Time as a structuring condition behind new intimate relationships in later life

Author: Dr. Torbjörn Bildtgård  
*Stockholm University*  
Co-author: Dr Peter Öberg

Mobility in and out of intimate relationships has become more common in late modern societies also in later life. However, it has been a neglected issue in social gerontology and sociological studies on ageing. In this paper the research questions are: What characterizes the formation of new intimate relationships in later life? Are there any specific, more or less universal, conditions that separate them from relationships in earlier life phases? Qualitative interviews was used with a strategical sampel, consisting of 28 Swedes, 63–91 years, who have established a new intimate heterosexual relationship after the age of 60 or who are dating. The results showed Time constituting a central structuring condition for new intimate relationships in later life. In the results three aspects of time – Available free time, Lived time and Remaining time – which all have a constituting and an important formative power on new late in life relationships are discussed in relation to theories of late modernity and the Third Age and in relation to changing demographical conditions.

O7.1-2 16:15-16:30

Ageing-in-place - older people’s housing problems and social contacts

Author: Sirpa Andersson  
*National Institue for Health and Welfare THL*

The aim of the presentation is to explore problems in housing, environment and social relationships of people aged over 80 based on their perceptions. How are these issues connected with each other? Living at home is the desire of older people, while the ageing policy of Finland is also to promote this kind of ageing-in-place. Given that the goals of older people’s and the society are similar, it is important to give more attention to the home environment. Social relationships, near relatives, friends and neighbours are of great value to older people. The study discusses how the conditions for ageing-in-place are realised. The theoretical orientation works from the perceived well being of older people. The study material is drawn from two different Finnish enquiries: 1) a

survey of Finnish wellbeing and services, 2) a needs assessment on services for older people. They contained interesting and relevant questions about housing and the social contacts of older people. Quantitative methods were used in the analysis. The study illustrated that getting to and from home is difficult for many older people. They encounter problems in moving outside and in doing things like shopping. Typical shortcomings in the housing environments were that services were too far away and there was a lack of public transportation. Most respondents were happy with their social life and relationships while some hoped for more support from friends. Connections with relatives and friends were seen as important, while some also expressed feelings of loneliness. These aspects clarified the ageing-in-place concept. The results indicated that problems in housing environment and loneliness can accumulate among some older people. Their opportunities to age-in-place can thus be poor. Ageing-in-place necessitates that physical and social housing environment must meet older people’s needs and hopes.

O7.1-3 16:30-16:45

Old, inactive and happy: can a socially unproductive ageing be a successful one?  
Exploring the protective effect of fulfilling marital relationships in inactive 50 plus.

Author: Rita Borges Neves  
*Centre of Research for Social Sciences, University of Minho*  
Co-authors: Prof Alice Delerue Matos, Fátima Barbosa, prof José Machado, Victor Terças Rodrigues, Daniela Craveiro

Several studies stress the importance of social productive activities (generating goods and services) for wellbeing as providers of control, autonomy, self-realization and pleasure at older ages. This approach on seniors’ wellbeing developed on the grounds of the ingrained sociological construct of reciprocity. Mutuality within social interactions (one’s effort being rightfully rewarded either monetary or socially) was shown to activate brain reward circuits and strong positive emotions. In western societies, common contexts for reciprocity are formal and volunteer work or provision of care. According to this perspective, we can assume that seniors deprived of this kind of activities\_ in situations of unemployment or retirement, and not providing informal care, nor voluntary work \_ would be lacking reciprocity and its beneficial effects. In fact, depressive symptoms and diverse health problems have been shown to result from unemployment and retirement. These studies eventually reinforce the idea that a successful and healthy aging is an active one. Nonetheless, we cannot overlook other dimensions/types of bonds that contribute to wellbeing based on emotional and intimacy attachment. Numerous studies point out that living in a marital-like relationship is associated with higher psychological well-being than being single. Given this line of reasoning we set out to explore to what extent

satisfactory marital-like relationships moderate ill-being in case of unemployment, retirement and absence of other socially productive activities in older individuals. By analyzing wave 4 of SHARE's 2011 preliminary data on 50-plus Europeans we will establish the deflection capacity of satisfactory marital-like relationships in vulnerable strata. For that purpose, we will make use of state-of-the-art multivariate statistical analyses. As recently collected raw data is going through the final refining process, results will be available mid-March.

O7.1-4 16:45-17:00

How do different dimensions of social relations fulfil social needs in older people?

Author: Katja Pynnönen  
*Gerontology Research Center and Department of Health Sciences, University of Jyväskylä*  
Co-authors: Timo Törmäkangas, Taina Rantanen, Tiina-Mari Lyyra

**Objectives:** Earlier studies have shown that various dimensions of social relations may be beneficial in different ways in old age. The aim of the study is to investigate how different dimensions of social relations fulfil social needs as essential for well-being in older people.

**Methods:** 394 persons aged 80 were interviewed face-to-face. Exploratory factor analysis was used in forming sum variables of social relations. Perceived social support was measured by Social Provision Scale based on theory of Weiss. Associations between social relationships and dimensions of social provision were analyzed by regression analyzes.

**Results:** Existence of spouse, frequent contacts with children and friends/acquaintances were related to intimacy including feelings of emotional closeness, assurance that others can be counted on in times of stress, and guidance. Contacts with friends/acquaintances and participation in social activities provided a sense of belonging to a group of friends (social integration). Existence of spouse was most important in providing an experience of opportunity for nurturance and reassurance of worth. These needs were related also to contacts with friends/acquaintances and giving help to children/grandchildren.

**Conclusion:** Close relationships e.g. with spouse and children may be important in providing both emotional closeness and anticipated social support. On the other hand, giving help may be significant in fulfilling needs of reassurance of worth and opportunity for nurturance. Interaction with friends/acquaintances may be relevant in old age since they are related to various social needs. Thus, promoting social activity which helps to fulfil social needs can maintain and enhance health and well-being in old age.

O7.1-5 17:00-17:15

Life as theatre: older transgender persons' experiences of ageing and gender identity

Author: Anna Siverskog  
*Nationella Institutet för forskning om äldre och åldrande*

Older LGBTQ (Lesbian, gay, bisexual, transgender and queer) identifying persons have during their lifetime witnessed and experienced many juridical and social changes in attitudes towards sexual and gender identities. There is however a lack of research on this subject in a Nordic context, especially in the case of older trans identities.

This presentation explores age and ageing in relation to transgender identities. It is based on life story interviews with persons identifying as transgender aged 65 to 77 years old, made within a dissertation project about older GLBTQ identifying persons. The theoretical frame used consists of social gerontological perspectives and queer theory. Three themes are focused; the relation to gender throughout the life course; the ageing body; and the lack of knowledge on trans issues. The results illustrate how trans identities and practices have been seen as inaccessible during big parts of life, but that a different context in combination with being in third age can offer new possibilities to be open. There are also experiences of attempts to undergo sex reassignment surgery, but facing the fact that health and the ageing body are making this wish impossible. Some persons express worries for ageing and future need of care where they fear they might be discriminated. There are also experiences of a big lack of knowledge about trans issues. One conclusion is that while it is possible to talk about a "homonormativity", where the homosexual subject under certain circumstances is seen as more respectable in general discourses, transgender identities have not reached this point if they are not made invisible; something that can be hard to achieve with an ageing body that has not underwent sex reassignment surgery.

Posters  
Abstracts



POSTER SESSION I  
11-06-2012, 15:15-16:15,  
ROOM 14/15

P1-1

Timed Test of Money Counting (TTMC)

Author: Dr. Gona Abdulla  
*BHR Hospitals NHS Trust*  
Co-Authors: Dr Loay Al-Dhahir

**Introduction:** The competent handling of money is an essential basis for living independently. TTMC is quickly performed and requires no special equipment or training. The test measures in seconds the time a person needs to open a purse, to take out all the money and to count it. The amount of money is defined: one £5 note, one £1 coin, one 50p, one 20p and three 10p. If the reported amount is incorrect, the examiner tells patient that the answer is not correct and patient is allowed to try again. The time measurement continues, the test is interrupted after three errors or after 5 min. In both case a penalty time of 300s is noted.  
**Methodology:** The TTMC conducted on 23 inpatients (12 female and 11 male). Age ranges from 63 to 90. Further assessment has done including, mini-mental state examination MMSE and Grip Strength measurement.  
**Result:** The 23 patients were divided in to three groups based on the duration of the test. The first group include those patients who conducted the test in less than 45 seconds; the second group include those who completed the TTMC in more than 45 seconds but not more than 75 seconds and finally those who finished the test in more than 75 seconds. Seven patients completed the test in less than 45s and they have got MMSE above 25. In the second group of patients 2 have MMSE of more than 25, 1 patient has mental score between 20 to 25 and another one with MMSE below 20.  
The third group include 12 patients, 5 patients have MMSE more than 25, 3 have got mental score of 20-25 while 4 of them have MMSE below 20. Within those five patients who have MMSE above 25 and completed the test in more than 70s, 4 of them have weak grip strength due to previous stroke and 1 penalty given to one patient because of one mistake which means extra 300s given to that patient.  
**Conclusion:** TTMC is reliable and showed concurrent validity with other measures of physical and cognitive function.

P1-2

Assessing Long-term Care Service Needs  
of Indigenous Older Adults:  
A Framework for Practice with Native Elders

Author: Dr. Colette Browne  
*University of Hawaii*  
Co-Authors: Dr. Noreen Mokuau, Dr. Kathryn Braun, Dr. Lana Kaopua

The social and health profile of indigenous older adults in the US are alarmingly alike--shorter life expectancies, greater rates of disability, and higher rates of poverty. Native American, Alaska Native, and Native Hawaiian elders also share similar histories of forced colonization, leading many to hypothesize of the link between historical trauma and poor health. This poster session will describe approaches to native elder long-term care assessment needs in Hawaii and the continent that are informed by a life course perspective. Research identifies the importance of accurately assessing needs in culturally competent methods. With a focus on kupuna (native elders) in Hawaii, we will provide an overview of their social and health profile, describe a multi-method approach to elder assessment and community engagement, and discuss finding implications for this and other indigenous communities.

P1-3

The effects of marital status on episodic  
and semantic memory in healthy  
middle-aged and old individuals

Author: S-M-Hossein Mousavi-Nasab  
*Örebro University*  
Co-Authors: Dr. Reza Kormi-Nouri, Prof. Lars-Göran Nilsson

Previous studies have shown inconsistent findings about the relation between marital status and cognition (especially with a general cognitive test. i.e., MMSE). In the present study, we examined the effects of marital status and age on specific memory tests: episodic and semantic. A total of 1882 adult men and women participated in a longitudinal project (Betula) on memory, health, and aging. The participants were grouped into two age cohorts: 35-60 and 65-85 and studied across a period of 5 years. Episodic memory tasks comprised recognition and recall, and semantic memory tasks comprised knowledge and fluency. After controlling for education, some diseases and leisure activity as covariates, married people showed significantly better memory performance than single individuals in episodic memory, but not in semantic memory. Also the amount of decline was significantly larger for singles and widowed than other groups in episodic memory during 5 years period time. These results were similarly observed in both age groups. Our specific episodic memory task showed that the effect of marriage can be observed only in comparison with singles and

not with divorced and widowed individuals. This effect can be explained by the role played by cognitive stimulation in memory and cognition. The cognitive stimulation of a partner may protect the brain from deterioration. Marriage can be seen as a positive factor in cognitive aging.

P1-4

Inventory of Life Satisfaction (ILS)  
An ecological approach to life staisfaction

Author: Professor Antonio Fonseca  
*UNIFAI*  
Co-Authors: Dr. Laetitia Teixeira, Prof. Constança Paúl

The construct of life satisfaction assumes increased relevance with the awareness that "live longer" is not the only desirable result of the increase of longevity. The main goal of this paper is to provide descriptive information about prevalence of three ecological factors with respect to life satisfaction – Health and Safety, Services and Resources, Residence and Sociability. The construction and validation for the Portuguese mid-life and older population (N=1321) of a life satisfaction instrument was carried through. The proposed three-factor solution provides standard and adequate psychometric requirements for reliable and valid measurement. Therefore Services and Resources, Health and Safety, and Residence and Sociability may be used as determinants of life satisfaction of mid-life and older people not only considering the heterogeneity of the ageing process itself but also because different groups of older people even within a similar cohort might differ in their experience of life satisfaction. For instance, women present higher means regarding Services and Recourses and lower means regarding Health and Safety when compared to men (p<0.05). Findings indicate that there is a significant difference between the dimension Health and Safety and age, where we verify a lower mean of the sub dimension for the older. For the marital status, we found significant differences for the total scale and Residence and Sociability (p<0.05) and the widow present higher scores. Finally, findings indicate that there is a significant difference between education and all dimensions and total scale (p<0.05), where lower scores is associated a low education. It can be concluded that the proposed three-factor solution provides an adequate description of psychometric properties of the Inventory of Life Satisfaction, supported by high alpha values and differentiated results in the majority of the variables considered.

P1-5

Establishing of Herlev Hospital  
Discharge-Liaison team

Author: Department Physiotherapist Merete Quvang  
*Herlev Hospital*  
Co-Authors: Registered General Nurse Anja Thomsen, Registered General Nurse Anne-Lise Mason

**Objectives:** The purpose of establishing a Discharge-Liaison Team at Herlev Hospital has been to ensure a smooth sectoral transition of care from hospital to the home environment/ Primary Care, promote and obtain security surrounding the patients discharge. This helps to avoid unnecessary re-admission and this service is offered to the vulnerable patient.  
**Methods:** The Team is based in the hospital medical department but covers all areas within medicine and surgery. The hospital Discharge-Liaison Team consists of a Registered General Nurse, a Physiotherapist and an Occupational Therapist, each having an extensive knowledge of inter professional collaboration. The team is in continual contact with other members of the multidisciplinary team within the hospital itself and community services. Prior to discharge, background information regarding all aspects of the patient's circumstances and medical history is collected to ensure an individualized plan of care. The Team is often met with a complex home situation, which is not always possible to foresee. That obviously affects the action that is taken, to ensure that the patient has the optimal conditions to remain safely in their home. If further assistive measures from the hospital, homecare professionals and/or General Practitioner are required, the team will contact the relevant professional in order to establish the necessary action. All information is documented in the medical notes and shared with any relevant team members such as community nurses and the GP.  
**Results:** In 2011 we processed a total of 530 patients from all hospital departments. From this total there were reported 51 undesirable incidents, and a further 98 cases where there was a need for adjustments to the planned package of care. 64 patients were readmitted within a period of 14 days, of which 11 had the same diagnosis as the previous admission. It is shown that there is a high level of satisfaction regarding the Discharge-Liaison Teams. It creates confidence, ensures access to the relevant services, provides continuation of care and therefore enhances the feeling of security for the patient and family.  
**Conclusion:** The result has been based on earlier pilot studies from 2005-2006 and has shown that a Discharge-Liaison-Team contributes to secure the sector transfer after discharge from the hospital, and helps to prevent unnecessary readmissions.

P1-6

Do older adults really “age-out” of self harm behavior?  
An DBT adaptation for older adults.

Author: Dr. Valerie Alexander  
*National University*  
Co-Authors: Dr. Amanda Gutierrez, Dr. Kristie Earnheart

Few studies have explored self-injury in the older adult population. It has long been assumed that amongst these behaviors, such as self-mutilation, that the course seems to decline over time. Self-harm behaviors are thought to “burn-out” or significantly attenuate. This transcendence is thought to happen somewhere between adulthood and older adulthood. The purpose of this study is to explore geriatric variants of self-harming behaviors that may include self-prescribed polypharmacy, refusal of needed medical attention, neglect of chronic conditions, or sabotage of medical care. Changes instead of extinction of these behaviors may be largely related to an inability to formulate plans for the future and pursue goal directed behaviors. Dialectical Behavioral Therapy is a well known empirically supported treatment for the decrease of self-harming behaviors. However, little to no research has been done on the efficacy of DBT with older adults and its impact on overall quality of life. The results of this study hope to provide evidence of the efficacy of and need for the a DBT adaptation for the older adult.

P1-7

Supporting the Need for an Individualized Approach for Grief Work with the Geriatric Population

Author: Dr. Valerie Alexander  
*National University*

While grief affects all persons, the increasingly older adult population often has accumulative and multiple losses. Such a compounding sequence of losses can lead to an overload in bereavement, particularly if past losses have not been processed. Cultural and societal expectations can often pathologize a normal response to loss. Current literature and studies reveal a movement away from the outdated model of stages of grief to a more individualistic approach. As late adulthood grief can contribute to depression, anxiety, and physical and mental decline, it makes sense that we treat our elderly clients with an integrative approach. An integrative approach includes emotional, cognitive, physiological, interpersonal, and spiritual. This will be viewed with an emphasis on treatment, intervention, and cultural sensitivity. **Conclusion:** Due to the lack of educated healthcare providers in the integrated treatment of grief in the elderly there is a need for this awareness and knowledge for an individualized approach.

P1-8

Active Lifestyle All Your Life  
A Multiprofessional Occupation based Lifestyle intervention Preventing Accidental Falls

Author: Erica Johansson  
*Karolinska Institutet*  
Co-Authors: Med Dr Reg OT Ann-Helen Patomella, Med Dr Reg OT Raymond Dahlberg, Professor Med Dr Reg OT Lena Borell, Ass. Professor Med Dr Reg OT Hans Jonsson

**Introduction:** Available research shows that accidental falls among the elderly are a major community health problem all over the world. Preventive interventions that are able to address several factors and involve several different professional groups have a proven effect in reducing the number of falls among the elderly as well as improving the physical capacity, the individuals participation and their self-rated health. But according to clinical practice today's fall-preventing interventions are not carried out in this way. This is a new unique occupation based multi-professional lifestyle intervention targeting older individuals at risk for accidental falls. The project is a RCT ongoing in 9 primary care areas in Stockholm based on the Well elderly study/ Lifestyle Redesign in the USA. The question examined by the study is whether the intervention program can: Significantly reduce accidents and incidents involving falling among the participants, influence variables such as satisfaction with life, confidence in one's own ability and a feeling of involvement. If the intervention can be shown to be cost effective in terms of the use of resources. The intervention – Active lifestyle all your life – is being developed in and for primary care for the cost effective prevention of fall injuries among elderly people using a method that results in continued active life. Aim The current project is aimed at contributing new knowledge of how a multifactorial occupation based lifestyle intervention based on maintaining an active lifestyle can prevent accidental falls. **Methods:** RCT, Random allocation of 150 individuals, highly at risk for accidental falls, +65 into 2 groups (Intervention and control). Repeated measures of participation, occupational performance, fear of falling and self-rated health combined with measures of consumption of care and frequencies of accidental falls are collected for a period of 24 month. **Results:** Preliminary results will be presented

P1-9

How do the patients and their close relatives experience The Coordinated Investigation Model of Dementia in the North Denmark Region?

Author: General Practitioner Hanne Hulgaard  
*Laegehuset i Vodskov*  
Co-Author: PhD-student, nurse Aase Marie Ottesen

The aim of the project was to investigate how the patients and

their close relatives experienced the investigation and the subsequent social medicine intervention, and to give recommendations based on the results. The project is based on qualitative interviews with 11 families. **Background:** The Coordinated Investigation Model of Dementia implies that the primary investigation is carried out in the primary sector by a general practitioner in cooperation with a local dementia nurse in accordance to a specified procedure. Further investigation may hereafter be carried out by specialists in the secondary sector. Especially after The Coordinated Investigation Model was evaluated in 2005 and found useful from a professional point of view, we found it relevant to investigate the experiences by the patients and their close relatives. **Results:** The project shows that the patients and their close relatives don't relate to the model – but rather to the results of the investigation, responsiveness and comfort. The investigation in the secondary sector seems very important to the patients and their relatives, who generally expressed that important decisions and information were handled by the secondary sector. A follow-up interview in the primary sector after investigation, which is mandatory according to the model, was practiced to a very limited extent. The role of the local dementia nurse as a coordinator was widely recommended by the patients and their close relatives, since many have experienced an accessible support and a relevant help. **Recommendations:** The primary sector's role in investigation and follow-up should be strengthened with the aim of executing the model with lowest effective cost. A formal agreement regarding follow-up should be implemented. The relatives should be more involved during both investigation period and in the socio-medical follow-up.

Author: Professor Shu-Yuan Chao  
*Hungkung University*  
Co-Authors: Hsiao-Mei Chen, Li-Jane Tsai

The study used a quasi-experimental design research method to investigate the effect of learning therapy on the improvement of cognition and psychological, behavior symptoms among the elderly with dementia in institution. There were two institutions, in total 44 participants were recruited in this study, including 23 and 21 participants were assigned to experimental group and control group, respectively. The elderly in experimental group were invited to read aloud and conduct digital computation, 15 minutes per time, five days a week, and continuously for 3 months. The MMSE and NPI&#65288;Neuropsychatric Inventory&#65289;were used for measuring the improvement of

P1-10

The Effect of Learning Therapy on Improving The Cognition Function and Psychological , Behavior Symptoms among the Elderly with Dementia in Institution

elder's cognition function, and psychological, behavior symptoms, before and after intervention. We applied multiple linear regression with the generalized estimating equation (GEE) statistic method to evaluate the effect of learning therapy on the cognition function and symptoms improvement after intervention. The results indicated significant improvement on experimental group elders, both cognition function and neuropsychiatric symptoms, achieving statistic level. The program could be the reference for the elderly care in institution. **Key words:** Dementia, Learning therapy, Cognitive function, Elderly.

P1-11

Risk of falling in elderly patients with Chronic Obstructive Pulmonary Disease

Author: Dr. Cristina Jácome  
*Escola Superior de Saúde da Universidade de Aveiro*  
Co-Authors: Prof. Alda Marques, Prof. Daniela Figueiredo, Dr. Raquel Gabriel

Falls are a major problem among elderly adults that negatively impact on their functional independency and social interaction. The presence of chronic disease and impaired balance are well known risk factors for falling. Chronic Obstructive Pulmonary Disease (COPD) is one of the highest prevalent chronic diseases in elderly adults, which severely impacts on patients' mobility and balance. However, limited information is available on risk of falling in this population. Therefore, the aim of this study was to determine the risk of falling in elderly patients with COPD. A cross-sectional study was carried out with 31 elderly outpatients with COPD in the central region of Portugal. Socio-demographic data were collected via a questionnaire based on the International Classification of Functioning, Disability and Health checklist. Spirometry was performed to assess participants' respiratory function. Balance and risk of falling were assessed with the Timed Up and Go Test (TUG). Descriptive statistics, the Mann-Whitney U test and Chi-square test were applied using PASW Statistics version 18.0. Participants were mostly male (n=21;67.7%), with a mean age of 76.71±6.45 years old. According to the Global Initiative for Chronic Obstructive Lung Disease criteria, participants were at advanced COPD (FEV1%predicted 35.45±8.15%). Considering the TUG cutoff point of 14 seconds for predicting falls, 38.70% of the participants were at high risk of falling. Participants with more than 74 years old (58.06%) were significantly slower (15.40±6.18 vs 10.62±4.45;p=0.020) and presented a significantly higher risk of falling (55.6% vs 15.4%;p=0.023) compared with younger participants. Elderly patients with COPD are at high risk of falling, especially those over 74 years old. Hence, pulmonary rehabilitation, a recommended standard of care for patients with COPD, should include a specific component of balance training and strategies to prevent falling, in order respond to elderly patient's needs.



P1-12

## Effects of Age Images on Implicit Age Attitude in Taiwan

Author: Professor YUJING GAO  
*Fu Jen Catholic University*

The increase in the older adult population is a global phenomenon. In review of the research on age attitudes in Taiwan, there are many researches using explicit measurements such as self-report scales or age semantic differential scales. The purpose of this study was to explore age differences in the implicit age attitude. The results indicated that no matter which age groups they belonged to, people all preferred young than old more. And the difference of preference decreased with age. In addition, an experiment was conducted to evaluate age image effects on age attitudes under different conditions by manipulating age stereotypes as positive or negative. The results showed that there were various patterns of age attitude across time. The intervention of negative image had impact on age attitude continuously.

P1-13

## Evaluation of NSW BPSD units in Australia: Adherence to a new model and clinical and cost-effectiveness

Author: Dr. Michael Bird  
*DSDC, Bangor University*  
Co-Authors: Dr. Katrina Anderson, Annaliese Blair, Dr. Sarah MacPherson

**Background and Objectives:** The NSW Government built eleven 16-bed units for people with dementia and disturbed behaviour to get them out of the back-wards of psychiatric hospitals. Over 20 years the units lost direction and became long-stay homes for easy to care for people. A pilot trial from 2005 onwards suggested that they could best operate as medium term assessment-treatment-discharge facilities for moderate to severe BPSD, if supported by a specialist outreach team and with increased staff and specialist medical cover. A change process was instituted with significantly increased funding. Our two-year evaluation was to determine whether change had taken place and to assess the clinical and cost effectiveness of the five remaining units.  
**Method:** We used a repeated measures design to assess multiple staff and patient variables using validated instruments, interviews with multiple stakeholders, observations, perusal of medical records. Results: All units had changed though some still had no outreach team and in one, no funds had been spent on it. The evaluation itself galvanised some change. The units were admitting people with more severe behaviour and from a larger geographic spread, but the original pilot-trial site remained superior on these variables. The median length of stay had reduced to 10-12 weeks, with readmission rates between 5

and 20%, and occupancy was a problem for some. These variables were worse for units with no outreach team. One unit had increased admissions five-fold. Psychosocial/dementia nursing skills were high across the units, though multi-disciplinary case reviews were dominated by medical practitioners discussing psychotropic medication. On admission all patients were on anti-psychotics but tended to be on slightly less at discharge. Treating patients in the units was more cost-effective than in-patient psychogeriatric facilities and appeared to involve less human costs.  
**Conclusions:** We recommended continuation of the program subject to all units coming up to speed within two years, structural changes to raise the profile of psychosocial interventions in case-discussions, some changes to admission criteria, and more support from NSW Health. The issue of instituting change in entrenched services will be discussed briefly.

P1-14

## The effects of self-management program and ram mai plong exercise on hba1c and quality of life in older persons with type 2 diabetes mellitus

Author: Suchada Konghan  
*Chulalongkorn university*

This quasi – experimental research aimed to test the effects of self-management program and ram mai plong exercise on HbA1C and quality of life in older persons with type 2 diabetes mellitus. The study sample were 48 patients, Diabetes Clinic out-patient department Ranong hospital, Ranong province. The experimental group and the compare groups were matched in term of sex, type of medications and duration of illness. The compare group received the eight weeks self-management program and ram mai plong exercise, while the control group received a conventional nursing care. The experimental group instruments were the self-management program and ram mai plong exercise and Quality of Life Questionnaire. The instruments were tested to the content validity by experts. The data were analyzed by using percentage, mean, standard deviation and t-test. The research finding were as follows:  
1. The mean HbA1C in older persons with type 2 diabetes mellitus after received the self-management program and ram mai plong exercise was significant lower than before received program at level of .05.  
2. The mean quality of life in older persons with type 2 diabetes mellitus after received the self-management program and ram mai plong exercise was significant higher than before received program at level of .05.  
3. The mean HbA1C in older persons with type 2 diabetes mellitus in experimental group and control group wasnot significant different at level of .05.  
4. The mean quality of life in older persons with type 2 diabetes mellitus in experimental group and control group was significant at level of .05.

P1-15

## The Role of Gender in Predicting Mortality among Older Adults in Singapore Predicting Mortality in Older Population

Author: Dr. Riawati JAHJA  
*DUKE-NUS GMS/National University of Singapore*  
Co-Author: Dr. Angelique CHAN

The purpose of this study is to identify the role of gender in predicting mortality among older adults in Singapore We use panel data from 2009 and 2011 to conduct our analysis. The original survey was based on a nationally representative sample of older adults aged 60 years and above (N=5,000) who were first surveyed between 1 July to 31 December 2009. The follow-up began 1 July 2011 and data collection is still ongoing. Our analysis is based on preliminary data between 1 July and 23 November 2011 for survival status of 207 deaths (4.1%) and 4,793 survivors (95.9%). Conceptual framework by Lezzoni (1997) guided our model for predicting mortality. We used descriptive statistics, univariate and logistic regressions to analyze the data. In multivariate analysis, as found universally that mortality risk in gender was higher in men than in women (P=0.007). Separate analyses by gender showed that older women who had poor vs good self-rated health and physical dependency with assistance required vs being independent were about 2.5 times more likely to die (P<0.05). Men had increased risk of dying when they had poor hearing ability vs good [OR=2.59, 95%CI=1.30&#8213;5.16, P=0.007] Furthermore, weekly walking exercise and living in condominium/private flat/shophouse/provided accommodation had a significant reduced risk of mortality in women by 26% and 7% following the adjustment, compared to walking exercise of less than once a month [OR=0.26, 95%CI=0.09&#8213;0.79, P=0.017] and living in 1-2 room flats [OR=0.07, 95%CI=0.01&#8213;0.76, P=0.028]. Whilst in more educated men compared to the less, benefitted them in reducing 44% risk of mortality (P=0.026). Elderly men and women had different attributes of mortality risk suggesting different needs of supports and approach to intervene the predictors of health-related outcomes.

P1-16

## Swedish and Iranian 75-year-olds – do they differ regarding physical function and physical activity?

Author: Doctoral stud Helena Hörder  
*Gothenburg university*  
Co-Authors: Doctoral stud Zahra Mozallenezhad, Professor Mahyar Salavati, Associate professor Lena Nilsson-Wikmar, Associate professor Kerstin Frändin

**Introduction:** The pattern of population ageing is highly

complex and contextually based. Cross-national comparisons are helpful to explore differences in health.  
**Purpose:** to compare physical activity level, physical functioning and certain health related factors in 75-year-old women and men in Sweden and Iran.  
**Methods:** population-based cohorts of 637 Swedish and 851 Iranian 75-year-olds were examined with the same methods regarding physical activity level, physical functioning and health related factors.  
**Results:** There were differences in physical activity level (p<0.001), self-reported physical functioning (p<0.001) objective physical functioning (p<0.001), health status (p<0.001) and most socio-demographic aspects between the two countries. Here the Swedish cohort had the advantage. There was no difference between the countries regarding prevalence of vertigo or falls. The only variables where the Iranian cohort had advantage over the Swedes were grip strength and smoking habits. There were larger gender differences in Iran regarding walking habits, self-selected walking speed, timed chair stand, and one-leg stance, and in Sweden in grip strength and physical activity, all to the disadvantage of women.  
**Conclusion:** Iranian 75-years-olds had a lower physical activity level, a worse objective and self-assessed lower extremity physical function but a better grip strength than their Swedish counterparts. Despite this, there were no differences regarding vertigo or falls. Women generally had worse results compared to men in both countries, but it was slightly more common in Iran.  
**Keywords:** Old people, aging, cross-cultural, physical activity, physical function, health

P1-17

## Three way benefits: Volunteers improving person centred dementia care in a rural hospital

Author: Catherine Bateman  
*Southern New South Wales Local Health District*

Older patients with cognitive impairment are known to experience fear, anxiety and increased confusion when admitted to hospital. They are more susceptible to falls, functional decline, delirium, prolonged length of stay, premature nursing home placement and death. Staff stress and care burden can be greatly increased in the care of confused hospitalised older patients with lack of time to support the necessary emotional care and safety needs highlighted. In rural areas with high ageing populations and limited or no access to geriatrician and specialist support these issues are even more pronounced. Increasingly the use of volunteers has been promoted as a supportive adjunct to care for patients with dementia or delirium but empirical support is limited. The primary aim of the study was to establish and train a group of volunteers in a person centred care approach to support patients with cognitive impairment in a rural hospital and evaluate outcomes for patients, staff and volunteers.



The volunteer intervention provided one to one emotional support aimed at enhancing the psychological wellbeing for patients with cognitive impairment as well as practical assistance aimed at reducing delirium risk and adverse outcomes. The intervention study used a quasi experimental design. Measures included patient outcome data, staff and volunteer dementia/delirium knowledge and attitudes to dementia questionnaires and post program acceptability by staff and volunteers. The program was highly accepted with 96% of staff and 100% of volunteers perceiving the program as having a beneficial effect on patient outcomes and should continue. Staff felt supported and assisted in their care of patients and volunteers perceived what they were doing was worthwhile and beneficial to patient outcomes. The program is now continuing 30 months post implementation, has won two health excellence awards and has been included as an example of existing good practice in the State Government Dementia Services Planning Framework 2010-2015. Replication of the program is occurring in other areas.

P1-18

## A cross-sectional study of fall epidemiology among community- dwelling elderly attending the Elderly Health Centres, Department of Health

Author: Dr. CHI HIN HO  
*Department of Health, Gov't of HKSAR*  
Co-Authors: Dr. Sammy PS NG, Dr. WM CHAN

**Background:** Accidental falls pose a significant burden on elders' health and the health care system. However the problem is often neglected by elders. As most falls are the result of a complex interaction of risk factors, elders should be advised to have multifactorial fall risk assessment and intervention. **Objective:** To collect updated epidemiological data on fall incidents of Elderly Health Centres (EHC) members so as to better plan our fall prevention education programme DESIGN A cross-sectional study. SETTING 18 EHCs of Department of Health, Hong Kong. PARTICIPANTS All elderly aged 65 or above who first attended the EHCs in a week in January 2011 for baseline health assessment. **Method:** The prevalence and the risk factors of falls among the elders were identified from the study. Baseline data of the surveyee on their demographics and information including comorbidities, health practices, and Activity of Daily Living (ADL) were collected. Besides information regarding their attitude, beliefs and health seeking behaviour about fall incidents were explored. **Results:** A total of 781 EHC elders were recruited into the cross-sectional study. Mean age of the subjects was 77.6; 77.8% were females. 11.4% out of the 781 surveyee reported to have falls once in the last six months.

Logistic regression of these risk factors showed that being a female (adjusted O.R. 1.957; 95% C.I. 1.147-3.340), aged 80 or above (1.929; 1.195-3.114), obese or overweight (1.668; 1.000-2.785), having cataract (1.668; 0.976-2.849) were independent risk factors of falls. Those who practice tai-chi were found to have sustained less falls. (0.208; 0.074-0.583). Our study also found the deficiencies in knowledge and the misconceptions of our elders on falls. Fallers seldom seek help from allied health or medical professionals. **Conclusions:** To better identify the characteristics of fallers and baseline risk factors for falls among the community-dwelling elderly in EHCs, a cohort study is being planned. A multifaceted health education programme was planned according to the modifiable risk factors identified.

P1-19

## Being a Standardized Test Administrator in an Acute Geriatric Setting

Author: Kariann Krohne  
*Olso and Akershus University College*  
Co-Authors: Prof. Sandra Torres, Prof. Åshild Slettebø, Prof. Astrid Bergland

In assessing geriatric patients' functional status, health care professionals use a number of standardized tests. The validity and diagnostics of such tests have been subjected to comprehensive research, but qualitative research illuminating the perspective of the standardized test administrator is lacking at present. The administering of a standardized test may influence test results – results which may have an impact on the level of care provided to the older patient. The objective of this study was to explore the experiences of occupational therapists and physiotherapists administering standardized tests. Drawing on seven months of fieldwork and observations of 26 test situations, interviews were performed with 14 physiotherapists and occupational therapists administering standardized tests on two acute geriatric hospital wards in Norway. Interview data were analysed with Systematic Text Condensation and supported with theory on relational competence. The analysis illustrates (i) how physiotherapists and occupational therapists decide which patients to test, (ii) what strategies they use for promoting a sense of security in the test situation, (iii) how patient stress is avoided, and (iv) how the patient's test performance is contextualized after the test. Our findings suggest that the test situation generates a tension between the health care professional's role as a standardized test administrator and as a health care provider. In handling this tension the health care professionals use their relational competence to reach and maintain individualization. Individualized adjustments are implemented by the test administrator throughout the test situation. This may cause bias in the deliverance of high-quality and user-friendly geriatric care and needs to be explored in future research.

P1-20

## Aging and work among healthcare professionals

Results from a research study conducted in the rural area of Carinthia, Austria

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This research study deals with the effects of demographic developments on healthcare professionals working in hospitals and old people's homes in Austria. Considering that not only the age structure of patients but also of the workforce is changing drastically, it can be assumed that their already critical working conditions will aggravate further. The aim of the study was to create a comprehensive database and to encourage an intra-institutional dialogue on the research topic. A mixed-methodology design was chosen to adapt a quantitative questionnaire on age management, originally developed in Finland, with the help of focus groups to the rural context of Carinthia, Austria. In 2009, a quantitative questionnaire was delivered to eight hospitals and 24 old people's homes. The return rate was 42.7%. The analysis showed that the subscales 'attitude of supervisors towards age/aging' and 'human resource practices' were most negatively assessed. A critical view increased with longer work experience, lower work status and lower subjective appraisal of personal health. The six focus groups conducted in 2010 revealed that the existing narrow financial, personnel and legal framework strongly hinder the implementation of age management practices in the affected institutions. In addition, age-specific measures were feared to lead to the social and financial exclusion of elderly staff as well as feelings of injustice among team members. Overall, the study has shown that aging and work among healthcare professionals is a highly pressing, and at the same time, sensible topic in Austria. Apart from the needed further adaptation of the assessment instrument, it is urgently advised to offer trainings in age management for supervisors, to encourage an open debate about aging and work among employees and to adapt the training of future healthcare professionals to the needs of an age-diverse working population. Clearly, policy support will be needed to introduce sustainable change.

P1-21

## Active Ageing: Exploring social participation in Belgium

Participation rates, individual profiles of participants and thresholds to participate

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Co-Authors: Sarah Dury, Nico De Witte, An-Sofie Smetcoren, Tine Buffel, Dominique Verté

**Purpose:** This purpose of this study was to investigate the social

participation of older people in West-Flanders (Belgium). Several dimensions of social participation were examined: informal care, voluntary work, participation in associations, and cultural participation. The specific questions this research addressed included: What is the activity rate of older people? What is the individual profile of (non) participants? What are the main reasons and thresholds to participate? **Methods:** This article analysed data from the Belgian Ageing Studies, collected in West-Flanders. 11258 older people were questioned using a standardised questionnaire. **Results:** The findings indicate that older people realise several active roles in society. 30.9% older people deliver informal care and 39.4% provides childcare. Almost 17% volunteers and 69.4% older people are member of an association. One out of two older adults participate in cultural activities. Moreover, the results demonstrate that several older people not yet participate in voluntary activities, but express the desire or willingness to do so in the future. Next, the individual profile of the participants in terms of age, gender marital status, income level, and physical health is discussed. Finally the main reasons (e.g. meeting other people, cosiness, personally asked) and thresholds (e.g. timing, price, interest) to participate are highlighted. **Conclusions:** The discussion provides an overview of potential vulnerable groups in terms of social participation. Moreover, it focuses on the implications of these findings for local policymakers and social organisations and provides impetus to organise and increase active ageing at the local level.

P1-22

## Prevalence of abuse against older women: a multi-national study in Europe

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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. The rapid ageing of society means that there will be a growing population of elders living at home and the most vulnerable of them are dependent on care or assistance. Research about where, when and how often elder abuse occurs is generally inadequate and inconsistent, or even non-existent. This presentation aims to explore the prevalence rate of abuse among older women living in the community. The main research questions are: a) What is the prevalence rate of domestic violence and abuse against older women in Austria, Belgium, Finland, Lithuania and Portugal? b) Can we detect patterns of violence and abuse against older women in those countries? This contribution provides results from the prevalence study of

Abuse and Violence against Older Women in Europe (AVOW-study). The study included women aged between 60 and 97 years who were living in private households. 2880 women were surveyed across five countries during 2010. Overall, 28.1% of older women had experienced some kind of violence or abuse. Generally, emotional abuse was the most common form of violence experienced (23.6%) followed by financial abuse (8.8%), violation of rights (6.4%) and neglect (5.4%). Sexual abuse (3.1%) and physical violence (2.5%) were the least reported forms. When studying co-incidence of types and intensity of violence several patterns of violence were detected. Furthermore, the results demonstrate that more than half of the respondents did not talk about the abuse, due to a number of reasons. In the final part of the presentation, the practical implications of these findings for early detection of elder abuse will be highlighted.

P1-23

### Physical performance as long-term predictor of onset of ADL disability; A nine-year longitudinal study among community-dwelling older women

Physical performance and ADL disability

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Disability in Activities of Daily Living (ADL) of aging women is an important public health concern. It is thus of interest to identify modifiable factors underlying onset of ADL disability. We assessed whether three physical performance-based measurements could predict ADL disability nine years later. The participants were 113 non-disabled community-dwelling women with a mean age of 79.5 years at baseline. The baseline examinations of physical performance were: functional reach, climbing steps and comfortable walking speed. ADL disability was defined as need of personal assistance in at least one of five basic ADL items. The participants were followed for 9 years. Logistic regression models were fitted for each of the physical performance measurements together with the covariates in relation to ADL disability. At follow-up 25.7 % were disabled in ADL. All three performance measurements were significantly associated with the onset of ADL disability at nine years of follow-up, however, only walking speed remained significantly related to onset of ADL disability, when all three performance measurements were included in the same model. In conclusion all the three performance measurements were related to onset of ADL disability, with walking speed having the strongest predictive value. Systematic screening based on walking speed measurements of non-disabled older women might help health professionals to identify those at risk of ADL disability and introduce preventive measures in time.

P1-24

### Consumption of marine-origin n-3 polyunsaturated fatty acids is associated with functional mobility in the community-dwelling oldest old in Japan.

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**Background:** As population of the aged has been expanding rapidly, one of the major concerns is how to maintain the health and functions in late life.

**Objective:** The objective of this study was to examine the association of habitual dietary intake of the marine-origin n-3 polyunsaturated fatty acids (n-3 PUFA), eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), on the functional mobility in the community-dwelling oldest old who are at a high risk for physical disability.

**Design and Methods:** This study is a part of the Tokyo Oldest Old Survey on Total Health, which is a community-based ongoing longitudinal study among the oldest old, 85 years or older, living in Japan. Four hundred ninety-three out of 542 participants at the baseline examination were enrolled in this study. Habitual dietary intake of n-3 PUFA was estimated using the brief-type self-administered diet history questionnaire (BDHQ), and functional mobility was assessed by the Timed Up and Go test. We evaluated the cross-sectional association between the habitual intake of n-3 PUFA and functional mobility by multivariate logistic regression analyses. Prior to the analyses, validation of BDHQ in this study was confirmed based on the EPA and DHA concentrations in the erythrocyte-membrane phospholipids as the gold standard for nutritional assessment.

**Results:** A moderate correlation was observed between the estimated dietary intake of EPA/DHA and the concentration of EPA/DHA in the erythrocyte-membrane phospholipids (Spearman's  $r=0.41-0.51$ ,  $p<0.05$ ). Multivariate logistic regression analyses revealed that a lower habitual intake of EPA+DHA was significantly associated with poor functional mobility, especially in the men (OR (95%CI) per 1 SD increase of EPA+DHA intake; 0.55 (0.34-0.91) and 0.79 (0.54-1.15), men and women, respectively).

**Conclusions:** Habitual intake of marine-origin n-3 PUFA is associated positively with functional mobility in the community-dwelling oldest old, especially men.

P1-25

### Older adults that receive home-based services, on the verge of passivity; The perspective of service providers

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Co-Authors: Professor Arne Henning Eide

The increasing number of older adults will put pressure on health care services in the community. Policy related to care of older adults, have focused both on active ageing and the need for more help and care. In order to reach the aim of active ageing it is necessary to explore how service providers perceive the conditions for participation among older adults.

The objective of the study was to explore service providers' perception and understanding of the conditions for participation among older adults who receive home-based care.

**Methods:** The study design was grounded theory study, with six focus group representing different parts of home-based care in two different municipalities. The data was analysed by a constant comparative method following the guidelines from Grounded Theory.

**Results:** The core category "being on the verge" captured how the older adults constantly were on the verge to stop participation and be pushed into passivity. Four conditions influenced; first, many applied for services too late, secondly, the older adults and their family's expectations about participation. Thirdly, external factors such as adequate housing and assistive devices. Finally, the service delivery per se could constitute a barrier for participation, since the services often focused on passive help and "standard packages".

**Conclusion.** The findings show how factors at the system level, the execution of services, and characteristics among older adults and their family may contribute to the individual service recipient being on the verge of being passive.

P1-26

### Application of heart rate variability technology to design an emotional management system for the elderly

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Co-Authors: Prof. Ching-Chang Chuang, Prof. Shih-Tsang Tang

Due to advancements in medical care technology, human beings are able to improve their health conditions and extend their lifespan. Some elderly people were found to have difficulties in controlling their emotion, which may later develop into psychological diseases such as panic disorder. Therefore, emotional management is a novel and important issue for the elderly.

In the present study, we incorporated biomedical engineering

and industrial design specialists to execute advanced design. First, we applied heart rate variability (HRV) technology to reflect the activities of the autonomic nervous system, which can also be used to develop the panic disorder identification system. The signal detection position was designed to palms of both hands, with the circuit being re-designed and the signal gain being re-defined. In addition, we integrated a visual display and an auditory broadcasting into this system. Then, we investigate the life style of elderly people to design the new system. The elderly people require same accommodation conditions and compensations in later life to deal with physical degradation, reduced ability, and increased needs. We focused especially on some aspects such as diseases, health care, living spaces (such as living room, bed room, bathroom), and social activities. Through the regular design process, including idea development, computer-aided design, mechanical design, mock-up, the prototype of emotional management system was thus fabricated. This newly developed emotional management system can detect the emotion signal when user emotion is unstable, then the system will issue the warning message to remind user, which would further effectively improve the personal health and life quality. In the future, a clinical evaluation with larger testing subjects should be conducted to collect more relative data concerning the effect of this system on the elderly population.

P1-27

### Nurses' Perceptions of Patient-Centred Care in Gerontological Nursing in Finland and in Estonia

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**Aim:** To explore and compare Finnish and Estonian nurses' perceptions of the implementation of patient-centred care (PCC) in the case of older patients and to identify possible similarities and differences in these perceptions.

**Background:** Gerontological nursing has seen a shift from a provider-driven toward a more patient-centred approach to care. While this approach respects older people preferences, the evidence suggests that challenges exist in implementing the approach in nursing practice.

**Methods:** The sample consisted of 220 nurses in Finland and 403 nurses in Estonia. We approach PCC from the standpoint of the nursing process, and the questionnaire consisted of questions about shared decision-making, assessment of patients' need for care and functional ability, goal-setting of patients' care, and evaluation of outcomes of patients' care. The data were analysed using statistical methods.

**Findings:** The nurses in Estonia, more often than the nurses in



Finland, reported that they never made the decision on a patients' care themselves and that they respected the autonomy of the patient. Instead, the nurses in Estonia reported specifying the goals of care and taking into account patients' own view of their functional ability more often than did the nurses in Finland. Both groups reported asking the views of patients' family members when assessing, setting goals and evaluating older patient's care.

**Conclusions:** The nurses' in Estonia, more often than the nurses in Finland, seemed to regard older patients as more active agents in the nursing process. In both countries, family members appear to be regarded as active partners in older patients' care. This is important, as PCC care requires that families are involved in the care of their older members.

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P1-28

## Older volunteers and potential older volunteers

### Differences in terms of individual characteristics

Author: Professor Liesbeth De Donder  
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Co-Authors: Sarah Dury, Nico De Witte, Tine Buffel, Dominique Verté

This study examines whether potential volunteers, volunteers and non-volunteers in later life are different from each other in terms of demographic, socioeconomic, physical and mental health, and family status. Data are derived from the Belgian Ageing studies. The dataset contains 27,128 people aged 60 and over living in 127 municipalities and cities in Flanders, Belgium. Multinomial logistic regressions are applied to analyse the key variables characterizing older volunteers, potential older volunteers, and older non-volunteers. Analyses indicate that non-volunteers, compared to volunteers, have a lower level of education, have more physical health issues, experience more psychological distress, and are less likely to be unmarried. Potential older volunteers are more likely to have a lower level of education, to be divorced, and are in better physical health than volunteers. Our findings stress the need for recognizing the various multidimensional factors that affect voluntary work in later life. Thresholds like lower level of education and financial vulnerability explain most of the individual determinants for being a non-volunteer and are crucial for voluntary organisations and social policy. Future research should include and make a distinction between potential older volunteers and older non-volunteers.

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P1-29

## Group-work based gerontological rehabilitation in Finland – meaningful group roles of elderly clients

Author: Aila Pikkarainen  
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**Introduction:** The study focuses on an R&D project, funded and coordinated by the Social Insurance Institution of Finland (IKKU 2009-13) and involves 60 rehabilitation courses (each including 8 clients, aged 74+), 6 rehabilitation centres and 21 municipalities. The aim of the multidisciplinary gerontological rehabilitation is to maintain and enhance the functioning, independence and meaningful living of older inhabitants in home settings and to enhance their participation in society. The focus of the project is to promote a client-centred approach to rehabilitation in which older clients are supported by a peer client group.

**Objectives:** (Study Part II): The section describes the main group roles the clients adopted in various situations during their rehabilitation process in rehabilitation centres and in municipalities. **Methods:** Active research in which the researcher observed selected parts of three courses in each centre during three years (18 courses). DATA: 101 observed rehabilitation days (à 7 hours) documented in 720 note pages.

**Results:** Different group processes and roles were observed and formulated. Depending on the client's life situation, health condition, previous life course and view of self, she/he could adopt one of the three different group roles: (1) an outsider: not engaging in group activities or interaction, requiring individual attention from group leaders; (2) a peer member: allying with one group member being in a similar situation, with same sickness or experiences, working in pairs or creating a smaller group inside of or parallel to the main group, even orienting out of the main group and (3) an original group member: looking and longing for the group process as a whole.

**Conclusion:** In group-oriented gerontological rehabilitation, professionals are required a special knowledge base to support older clients in different situations in adopting a meaningful group role, to enhance their participation in social activities and to prevent isolation.

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P1-30

## Geriatric challenges in a middle-aged person

### A case report of novel genetic variants causing premature ageing

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**Background:** A 49-year-old man with a history of massive

coronary disease, valvular disease and diabetes mellitus was admitted with a myocardial infarction and haemorrhage of the pons. He looked much older than his age, and in combination with disorders commonly found in the older population, this suggested an underlying condition causing premature ageing. **Methods and theories:** Werner syndrome, a syndrome of progeria (rapid ageing) in the adult, is a disorder caused by mutations in the WRN gene. In contrast, Hutchinson-Gilford progeria syndrome (HGPS), is a progeria syndrome in children caused by mutation in the LMNA gene, and is one entity in a large and varied group of diseases called laminopathies. Recently, cases of atypical adult progeria have been described with different LMNA mutations, connecting progeria in the young with progeria in the adult, suggesting a spectrum of diseases with molecular heterogeneity. **Results:** Based on clinical diagnostic criteria, our patient was considered a "possible Werner syndrome". Genetic testing showed a novel combination of a heterozygous LMNA mutation in exon 2 (R133L) and a heterozygous WRN stop codon mutation. **Discussion:** Our patient spent more than 15 years with repeated healthcare contact due to massive premature heart disease and had a very characteristic appearance of general ageing. However, otherwise highly competent health care personnel did not consider a rare underlying condition. Are we as professionals scared to acknowledge the biological variations within ageing? Has ageing become our society's last taboo? We believe attention to biological ageing is important in order to best adapt the treatment and care to each individual. **Conclusion:** We consider our patient as primarily a laminopathy case with a likely contribution to his phenotype from the heterozygous WRN mutation. This is an interesting contribution to the knowledge about the heterogeneity of these diseases and an exciting backdrop to further understand the mechanisms of normal ageing.

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P1-31

## Treatment intervention in nursing home versus hospital admission for patients with neuropsychiatric symptoms of dementia.

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**Objectives:** To investigate the clinical outcome of an ambulant treatment intervention in the patient's nursing home unit compared to hospital admittance. **Methods** and theories: Optimal treatment of neuropsychiatric symptoms, or behavioural and psychological symptoms in dementia (BPSD), is debated. Due to the increasing number of elderly, geriatric psychiatry hospital services will need to interact more closely with the municipalities and their nursing homes in order to meet the health challenges of BPSD. A further aspect of

BPSD is that the condition may worsen when the patient is brought out from the daily routine and surroundings and admitted to a hospital. Nursing home patients with BPSD referred for admission to hospital were randomized to either hospital admittance or ambulant treatment intervention in their nursing home unit. Registration of BPSD together with the caregiver's distress were assessed at T1, T2 and T3 using the Neuropsychiatric Inventory (NPI). **Results:** The intervention group consisted of seven females and one male and the control group of five females and two males. Median age (range) was 87 years (70/95) and 82 years (62/92) respectively. The mean NPI score ranged from 23 to 98 at T1, indicating severe neuropsychiatric symptoms present in both groups. Both treatment groups showed a statistically significant reduction in BPSD, and there was no significant difference between the groups. NPI-reported carer distress was equally reduced in both groups. **Conclusions:** This study indicates that a standardised intervention in nursing home units is an equally effective treatment to hospital admission for patients with BPSD. Perceived carer distress was significantly reduced when they were engaged throughout the whole intervention process and when transference of knowledge and skills took place. Our data may carry possible health economic implications and further research should therefore be conducted within this field.

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P1-32

## Cross-validation of a Japanese Version of the Gerotranscendence Scale

### Factor Structure, Reliability, and Validity in an Older Japanese Sample

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**Objectives:** Gerotranscendence is a developmental process accompanying natural aging. Tornstam (1994) defined it as a shift in meta-perspective, from a materialistic and rational vision to a more cosmic and transcendent one, normally followed by an increase in life satisfaction. Previous qualitative studies suggested that the oldest old Japanese could show cultural-specific gerotranscendence signs. Thus, a Japanese version of the gerotranscendence scale was developed to measure gerotranscendence among the older Japanese (Masui et al., 2010). The present study evaluates the factor structure, reliability, and validity of this scale. **Methods:** Participants were 1000 septuagenarians aged 69–72 (479 males, 521 females) and 512 octogenarians aged 78–82 (248 males, 264 females). They responded to a questionnaire that



included the 30-item gerotranscendence scale and components of subjective well-being: life satisfaction, positive affect, and negative affect.

**Results:** The confirmatory factor analysis showed that the previously established eight-factor structure was replicable. The model-fit indexes (X2 = 1084.09; df = 322; p < .001; CFI = .85; GFI = .95; AGFI = .93; RMSEA = .04) exceeded the acceptable levels, except for X2 and CFI. Cronbach's alpha coefficients were moderate (.47–.61), except for "Transcendence from dualism" (.36). Positive associations were observed between six of eight subscales of gerotranscendence and subjective well-being, except for "Introversion" and "Transcendence from dualism." The subscale scores, except for "Introversion," were higher among octogenarians.

**Discussion:** The current study indicates that six out of eight subscales of the gerotranscendence scale can capture the adaptive development among the older Japanese. Future studies should cover the oldest old and examine the predictors of gerotranscendence, including physical, psychosocial, and cultural factors. We'll add further octogenarians to the analysis and report the results at the congress.

P1-33

### White matter hyperintensities are not associated with orthostatic hypotension in mild dementia – a cross-sectional study

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 Co-Authors: Professor Dennis W. Nilsen, Professor Dag Aarsland

**Objectives:** White matter hyperintensities (WMH) are commonly found in magnetic resonance imaging (MRI) scans of the brains of older people, particularly those with depression or dementia. WMH are modestly associated with classic cardiovascular risk factors. Some studies suggest that orthostatic hypotension (OH) might be important for the development of WMH. We aimed to explore the relationship between OH and WMH in a sample of older people with mild dementia.

**Methods:** Older patients with mild dementia diagnosed according to standardised criteria, and recruited from secondary care outpatient clinics from 2005 to 2007, underwent a comprehensive clinical assessment with standardised OH measurement, blood tests and MRI scanning. OH was defined as a reduction of systolic blood pressure (BP) of at least 20 mm Hg or diastolic BP of at least 10 mm Hg within 3 minutes of standing. MRIs were rated for WMH using the Scheltens scale by an experienced neuroradiologist. The study was approved by the regional ethics committee.

**Results:** 246 patients fulfilled the inclusion criteria. 139 of these had MRI scans that could be rated. The only significant difference between those rated for WMH and the rest was that the former included a higher proportion with Alzheimer's disease (64% vs 46%, p=0.006).

When comparing the patients in the highest and lowest WMH

quartiles, there were no significant differences in proportions with OH, or systolic and diastolic BP drops. The only significant differences were that patients in the highest quartile were significantly older (median age 78.4 vs 72, p=0.002), and more often had a history of stroke (9/28 vs 2/34, p=0.016). We found no significant correlations between Scheltens scores and systolic or diastolic BP drops (Spearman's rho 0.037, p=0.700 and -0.122, p=0.202, respectively). Potential predictor variables with p<0.25 in bivariate logistic regression analyses (age, hypertension, APOEε4 status, previous stroke) were entered into stepwise multiple logistic regression analyses. Only age remained a significant predictor of being in the highest WMH quartile (B=0.112, SE=0.048, p=0.019, OR 1.119 (95% CI 1.018-1.230)).

**Conclusion:** In this sample of older people with mild dementia, the severity of white matter hyperintensities was not associated with orthostatic hypotension, but with age only.

P1-34

### Sharing knowledge to advance healthcare policies in Europe for People Living with Dementia and their Carers

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The last 50 years in Europe have seen a dramatic increase in healthy life expectancy; however, this period has also seen a corresponding elevation in diseases linked to aging, particularly dementia. Given the high prevalence, cost, and profound impact on society of Alzheimer's disease and other dementias, they are a public health priority at the EU level.

The ALzheimer's COoperative Valuation in Europe (ALCOVE) is a Joint Action co-financed by the European Commission and comprised of 30 partners from 19 EU Member States. ALCOVE aims to improve knowledge and information exchange on dementia and its consequences to preserve health, quality of life, autonomy, and dignity of people living with dementia and their carers in EU Member States.

ALCOVE's main objectives are the following: 1) To establish a European network of healthcare institutions; 2) to inform and advise policymakers, healthcare professionals, caregivers, and citizens through convergent recommendations; 3) to reduce the risks associated with psychotropic drug use, particularly antipsychotics.

ALCOVE aims to improve data on dementia prevalence; access to early dementia diagnosis; care for those living with dementia, especially those with behavioural and psychological symptoms; and the rights of people with dementia, particularly with respect to advance declarations of will. In conducting this work, ALCOVE draws on previous European studies, including

EuroCode, and existing networks, including the Joint Programming on Neurodegenerative Diseases (JNPD), European Alzheimer Disease Consortium (EADC), European Dementia Consensus Network (Edcon), Early detection and timely Intervention in DEMentia (Interdem), and Alzheimer Europe. The 7 work package leaders - France (coordination), Spain (dissemination), Slovakia (evaluation), Italy (epidemiology), United Kingdom (early diagnosis), Finland (care and services) and Belgium (rights and dignity) constitute the Executive Board of this Joint Action running 2011-2013.

P1-35

### Adopting the Seniorfriendly Hospital Framework: caring for frail older patients in the Orbis Medical Centre

Author: Mr. Herbert Habets  
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 Co-Authors: Walther Sipers, Erik van Rossum

**Objectives:** Hospitals face an increase in frail older patients vulnerable to loss of function and often experiencing adverse events during hospital stay. Orbis Medical Centre aims to work towards better health outcomes for these patients. Evidence indicates that a systematic integrated approach is fundamental to succes (Wong, 2011). Therefore the hospital has adopted the Senior Friendly Hospital Framework (Parke, 2004) as a main strategy. Maintaining and improving optimal function, improvement of patient and family satisfaction, facilitating discharge, targeted interventions to prevent complications are main objectives.

**Methods:** The Senior Friendly Hospital Framework was translated in a so-called 5-C model. The five building blocs (C's) of this model are: Construction: physical environment; Communication / attitude; Coach / family: family engagement in care; Continuity of care; Complication prevention. Facilitated by the support of the management, in cooperation with older persons, with participation of students from different background the model is realised in a stepwised approach.

**Results:** Every patient (+70 years) is screened for frailty by integrating the Groningen Frailty Indicator in the digital nursing assessment. In the same way fall risk, risk of delirium, malnutrition and functional decline is determined. A multidisciplinary consultation team assesses frail patients and gives preventive advices to the wardpersonel.

A toolbox with a summary of useful interventions was distributed hospitalbroad. An effectstudy of this proactive approach is underway. An innovative physical environment (only single patientrooms) offers new options with regard to family participation, deliriumprevention, communication. The CodePlus, a Canadian evidence based set of design guidelines was translated, adapted and used. A model for the preparation of discharge of older patients was developed and will be implemented in 2012.

**Conclusions:** Although an effectstudy is underway, it can

already be concluded that the model is inspiring, in engaging professionals, students and older people in changing the entire hospital into a more seniorfriendly environment.

P1-36

### The importance of environmental factors in dementia care units and its influence on marital relationships

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 Co-Author: Professor Siri Ytrehus

**Background:** Housing and care for people with dementia is continuously changing. Different types of housing and living arrangements have been developed, and there are major differences in their fysical design, size, and location. Even though the housing and the organization of homes and institutional care for people with dementia can vary, the importance of good environments and private space is emphasized. This study focuses on marital relationships in dementia care units. As the illness progresses, transfer to a dementia care unit is often needed. Relocation of a partner to such units will strongly affect the relationship. The unit's design can, however, provide positive effects for the spouses' opportunity to continue their relationship. Still, marital relationships in different caring settings have been scarcely focused in research; this is therefore emphasized in this study.

**Objective:** Explore the importance of environmental factors and its influence on marital relationships in dementia care units.

**Method:** Qualitative in-depth interviews with spouses above the age of 65 of persons relocated directly from home to dementia care units in the southern parts of Norway.

**Results:** After relocation of the partner, the spouses came visiting on regular basis. They appreciated the private room, and the room was frequently used during visits. Some of the spouses found the possibility to create a homelike environment in the room important, both by using furniture, personal objects and photographs. Additionally, the private room was expressed as an important arena which made it possible to continue caring for their partners, as well as a place for maintaining cherished activities significant for the couple. The private room, or access to private space, was important as a continuing factor in the relationship, in order to recapture significant routines and habits incorporated by the couple. Although private room for many was highlighted as important, there were also spouses who did not find this significant. They gave the impression they're partner's state of health had an influence on this.

**Conclusion:** The opportunity to continue the relationship after relocation seems important to the spouses, however, this could vary depending on the health condition of the person with dementia.

P1-37

## Not without my pet! Domestic animals and loneliness among older Swedes

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Co-Authors: Dr Anna Dahl, Dr Ola Sternäng

**Objectives:** Cultural factors, living arrangement – living alone or not – and health are determinants of loneliness in European countries (Sundström et al. 2009), but we know little about potential effects on loneliness by pet ownership. In Sweden there are about 9 dogs/100 inhabitants, with the highest rate in Jönköping county (19/100), about the same rate as for underage children/100 inhabitants. We analyse potential effects on loneliness among community residing older persons. **Methods and theories:** It is a common assumption that domestic animals provide an object for affection and also prevent or alleviate feelings of loneliness. We use a local study in Mullsjö, Jönköping county, of persons 57+ in 2010 (26 % have a pet) and the nationwide SATSA study to analyse potential effects of pet ownership on loneliness. **Results:** 28 % of co-resident persons have a pet, 17 % of persons who live alone. In total 4 % of pet owners feel lonesome, 7 % of the non-owners. Among persons who live alone, 13 % of pet owners feel lonesome, whereas 18 % of non-owners feel this. In the most vulnerable group, persons who live alone and suffer poor health, the percentages are 19 % and 25 % respectively. To complete the panorama, 72 % have been caring for a pet during their life course, but regression analyses show only weak associations between pet ownership and loneliness. Partnership and health remain prime factors in loneliness. **Conclusion:** Rates of loneliness depend systematically on household pattern and health as seen in other studies (Sundström et al. 2009, 2011). Pet ownership has little influence on rates of loneliness when living arrangements and health are taken into account.

P1-38

## When Children Go First: How Many Older Swedes Lose an Adult Child?

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**Objectives:** We assess how common it is for older persons to lose adult children and how this has shifted over time. Loss of an underage child was common in the general population until recently, with on average 18 % of mothers in 1935 having lost at least one child. (Longer marriages and unions with many children had much higher risks.) **Methods and theories:** We use demographic sources and survey

data to estimate risks. There is little research on the scope of loss and implications for bereaved elderly parents. **Results:** Family networks of older Swedes have become tighter: older people increasingly have partners, siblings, children and other off-spring, and progressively also parents. Maybe this – although many people presume the opposite tendency – has numbed us for the potential loss of close relatives. Population data for Swedish women born in 1940 or later indicate that the risk of losing one or more children under 1 year has decreased to about 1 %; for children under 20 years of age to ca. 2 % altogether. Among women born in 1940 3.4 % have so far lost an adult child (20+), among women born in 1950 1.4 % so far (2010). Probing loss of adult children with survey data is problematic. Estimates of this loss for today's older Swedes vary from 5 % for 50-74 year olds, to 16 % of the 80+. Historical population data since 1749 suggests a decreasing risk of death of adult children, but the risk is still sizeable. Possibly as many as 4 out of 10 of today's older persons will lose one or more of their adult children before they die themselves. **Conclusions:** Many older persons eventually risk to lose one or more of their adult children. The emotional and practical implications of these losses are little researched or understood, as are also the lifelong effects of loss of an underage child.

P1-39

## Physical activity among elderly with chronic pain

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**Objectives:** The study aimed to investigate physical activity among elderly and how pain characteristics, self-efficacy, and various symptoms affect the degree of physical activity among elderly with chronic pain. **Method:** Data was obtained through posted questionnaires sent to a randomized selection of persons (65 +) living in Sweden. The questionnaire included questions about physical activity (Grimby's activity scale), kinesiophobia (Tampa Scale of Kinesiophobia, TSK-11), pain characteristics (pain intensity, pain duration), self-efficacy (General self-efficacy scale) and symptoms (dizziness, balance, continence, fatigue, and depression). Pain lasting longer than 3 months was used as the definition of chronic pain. To study the associations between the variables multiple stepwise linear regression were performed using physical activity as dependent variable. **Results:** 1141 where included in the study. 433 (37.9 %) reported chronic pain (57% women, mean age 74.3 years). 10.1 year was the mean duration of having chronic pain and 16. 7 % had pain at multiple locations. Those with chronic pain were significant less active than those without pain ( $p < 0.01$ ). In the total population men reported significant higher levels of physical activity ( $p < 0.01$ ), whereas among those with chronic pain there

was no difference between genders. Kinesiophobia ( $B = -0.30$ ), age ( $B = -0.18$ ), self-efficacy ( $B = 0.17$ ) and balance ( $B = -0.16$ ) showed statistically significant associations ( $p < 0.01$ ) to physical activity. **Conclusion:** For elderly with chronic pain, age, kinesiophobia, low self-efficacy and balance difficulties were variables associated with lower levels of physical activity. All associated variables except age are possible to intervene and of importance to consider in clinical settings and treatment programs when aiming to increase physical activity among elderly with chronic pain. Thus, treatment programs should have a broad perspective and include both physical and psychological variables.

P1-40

## Addressing social isolation and loneliness through practice

Author: Rob Hankins  
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'Living Well' is an innovative program being piloted in South Australia which suggests that time-limited intervention can address loneliness in older people and develop sustainable social support. For one lady it was a laptop and computer lessons, for another it was organising a volunteer position at a local primary school. Whatever the solution, a range of simple interventions have made a world of difference for a growing number of older people. Social isolation and loneliness amongst older people living in the community have been associated with adverse health outcomes, and increased risk of placement into residential care or death for older people. Despite evidence of these negative impacts, social isolation and loneliness have been low priorities for funding or innovative service responses whilst traditional services have created dependency rather than addressing the problem. As service providers we face the challenge of providing services without creating service dependency, and the uncertainty of not knowing whether the often hidden problems of loneliness and social isolation are being addressed effectively through these traditional services. For the past four years, ECH (based in Adelaide, South Australia) has been piloting an innovative restorative program with socially isolated and lonely older people who are living in their own homes in the community. Evaluation of the 'Living Well' program results suggests that time-limited intervention strategies including individualised goal setting, personal coaching and support can be effective in supporting older people to resume previous social relationships or to develop new social connections in their community, thereby reducing isolation and loneliness. Using client case studies, this paper will highlight the diverse barriers to social participation as well as the range of responses which have been successfully implemented and have supported older people to develop sustainable social supports beyond the life of the intervention program.

P1-41

## Relationship between leisure activities and cognitive function among the elderly in Japan

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**Introduction:** Leisure activity in old age is important to maintain physical health, mental health, and cognitive functions. However, the causal relationship and mechanism that influences the functional components of leisure activities and cognitive function is still unknown. This study examined the relationship between leisure activity components and cognitive function, not on each activity itself. **Method:** 987 individuals (471 men and 516 women) in the age range of 69–72 years (mean age  $70.1 \pm 0.88$  yrs) were analyzed. We used 11 leisure activities based on the Activity Questionnaire (Jopp & Hertzog, 2010). Participants were asked to choose every item if they participated. Cognitive function was measured by 4 tests: MoCA-J, word recall and recognition, and inductive reasoning test. **Results:** Leisure activities were categorized into 3 categories: strongly tap physical dimension, intellectual dimension, and moderately tap physical and intellectual dimension. We calculated activity involvement score for individuals by summing the number of activities in each category. For the multiple regression analysis, cognitive function was a dependent variable and activity involvement scores were the independent variable; sex and education were controlled. As a result, age, education, and intellectual dimension influenced all scores of cognitive function. In addition, physical and intellectual activity influenced MoCA-J score. And physical activity and physical and intellectual activity influenced score of recall test. **Discussion:** These results indicated that not only intellectual activity but also physical activity influence cognitive function. Additionally, the influence of the leisure activity varied according to the dimension of the cognitive function. Individual activities have different degrees of physical load and cognitive components. Further research should examine the components of each activity and the relationship between activity components and cognitive function.



P1-42

### 24-h mobility during acute hospitalization in older medical patients

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**Background:** Inactivity during hospitalization in older medical patients may lead to functional decline and new disabilities in Activities of Daily Living. The objective of this study was to quantify 24-h mobility and assess the daily level of basic mobility during hospitalization in acutely admitted older medical patients. **Methods:** A prospective cohort study in older medical patients (+65) who were able to walk independently on admission, and a reference of patients unable to walk independently. The 24-hour mobility level during hospitalization was assessed by accelerometers from admission to discharge. Basic mobility, defined as the ability to get in and out of bed, sit-to-stand from a chair, and walk, was quantified within 48 hours of admission, and repeated daily throughout hospitalization. Basic mobility was scored on a scale between 0-6. A score between 0-5 corresponding to some level of dependency in basic mobility, and a score of 6 corresponding to being independent in basic mobility. **Results:** Forty-three patients able to walk and six reference patients were included. The mean age was 84 years and the sample included 52 % men. The patients able to walk had a tendency of being hospitalized for fewer days than the reference patients (7 days versus 16 days, p=0.13). The patients able to walk were lying median 17.0 hours, (IQR: 14.4-19.1), sitting 5.1 hours (IQR: 2.9-7.1), and standing/walking 1.1 hours (IQR: 0.6-1.7) per day. On days with independency in basic mobility, the patients able to walk were lying 4.1 hours less compared to days with dependency in basic mobility (p<0.0001), sitting 2.4 hours more (p=0.0004), and standing 0.9 hours more (p<0.0001). The mobility level was independent of co-morbidities, and pain. **Conclusions:** Older acutely hospitalized medical patients with walking ability spend 17.0 hours/day of their in-hospital time in bed, and the level of in-hospital mobility seems to depend on the patients’ level of basic mobility.

P1-43

### Local Medical Center as Idea and Practice Possibilities and Challenges

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Co-Author: Student Siv magnussen

**Introduction:** A new health care reform in Norway - The Cooperation Reform - will provide challenges in the primary health care in the municipalities. A consequence of the reform is

that hospitals increasingly will focus on short-term acute care and outpatient services. Hence recent health care policy has promoted local medical centres (LMC) as a remedy for building a more robust health care in the municipal sector. The term LMC is used for municipal health services where one ore more municipalities cooperate with the local hospital do deliver health care before, after, and instead of hospitalization. The aim of this study is to explore how LMC as a normative model is understood and translated into practice in various Inter-municipal cooperation regions. Furthermore what kind of possibilities and challenges do various local authors meet in their efforts to realize their LMC? **Methodology:** The project is based on a case study design. Data was collected in three inter-municipality cooperation regions in health care by conducting in depth open ended interviews, examining written documents, and observing several meetings. **Results:** LMC reflect a highly flexible type of health care facility. Preliminary results from the regions indicate different models of LMC. In one region LMC represent health promotion at home. In another region LMC represent an alternative to hospital. The main patient group, in both regions, is old and chronically ill people. However, many of the challenges the municipalities face are similar and related to funding uncertainty and the ability to gain the competence needed for a more comprehensive health service. **Conclusion:** Our preliminary results suggest that LMC will provide various health services depending on local adaption and translations of the idea of LMC. In the end, a consequence may be that the quality of the health service delivery for old and chronically ill people will vary considerably between municipalities in various regions of the c

P1-44

### Vitamin D status in geriatric patients from 2007-2010

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Vitamin D status in geriatric patients from 2007 – 2010. University Hospital of Gentofte, Denmark, Jacobsen, Kim Otto, MD, Kannegaard, Pia Nimann, MD, et al. Gentofte Hospital, med.afd. C, Niels Andersensvej 65, DK-2900 Hellerup, Denmark. E-mail: kiotja01@geh.regionh.dk or pkan0004@geh.regionh.dk **Objectives and background:** Vitamin D status in the elderly population has drawn much attention over a long period of time. In the Geriatric Department of Gentofte Hospital, Copenhagen, Denmark, we have collected information on vitamin D status for a period of four years. **Methods:** Many patients admitted to our department were screened for vitamin D deficiency. In the beginning of the period fewer assemblies were performed primarily due to less focus and costs. However, over the four year period the number of assemblies increased. In the end of the period almost all patients were screened. We found a high percentage of

patients with deficiency in varying degrees despite the increase in public focus. **Results:**

Year	Number	D<50	D<25
2007	254	154 (61%)	72 (28%)
2008	324	174 (54%)	84 (26%)
2009	411	159 (39%)	62 (15%)
2010	469	157 (33%)	41 (9%)

**Conclusion:** Final data analysis has not yet been performed. Additional data on age, gender, se-calcium, se-parathyroid hormone, and bone mineral scans will be ready in March 2012 and will be presented in an oral presentation or a poster.

P1-45

### Intermediate care in nursing home is more sucessfull for older patients with a medical compared to an orthopedic admission diagnosis

Intermediate care in nursing home

Author: Dr. Jenny Foss Abrahamsen  
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**Introduction and objectives:** Storetveit nursing home has organized a 19-bed intermediate care unit staffed with a geriatrician and increased nursing staff and physiotherapists. A heterogeneous group of elderly (70 +) community-living patients with acute illness are transferred shortly after hospital admission for further treatment and rehabilitation. The major indicators for successful treatment are that the patients are able to return to their home after treatment and that the length of stay does not exceed 14 days. In the present study we wanted to compare the two major groups of medical and orthopaedic patients, concerning these indicators. **Method:** A patient registry recording routine medical informations on all consecutive patients was started July 2011. The information was analyzed with SPSS 19 software for Windows. **Results:** So far, 239 patients (mean age 85 years) have been included. The most common medical diagnoses were infections, heart disorders and COPD. Of the orthopaedic patients 39% had a trauma with no fracture, and 61% had a fracture. **Admission characteristics:** The orthopaedic patients had a lower Barthel ADL index 60/100, compared to the medical patients 75/100. There were no difference concerning age, sex, living alone, no of diagnosis, home care, multipharmacy, cognitive status depression nutritional status and orthostatic BP. **Outcome:** 73% of the medical versus 43% of the orthopaedic patients were discharged to home within 14 days. The mean length of stay was 12,7 versus 14,5 days for the medical and orthopaedic patients, respectively. **Conclusions:** More patients with medical diagnosis were able to

return to their home within 14 days. These patients may be more suited for treatment in an intermediate ward compared to patients with orthopaedic diagnoses. Further analysis of the heterogenous group of orthopaedic patients and one year follow up is required to answer which patients are best suited for intermediate care in a nursing home.

P1-46

### The predictive value of fatigue for nonfatal ischemic heart disease

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Chronic disease in midlife may affect the possibility of a good physically functioning old age. One early sign of chronic disease may be fatigue, which has been shown to increase subsequent disability, use of health services and mortality. Hence, the purpose of the present study was to investigate whether fatigue predicts non-fatal ischaemic heart disease (IHD) in middle aged men. The study population was defined as 5216 healthy middle-aged men born in the Copenhagen Metropolitan area in 1953. Fatigue at baseline was measured by questions on feeling worn out and energy level during the past four weeks. IHD diagnosis was retrieved from the Danish National Patients Registry. Kaplan Meier and Cox proportional hazard model were used to test the association at 4-year follow-up. Analyses were adjusted for socioeconomic position, life style factors, depression, diabetes, hypertension and antihypertensive medicine. Fatigue was associated with hospitalization for non-fatal IHD (HR=1.98, 95%CI=1.09-3.61); however the association became non-significant in multivariable-adjusted models (HR=1.57, 95%CI=0.82-3.01). When the analyses were stratified by smoking we found fatigue to be a strong independent predictor of first hospitalization for non-fatal IHD among non-smoking men (HR=6.00 95%CI=2.00-18.04), but not among smokers. It is suggested that fatigue is an early marker for IHD especially in individuals with a healthy lifestyle.

P1-47

### An everyday life with minor and more wide-ranging adjustments

Author: Dr. Eva Magnus  
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Co-Authors: Occ.Ther., professional coord. Nina Marstrand

**Objectives:** Everyday life is shaped in the struggle between what the individual desire as goals, and the restrictions one meets. This presentation put attention to how elderly persons with a



newly diagnosed low vision experience and organize their everyday life. Findings are drawn from a minor project, with the purpose of increasing knowledge about this group of citizens, to be able to improve early intervention initiative.

**Methods:** Methods used were the time geographic diary in combination with a qualitative interview. The diary method focuses on the ordinary everyday life and the connections between time, space and activity. Nine elderly aged, aged 65 to 88 were given a notebook with the headlines: Time, What I do, Where, Together with and Comments. During three days, included one week end day, they were asked to record activities over time in their naturally occurring order. The diaries were individually coded, and adapted through a computer program. Subjects from the diary were the starting point of the qualitative interview, followed by themes prepared in an interview guide. Themes were built on topics connected to how low vision can have an influence on daily life activity and participation.

**Findings:** Preliminary analyses show how the participants struggle to live what they experience as “the best of days”. They express hope and anxiety of the future, and of how to live and cope with the new situation. At the same time they find adjustments and strategies in preferable and desirable activities. Family members give support or resistance. Being a part of society is important; that is also the possibilities to keep on to activities implying a special meaning in life.

**Conclusions:** These elderly are living an everyday life with minor and more extensive adjustments. They have found ways of handling new challenges as best as possible, and they worry about the future. This knowledge is significant when discussing services and early intervention strategies.

P1-48

## Adding value to the daily lives of the vulnerable elderly

### When Time is the fundamental substance of life

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**Background:** At a time when those caring for the elderly are asked to do more with less we ask: Might social care and Quality of Life (QOL) suffer? Over 17 years VEGA, a collaborative translational research network, evolved a model of social aging. The model focuses on the time aspect of situations in everyday life (SEL). Time is the fundamental substance of life. The VEGA studies are about days, weeks, mornings, time alone, time for conversations, time for cooking and eating, time for outdoor life and sleep. The model links QOL to the personal values elderly people assign to these situations. The VEGA studies are case studies of these situations and studies of attempts to improve their value content. The care givers used a small steps strategy care givers continuously did small but important things to change to change the SEL.

**Purpose:** This study analyzed findings from several studies that

employed the VEGA model of social aging to show how attention to SEL and personal values may improve QOL for vulnerable elderly adults.

**Procedure:** This study is a multi-year meta-analysis of the case studies on SEL. While it is not possible to generalize findings from case studies to large populations, it is possible to use them to critique the VEGA model of social aging, and to better understand the relationship between personal values and SEL and the role it plays in an older person’s everyday life.

**Results:** This study of SEL shows a number of values assigned to SEL, i.e. participation, togetherness, confidential conversations, ownership, attention, personal routine, personal space, bright spots and the fullness of time. These personal values and threats to them can affect quality of life. The study suggests a number of ways to add value to SEL to improve the daily life of the elderly.

**Conclusion:** The studies showed how personal values are linked to SEL and contribute to the quality of a person’s daily life. Specific suggestions were made for caregivers about ways to add value to SDS and improve QOL. Since these suggestions can be implemented without much cost, care givers and policy makers may find them immediately useful.

P1-49

## Last three days of life in the hospital: A comparison of pain management in adult and old cancer patients

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Objectives of the study Pain is recognized as a substantial burden in cancer patients. There are numerous studies regarding pain in adult cancer patients, while the knowledge concerning pain and pain management in the oldest terminally ill cancer patients is deficient. The objective was to investigated health-care workers documentation of frequency of pain characteristics and whether there were differences in documentation of pain characteristics in hospitalized adult cancer patients (36-77 years) and old cancer patients (78-99)

**Methods:** The study included 110 cancer patients: 54 adult cancer patients and 56 old cancer patients from a general hospital in Oslo, Norway. Data were extracted from the patients’ electronic records using the Resident Assessment Instrument for Palliative Care.

**Results:** Median age of the adult cancer patients and the old cancer patients was 65.5 years and 84.0. The two groups did not differ with regard to mean length of stay in the hospital, sex, residential status or ward admittance. A higher proportion of the adult patients lived with family members or others. Pain was reported in 80.9% of the total sample. There were no significant differences between the adult and old patients with

regard to frequency of pain, intensity of pain, breakthrough pain, new pain and pain control. A proportion of patients from both groups, 11.3% of the adult patients and 9.3% of the old patients, did not receive adequate pain control. Analgesics were administered to 92.3% of the adult patients and 94.1% of the old patients.

**Conclusions:** Pain was a common symptom in hospitalized dying cancer patients in the last three days of life regardless of age. In contrast to previous studies, this study found no significant differences between adult cancer patients and old cancer patients with regard to pain characteristics. In both age groups there were potential for improvement for better pain control.

P1-50

## Psychological well-being and metacognitive efficiency in late adulthood: The impact of cross-cultural factors on the Italian elderly population.

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A body of research shows that cross-cultural differences are related to implicit theories on ageing. Specifically, in the Western individualistic cultural context, elderly people are perceived as obsolete, weak, and unable to contribute usefully to society, whereas in collectivistic cultures, older people are venerated as a resource of knowledge and cultural traditions (e.g., Yoon, Feinberg, Rahhal, & Winocur, 2000). Current research is mainly aimed at investigating the effect of cross-cultural and age-related factors on self-referent well-being in the Italian population. One hundred-thirty-nine healthy adults (20 to 99 years) were recruited in individualistic northwest Italian (i.e., province of Cremona) and collectivistic Sardinian contexts (i.e., province of Ogliastra) and were respectively assigned to the following groups: Young (i.e., 20-30 years old), Old (i.e., 65-74 years old), and Very Old (i.e., > 75 years old). Participants were administered a battery of tests, including self-referent cognitive efficiency scales, subjective psychological well-being, depression, and psychological distress scales. Participants from the collectivistic context show greater levels of well-being, lower depressive signs and lower levels of psychological distress than controls from northwest Italy. Moreover, as expected, age-related factors impact psychological wellness: Old participants self-refer more emotional competencies, coping strategies and personal satisfaction and less depressive symptoms than the Very Old group.

In conclusion, the present outcomes suggest that the dominance of a collectivist culture — emphasising the positive social role of the elders are respected and thought as helpful and depositary of the local traditions —seems to promote subjective well-being in late adults by means of the maintenance of a more positive social status for the elderly and a greater involvement in the social network.

P1-51

## Development of Life-management Strategies through Work Experience and Its Effect on Subjective Well-being among the Elderly

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**Objective:** The selective optimization with compensation (SOC) model relevant to strategies of successful life management was developed by P. B. Baltes and his colleagues. Empirical studies have shown the association between the use of SOC strategies and high subjective well-being. An assumption underlying the SOC model is that the use of SOC is developed by life context over a lifetime. Our study examines the effect of the longest work experience on SOC use and subjective well-being in late life.

**Methods:** Using data of 1,000 Japanese community-dwelling participants aged 69–72, we conducted path analyses to investigate that work experience by means of life management strategies affects subjective well-being in late life. Life management strategy was evaluated with the Japanese abbreviated version of Freund and Baltes’ (2002) self-report measure for elective selection, loss-based selection, optimization, and compensation. Three variables served as measures of subjective well-being: positive emotion, negative emotion, and life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985; Mroczek & Kolarz, 1998). Work experience was evaluated using work complexity scores (Kohn and Schooler, 1983). This construct has three dimensions, namely, data, people, and things. Also education was included.

**Results:** The path analyses showed that work complexities influenced the use of SOC strategies, which, in turn, resulted in positive subjective well-being in late life. Interestingly, a significant difference was observed between the use of SOC strategies and subjective well-being between old age men and women.

**Discussion:** These results indicated that the use of SOC strategies were based on work experience. Our findings suggest that other factors, such as marital status and family relationship, may be important predictors of subjective well-being among old Japanese women.

P1-52

## The relationship between self-reported memory compensation behaviors and prospective memory performance in elderly people

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**Background:** Prospective Memory (PM) means the memory for future intentions. PM is important in maintaining healthy and safe independent living(Einstein&McDaniel,1996). It is essential for people to prevent from causing PM failures by memory strategies. Dixon, de Frias, & Bäckman (2001) made the Memory Compensation Questionnaire (MCQ). It is unknown whether memory compensation behaviors compensate effectively PM performance. The purpose of the present study is to reveal the relationship between self-reported memory compensation behaviors and prospective memory performance in elderly people. **Method:** The experiments were conducted with 151 elderly drivers, ranging in age from 60 to 85 years old (M = 68.06, SD = 5.20). They were required to answer the MCQ and conduct Virtual Week (VW, PC version; Rendell & Craik, 2000) as PM measure. VW is a PC version of a board game on which participants move around with roll of a dice and are required to make choices about daily activities and remember to carry out lifelike activities (PM tasks). First, we measured partial correlation coefficients between MCQ Scales and VW Performances. Second, we measured **Results:** The results showed that the elderly people who usually used more internal strategy and effort strategy in daily life performed better in irregular time-based tasks which were relatively difficult. On the other hand, the elderly people who usually used more reliance strategy and time strategy in daily life performed worse. Then, separate multiple regression analyses for each strategy were performed. The results showed that personality have influenced on internal strategy and effort strategy, however self reported PM failures and living condition have influenced on reliance strategy and time strategy.

P1-53

## Geriatric Assessment Unit (GAU) Preliminary results from a Subacure Geriatric Assessment Unit

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**Introduction and Objective:** In frail elderly people functional

decline, falls and unspecific symptoms may be signs of acute or sub-acute disease. Awareness of day to day change in functional ability and symptoms and availability of sub-acute assessments and diagnostics may be a way to prevent unnecessary acute hospital admission. We report preliminary data from a study focusing the above. **Method:** Two municipals, all GPs in these and the local geriatric department participated. At start front workers in the municipal elderly care went through an education program. A new co-work model for the referral of patients from the elderly care and/or GP to the new sub-acute Geriatric Assessment Unit (GAU) was described. A one-day Geriatric Assessment Program was developed. Diseases, health- and functional problems were identified. Individualized interventions were offered. Study period 1st of September 2011 – 30th April 2012. **Results:** During the first 4 months of the study a total of 31 patients were referred for the GAU (71% females, mean age: 79, 2 years). A number of new diseases or unaddressed health problems were identified: 3 patients suffered acute infection, 1 anemia, 3 cardiac incompensation, 3 cardiac arrhythmia, 3 electrolyte derangement, 10 signs of cognitive dysfunction, 6 malnutrition, 7 inappropriate medication and 20 had impaired muscle strength. Interventions included in 14 of 31 new medical treatment, 15 of 31 change in medication, 13 of 31 referral to physical training and in 11 of 31 referral to more home help services or aids. Two patients were admitted to inpatient treatment, 22 were offered further outpatient treatment and 7 were discharged immediately after the one-day assessment in the GAU. **Conclusion:** Multidisciplinary geriatric assessment on an outpatient basis in frail elderly patients, referred with newly developed unspecific symptoms, falls and functional decline revealed a variety of diseases and health problems available for interventions.

P1-54

## Turmoil and confusion A qualitative study of nurses’ experience with delirium in the face of hospitalized elderly with fracture.

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**Background/aims:** Delirium is a frequently occurring condition of hospitalized elderly, especially among those with fractures. Consequences of delirium are higher mortality, increased hospitalization and subsequent institutionalization. Nursing staff play a key role in prevention and treatment of delirium. Nurses providing care to the suffering of delirium are facing many challenges connected to the state. The objective of the study was to investigate the characteristics of nurses’ practice experience related to the state of delirium in the orthopedic elderly patients.

**Methods:** Fifteen nurses from the orthopedic department of two hospitals in southern Norway participated in three focus group interviews. The data was transcribed and analyzed with themed content analysis. **Results:** The results indicate challenges related to unpredictable surgery programs, insufficient knowledge and poor plans for elderly patients at risk of or who has developed delirium. With regards to clinical nursing knowledge to the state of delirium, the study revealed a need for adopting established routines. Focus group interviews stimulated an interest in regard to changing established routines. Furthermore, the results show that it is necessary to improve nursing practice to elderly patients with fractures, to achieve other possible ways of nursing in the specialist healthcare. **Conclusions:** It is necessary to improve practice of nursing to the elderly with fractures in health services to achieve better quality services adapted to this patient group’s unique needs. The surgical unit context impacts nurses’ opportunities and motivation to perform academically acceptable nursing. Increased attention to knowledge of delirium in older patients is necessary both in nursing education and nursing practice. Knowledge that brings nurses into a position to distinguish delirium from conditions with similar symptoms needs increased focus. In general, short hospitalization periods may contribute to basic nursing care being given low priority. This may result in elderly patients, who are at risk or have developed delirium, not receiving adequate help.

P1-55

## Residential Aged Care in Japan - Strategies to facilitate ‘Aging in Place’-

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Scandinavian countries have earned good reputations as liberal and progressive welfare states, often influencing and leading the other countries’ welfare policies. In the mid-eighties new types of dwellings for dependent older people were introduced in Denmark, with the intention of substituting conventional nursing homes. Japan was among the countries, where they followed and adapted the style of housing (assisted living) in the late-nineties. Consequently, various kind of care-available-housing now exists, where residents maintain their autonomy and are respected as an individual. Along with the change in housing, long-term-care system was newly introduced, and end-of-life care practices are being modified in Japan. However, eight out of every 10 Japanese die in hospital at present. Our clinic locates inside the one of the largest residential aged care facilities in Japan, providing 24-hour medical care with nursing care unit. Those who choose to move into the facility expect to age in place and receive their care on site when their condition deteriorates. We retrospectively studied how end-of-life care was managed in the facility.

Approximately 70% of the residents had to be transferred to the near-by hospital. The factors that lead to the transfer were investigated and our strategies to facilitate ‘aging in place’ will be discussed.

P1-56

## “Before thinking of retirement, I first want to lead a ‘normal’ life!” Perspectives on aging of people with lifelong intellectual disabilities

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The live expectancy of people with intellectual disabilities (PID) has improved dramatically and is nowadays almost the same as for people without disabilities. Some scientists are sanguine that people with lifelong learning disabilities, who already reached a higher age, are in a good position to outstay their non disabled age cohort. This is mainly based on improved living standards and medical advancement. Growing old not only comes with white hair, it also indicates life experience, new possibilities for development and obtaining wisdom. Then again growing old also means increasing probability of bodily changes up to gaining further disabilities due to physiological deterioration, or other chronic illnesses. Due to lack of older PID in the past, Carinthia’s Disability-Care-System is still inadequately equipped to meet the needs of aging adults with intellectual disabilities. The objective of this part of the study is, to find out more about subjective wellbeing of aging PID. What are these people’s expectations, visions, goals and wishes concerning their convenience when growing older. The overall study objective is focusing on necessities in support and supply in aging PID in Austria’s province of Carinthia. In a multi method study design different qualitative conducted data and methods were triangulated. Five different perspectives of involved parties were identified. With a total of 33 face to face interviews, PID were the largest sampling group. They were asked questions following a partly standardized manual. This inclusive research project not only focuses on PID as research objects, it includes them in a participatory approach, mainly in all relevant project proceedings. The data material was analyzed with the qualitative content analysis, according to Mayring. First results, concerning the individual perspectives of PID, on how to reach and preserve wellbeing in later life will be outlined and discussed in this presentation.



P1-57

## Stroke patients' experiences with Wii Sports® during inpatient rehabilitation A qualitative study

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**Introduction:** Every year 12,000 people are hospitalized in Denmark due to stroke. Commercial virtual reality games show potential as beneficial leisure intervention for discharged stroke patients. The aim of this study was to explore Danish hospitalized stroke patients' experiences with Wii Sports® as a supplement to conventional occupational therapy.

**Materials and methods:** A qualitative triangulation design included semi-structured interviews and field notes. Nine stroke patients hospitalized at a stroke unit participated. Patients diverted in gender (6 male;3 female), age (51-95 years), stroke type (2 hemorrhagic;7 ischemic), localisation (6 RCVA;3 LCVA), and prior knowledge of Wii.

Patients received 1-9 interventions with Wii Sports® during a three-week period. Each session lasted 20-40 minutes. Patients' physical and emotional reactions were registered. An individual interview was conducted with each patient and responses were coded by qualitative content analysis.

**Results:** Analysis revealed three categories that encompassed patients' experiences with Wii: 1) variety, 2) engagement, and 3) obstacles and challenges. All patients desired meaningful activities, Wii were seen as a respite, and patients were motivated and engaged during play. Due to stroke impairments, patients experienced disappointments and physical and cognitive challenges. Field notes confirmed the interview findings and showed an intermittent need for therapeutic support. An overarching category showed that all patients related to appreciated or desired past, present, and future occupations.

**Discussion:** Stroke inpatients may experience Wii Sports® as a beneficial and challenging occupation for both rehabilitation and leisure. Incorporation of Wii Sports® into conventional occupational therapy services may benefit patient rehabilitation directly or provide motivation for alternative leisure activities.

**Key words:** Stroke, rehabilitation, Nintendo Wii®, leisure, qualitative content analysis.

P1-58

## Outcome of municipal rehabilitation evaluated by Dynamic Gait Index, Short Falls Efficacy Scale-International, 30-s Chair-Stand Test and Timed Up and Go in fall patients

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Co-Authors: Ole Bruno Faurholt Nielsen, Martin Grønbech  
Jørgensen

**Background:** It is well documented that the risk of falling increases with advancing age, especially amongst women. Approximately 1 in 3 individuals aged +65 experience a fall within a year, increasing to about 50% amongst adults aged +80. In addition, a history of falls is a strong predictor of future falls, as the relative risk ratio (RR) in the following year is 3.0 (range 1.7-7.0) compared to non-fallers, unless appropriately interventions are performed.

**Objective:** To examine the effectiveness of standard municipal rehabilitation on fall patients evaluated by Dynamic Gait Index (DGI), Short Falls Efficacy Scale-International (Short FES-I), 30-s Chair-Stand Test and Timed Up and Go (TUG).

**Methods:** This study was an observational analysis of 48 fall patients (10 men and 38 women) with a mean age of 76.88 ±7.4. All patients were allocated to standard municipal rehabilitation by the Fall Prevention Clinic, Aalborg Hospital. The primary outcomes of interest were improvements in DGI, Short FES-I, 30-s Chair-Stand Test and TUG at 3 months follow up. One sample t-test and Wilcoxon Signed Ranks Test where applied appropriately to the scale type and the distribution of data.

**Results:** During 3 months of municipal rehabilitation DGI increased from 13 (Q1=10, Q3=15) to 15 (Q1=11.5, Q3=20) (p<0.001; n=41), 30-s Chair-Stand Test from 7.44 ± 3.185 to 8.44 ± 3.235 (p = 0.044; n = 39), whereas Short FES-I decreased from 14 (Q1=10.50, Q3=20) to 11 (Q1=9, Q3=13) (p<0.001; n=21). No statistical difference was observed in TUG (14.515 (Q1=11.15, Q3=20.25) vs 14.750 (Q1=11, Q3=19), p=0.402; n=36).

**Conclusions:** Statistical significant improvements were observed in DGI, Short FES-I and 30-s Chair-Stand Test following 3 months of municipal rehabilitation in fall patients, however TUG remained unaltered in this patient group. It appears that a standard municipal rehabilitation regime has a clinical impact on fall patients in the Aalborg area.

P1-59

## How to improve everyday life for vulnerable elderly

Author: Training manager Marianne Elbrønd  
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Co-Authors: Senior consultant Knud Ramian, Network manager  
Inger-Lise Dyhrholm

**Objectives of the study:** For the last 17 years a translational Research network of schools and institutions in Denmark called VEGA, studied how life for vulnerable elderly can be improved. To improve the concept of Quality of life (QOL), we focus on life as strings of moments (SoMo) and study the values built into SoMo. The networks objective is to produce knowledge, models for social aging and methods that makes a difference in practice and in elderly peoples life.

**Methods:** For periods of 5 years the network formulates a collaborative research program. Starting from now we will focus on: Technology in and on time. A number of case studies that allow elderly people as well as employees to systematically give their input into decisions that effect their own life and work will be designed. In sub-projects the study will focus on elderly peoples life in different settings (private homes, daycare centers, nursing homes) and on different moments of life where technology and digitization maybe or maybe not will improve life: Social time, meals, nights, conversations, travel time etc.

**Procedure:** In the sub-projects we will through life- and timefocused conversation examine what different elderly persons are doing and what they want to do to improve life and adding value to the string of moments. A change strategy: "the small steps strategy" will be used to study if improvement in SoMo has taken place. A cross-case analysis of the improvements will be performed and front staff and elderly people will be responsible for effectively dissemination of the know-how results.

**Results:** In earlier VEGA studies 15 areas of improvement in SoMo were found effective: participation, togetherness, order in days and weeks (socially, temporally and materially), personal space, bright spots etc. In this new project: Technology in and on time we hope to find new areas for improvement.

**Conclusion:** Focusing at the strings of moments (SoMo) as the fundamental substance of life and spotting the valuable moments suitable for improvement, makes for a QOL concept that can easily be operationalized. The results from VEGA studies are an argument for the use of simple change strategies focused on time as an efficient and not so costly way to improve QOL for the vulnerable elderly. This makes the VEGA strategies immediately useful.

P1-60

## Discrepancy and consistency between staff and institutional policy with regard to the actual condition of care in day care service in Japan

Author: Mami Toyoda  
*Osaka University*

Because of the increasing number of elderly people, the care services supplied by institutes are now becoming more important. However, the turnover rate of nursing homes' staff tends to be higher, and lack of manpower is a chronic problem for facilities that care for the elderly. In order to solve this problem, work environment of staff must be improve. This study focused on the discrepancy and consistency of policy between the procedures that provided by staff and the institutional policy with regard to the treatment of users. This is an important factor that influences motivation and retirement decision of care staff. 8 care staff working at the same institute (age 21-57years) were interviewed. We asked them about the care provided at the institution, especially about the care what the staff gave themselves and what was institutional policy.

After analysis, the content of the interviews were classified into 3 categories, with 4 standpoints; the problems of users, the actual cares provided by staff, the cooperation with other staff members, and awareness about institutional policy. 4 types of treatment work frames exist, —cooperate with each other (cooperation treatment), the treatment that follow institutional policy (unified treatment), shared treatment strategies among staff (common treatment), and treatment based on the staff's own decision (unique treatment). Additional analysis indicated that the unified treatment is not always the first priority to be go along by staff. Daily cares are based on the unified treatment, but they also pay attention to the information about users, that is constantly exchanged among staff and learn good treatment strategies from other staff's behaviors. Moreover this flexible work frame enables them to challenge new way of treatments. In conclusion, treatment strategies other than unified treatment, are important to build up their skills, which is one of the important factors to encourage them to keep working as care staff.



P1-61

## Housing tenure in later life Differences among older adults in Belgium

Author: Professor Liesbeth De Donder  
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Co-Authors: An-Sofie Smetcoren, Prof. Dr. Tinie Kardol, Sarah Dury, Nico De Witte, Tine Buffel, Dominique Verté

The main purpose of this study is to investigate whether housing tenure differs among older people in terms of socio demographic variables (age and gender), physical health, income and marital status. Housing tenure refers to the legal status under which someone lives. Four different types are examined: homeownership, private rented housing, social rented housing and others (e.g. living with children, beneficial interest). The data for this contribution are derived from the Belgian Ageing Studies among people aged 60 and over (N=48.889) living in 138 municipalities and cities in Flanders, Belgium. In order to answer the research questions, frequencies and bivariate analyses are performed. The results indicate that homeowners have a higher income, a better physical health and are more likely to be married or widowed in comparison with older renters. Differences are also found between older people living in private rented housing and those who live in socially rented housing. Renters on the private market appear to be the most vulnerable category: they are more likely to have a lower income, a poorer physical health and they are more likely to be divorced or cohabitant than older people who live in social housing. The findings revealed the importance of recognizing the various multidimensional inequalities in housing tenure among older adults. Future research could explore additional insights between housing tenure and housing quality in later life.

P1-62

## Out-of-home activity intervention carried out by volunteers improves mood among older people with severe mobility limitation: A Randomized Controlled Trial

Author: Dr. Merja Rantakokko  
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Co-Authors: MSc Inka Pakkala, MSc Irma Äyräväinen, PhD Taina Rantanen

We examined the effects of individualized recreational out-of-home activity intervention on depressive symptoms among community living older people who have difficulty in accessing outdoors independently. The present study is based on the secondary analyses of the “Volunteering, Access to Outdoor Activities and Wellbeing in Older People” (VOW) data (ISRCTN56847832). VOW project was

a randomized single blinded controlled trial (RCT) conducted in Jyväskylä, Finland, in 2008-2011. The inclusion criteria were: agree to participate in a RCT, age 65 or higher, severe mobility limitation, willing to increase outdoor activity and able to communicate normally. After screening, a total of 125 people aged 67-92 years were interviewed at home and randomized into intervention or waiting list control group. Each intervention group member was assigned a trained volunteer who assisted the participant in attending recreational out-of-home activities once a week for three months. Depressive symptoms were assessed at baseline and after 3-month intervention using Center for the Epidemiological Studies Depression Scale (CES-D). The baseline characteristics of the intervention and control groups were comparable. In the intervention group the CES-D score remained practically at the same level over the intervention (from 14.9, SD 6.8 to 14.7, SD 7.4), while in the control group CES-D score increased from 17.3 (SD 10.0) to 18.8 (SD 11.0) (treatment effect  $p=.209$ , group difference  $p=.033$ ). Among the subgroup with minor depressive symptoms at baseline, a significant treatment effect was observed ( $p=.026$ ), where CES-D score decreased in the intervention group and increased in the control group. The findings of the study suggest that three-month out-of-home activity intervention may improve mood among those with minor depressive symptoms. The benefits of out-of-home activity among older people with severe mobility limitation warrants further studies.

## POSTER SESSION II 12-06-2012, 15:00-16:00 ROOM 14/15

P2-63

## SENIORENGAGE Project: Use of Computer and the Internet among Senior and Young Professionals

Author: Dr. Pirjo Tiikkainen  
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Co-Authors: Dr. Tiina Kuukkanen, Jan Bobeth

**Background:** The SENIORENGAGE project will develop, test and validate an Internet platform that introduces the seniors in the IT world, providing them with a social network to share knowledge and experiences with other, both young and senior professionals. **Objectives:** To survey the use of a computer and the Internet among retired and semi-retired senior professionals, as well as among young professionals for to develop platform. **Methods:** The survey with online structured, anonymous questionnaires was conducted in Finland by Jyväskylä University of Applied Sciences (JAMK) and in Austria by Center for Usability Research and Engineering (CURE). In total there were 153 replies to the questionnaire from senior professionals and from 82 young professionals. The data from the questionnaires was analysed using descriptive statistics; per cents and frequencies. **Results:** All the target groups had well equipped computers, and they used their computers and the Internet almost daily. There was no remarkable difference in computer and Internet use between the seniors and young professionals. Computers were used mainly for text processing and calculations in both groups. Drawing, photo and video editing were more common among young professionals. In the Internet use the groups differed from each other in self-expression and searching for new friends. 65-70% of the seniors did not use the Internet for self-expression such as for writing blogs or searching for new friends. The respective numbers of young professionals were 25-35%. **Conclusion:** The findings showed the skills and behaviour of the age of 55 and over regarding their use of computer and Internet in general. The results form the basis for developing a platform equipped with all the tools that will facilitate and enhance professional knowledge interchange in the third age and promote the intergenerational learning and collaboration.

P2-64

## SENIORENGAGE - virtual network to empower the integration of seniors into an active community in the post retirement years.

Author: Dr. Tiina Kuukkanen  
*JAMK University of Applied Sciences*  
Co-Authors: Pirjo Tiikkainen, Jennifer Woodard, Gabriel Swatzell, Peter Bartal, Elisa Järvenpää, Jan Bobeth

**Background:** Given the rapidly ageing European population – with more and more older adults retiring – this issue urgently needs to be addressed. SENIORENGAGE is a project financed by the European Commission EU-Ambient Assisted Living (AAL) Joint Programme “ICT based solutions for Advancement of Social Interaction of Elderly People”. **Objectives:** To provide a tool with which seniors and new professionals may network with each other by using the latest Web 2.0 and social networking tools in a single online destination. The platform will represent a virtual environment where senior citizens (retired professionals) can, on the one hand learn, and on the other hand, be connected to others, offering their expertise and continuing to actively participate in their profession, for a mutually beneficial educational and social exchange. **Results:** SENIORENGAGE platform is made up of two main modules with the aim to promote intergenerational education and cooperation. An E-learning tool will deliver a step-by-step course on the basics of use of the Internet and a Professional Self-Worth Network will allow senior professionals to continue their professions by mentoring younger generations through shared knowledge and expertise and they will continue to be involved in their professional field, contributing to their sense of self-worth. **Conclusion:** The final results of this ongoing project response to the need of a large number of ageing population. The platform helps them involving in the Information Society and enabling them to enjoy its many benefits. In this practical networking internet platform the senior citizens can continue to contribute to their professions and to different areas of society which could benefit from their knowledge and expertise.

P2-65

## Mobility recovery after a hip fracture

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Co-Authors: Timo Törmäkangas, Johanna Edgren, Sanna Sihvonen, Mika Pekkonen, Ari Heinonen, Mauri Kallinen, Taina Rantanen, Sarianna Sipilä

**Objective:** To study mobility recovery after hip fracture and investigate the characteristics that determinate the recovery after a hip fracture.  
**Methods:** Longitudinal analyses of pre-trial data of a randomized controlled trial on a multidisciplinary intervention, aiming to improve mobility and function in hip fracture patients (ProMo, ISRCTN 53680197). The Population-based sample consisted of 81 community-dwelling, on average 80±7 year-old, hip fracture patients that followed-up for on average 9 weeks after fracture. Self-reported mobility difficulty (moving outdoors and walking 500 meters) was assessed in the hospital reflecting the status prior to the fracture, at discharge (3.2±2.2 weeks after the surgery) and 6.0±3.3 weeks after discharge from the hospital. Demographic, surgery and health status data were received from the hospital and health care centers.  
**Results:** Ten percent of the patients experienced severe difficulties in moving outdoors before the fracture, 39% at discharge and 38% six weeks after discharge (p<0.001). Corresponding values for difficulties in walking 500 meters were 21%, 57% and 44% (p<0.001), respectively. In total, 63-68% of patients perceived that their mobility had declined from pre-fracture level to 9 weeks after the surgery. Based on preliminary analysis, fracture diagnosis, type of surgery and lower body pain were associated with the poorer mobility recovery after the fracture.  
**Conclusions:** Still over a month after the discharge hip fracture patients experienced severe mobility difficulties. Factors affecting mobility recovery need to be studied in more detailed in order to design effective rehabilitation programs after hip fracture.

P2-66

## Do Social background and intelligence early in life influence use of coronary heart disease preventive medicine in adulthood?

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**Background:** Social position in childhood and intelligence

assessed early in life is associated with later health outcomes in middle aged and older adults. However, the pathways that lead to disease in later life are only partly understood. Medical treatments of different chronic conditions are increasing and it may contribute essentially to health in aging individuals and the use of preventive medications may be a pathway between socioeconomic status in childhood and later health. In this study, we explore the relationship between socioeconomic position and intelligence early in life and use of cardiovascular disease (CVD) preventive medication.  
**Methods:** Birth-cohort study of 8736 Danish men born in 1953 without CVD at the start of the follow-up in 1995. Outcome was initiation and discontinuation of antihypertensives and cholesterol lowering medications (statins) according to the Danish National Prescription Register 1995-2007.  
**Results:** Low childhood SEP was associated with a higher probability of discontinuation of treatment with statins (HR 2.04 (1.00-4.16)). Those with higher IQ were less likely to initiate statin use between 1996 and 2007 (2nd tertile: OR 0.65 (0.52-0.82); 3rd tertile: OR 0.61 (0.48-0.79)). IQ tended to predict lower uptake and lower discontinuation with antihypertensives, but the associations were not significant in multivariate models using a 95 % confidence interval.  
**Conclusions:** Low IQ early in life tended to be associated with a higher initiation of CVD preventive mediation and low SEP in childhood was associated with initiation of statins, indicating that use of medications may be a proxy for the development of CVD. Low SEP in childhood is also associated with higher risk of discontinuation of the treatment with statins, while low IQ are associated with a higher probability of discontinuation antihypertensives, indicating that other factors than ‘need’ such as knowledge and economy may be involved in use of a prescribed medications.

P2-67

## Lexical decision task for the elderly: Differences between go/no go and yes/no variants

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When conducting an experiment on visual word recognition, yes/no variant of lexical decision task is one of the most used. Previous research works have proven that there is no significant difference between the yes/no variant (the participant press the “yes” button when the stimulus is a word and the “no” button when the stimulus is not a word.) and the go/no go variant ( participant only press the “yes” button when the stimulus is a word and if not, refrains from responding) in adult readers (Perea, M., Rosa, E., & Gómez, C., 2003). However, error rates

and/or response times tend to be higher in yes/no task than in go/no go task for developing readers (Moret-Tatay, C. & Perea, M., 2011). Nevertheless, there is no research indicating which task is more suitable for the elderly. The main purpose of this experiment was to examine differences between yes/no and go/ no go variants in this population. A preliminary lexical decision experiment was conducted, with a sample of 10 elderly people without cognitive impairment, recruited from the University of Salamanca. Here, a preliminary lexical decision experiment was conducted in a sample 10 elderly people, recruited from the University of Salamanca. Results showed that error rates were much lower in the go/ no go task (1%) than in the yes/no task (9%), lexical decision times were substantially faster in the go/no go task, (a mean of 83 ms) and there was less variability in the latency data of the go/no go task (SD=114.16) than yes/no task (SD=190.30). Thus, the go/no go lexical decision task is more preferable than the yes/no task with the elderly, however more research on this topic is necessary.  
**Keywords:** Optimal aging, support, mental health

P2-68

## Support and Mental Health Evidence from optimal aging

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Support from social environment plays an important role on psychological wellbeing, however there are many questions remaining about its relation with the aging process. The aim of this study is to examine the influence, as the first approach, of different types of support for General Mental Health scale in a sample of optimal aging. A sample of 353 elderly participants (mean age of 65.22 years and a SD of 6.29, where 46% were male and 54% women) was selected for a University training program (Nau Gran) at the University of Valencia. General Health Questionnaire, GHQ-12 (Goldberg & Williams, 1988) and Multidimensional Scale of the instrument Perceived Social Support, MSPSS (Zimet, Dahlem, Zimet & Farley, 1988) were administrated. GHQ-12 measures psychiatric and psychological well-being, while the MSPSS measures perceived social support measures in three areas: family, friends and other significant support.  
**Results:** GHQ-12 was slightly correlated with MSPSS global scores (r = - .16, p <.001), and correlated with some of the different subscales from MSPSS such as significant support(r = -.18, p <.001) and friends support (r = -.15, p <.001). Bear in mind that, lower scores on GHQ-12, better overall of mental health, thus, support from other significant people and friends have a relation with mental health.  
**Conclusions:** This study shows the importance of support for

optimal aging and how it may relate to factors such as mental health. It will be interesting for future research, to examine factors that may be also involved in this process, as well as, a comparison not only with optimal aging, but also with normal and pathological aging.  
**Keywords:** mental health, support, optimal aging.

P2-69

## Staff’s experiences of factors contributing to a quiet atmosphere during meals in two nursing home wards

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**Objectives** 1:To describe staff’s experiences of factors contributing to a quiet atmosphere during meals. 2:To explore if structured organization of meals to reduce stimuli contributed to reduced agitation as experienced by staff. Theoretical framework: Progressively Lowered Stress Threshold model.  
**Method:** Co-operative inquiry design. Observation & interviews. Stage 1: Interviews with staff (N=6) that succeeded in creating a quiet atmosphere. Systematic descriptions of residents (N=25): Brief Agitation Rating Scale (BARS) and weight. Observations of lunch during 2 weeks. Stage 2: Development and implementation of a revised plan for the meals (based on data from stage 1). Reflection groups (staff N=20) with discussions of episodes with agitation and strategies to prevent and handle such episodes. Stage 3: Systematic descriptions of residents and observation of meals as in stage 1. Interview with staff (N=7) about their experiences of changes and improvements.  
**Analysis:** Qualitative data: Content analysis. Data from the resident registrations: Descriptive statistics.  
**Results (preliminary):** Staff was described to have an important role in securing a quiet atmosphere. Good knowledge of each resident, their diseases and food preferences was essential to plan and organize meals to be quiet. During meals stimuli that could distract residents from eating had to be minimized. Staff had to sit down at the table, establish a social community and help the residents focus on eating. Also, they had to constantly observe each resident and early signs of agitation to be able to prevent agitated episodes. Staff experienced the meals to be quieter in the end of the project. Results from analysis of BARS and weight are not available yet.  
**Conclusion:** Staff experienced that they were more competent and had a greater influence on how the meals developed at the end of the project.



P2-70

Gender differences in caregivers, in terms of coping and number of people taken care of

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In aged societies, the demand for care and caregivers has been increased. They need a range of cognitive and behavioural resources that may vary in terms of gender. The aim of this study is to examine gender differences in caregivers in relation to number of people taken care of and coping strategies. A sample of 203 informal caregivers (170 women, mean of age 55.24 years, 33 men, mean of age 58.77 years) was selected. Time as caregiver was 3.48 years for men (SD = 1.73), and 4.25 years for women (SD = 1.50) in average. COPE Coping Questionnaire (Crespo and Lopez, 2003) was employed to assess cognitive and behavioural coping. Number of people taking care of positively correlated with results from the different COPE sub-scale. In terms of gender, women results correlated with self-distraction (r =. 20), Denial (r =. 25) and self-blame (r =. 33). Men results correlated with self-distraction (r =. 45), Denial (r =. 30), seeking social support (r =. 28), using emotional support (r =. 34), all cases, p <.05. Caregivers use more direct coping strategies than detrimental avoidance strategies (alcohol-drug disengagement, etc.). On one hand, men participants showed more self-distraction than women. On the other hand, women showed more self-blame strategies, men religion and seeking social support. Healthy coping strategies are not only essential to prevent caregiver symptoms, it also to establish best practices in care. However, there are many questions underlying the degree of overload, resources and quality of life of caregivers. Thus, more research on this topic is necessary.  
**Keywords:** coping strategies, cares, caregivers

P2-71

Meaning in Old Age  
Knowledge and Tools for Supporting the Mental Well-Being of Older People

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Mental well-being of the aged is a timely topic that needs to be addressed in ageing research and development. Meaning in Old

Age Project aims to promote the mental well-being of older people by focusing on resources and strengths of older people themselves. The objectives of the project are to produce and provide information on the resource perspective and meaning in life approach, and to develop ways to support and improve mental well-being in later life. This work is grounded on valuing the voice of older people and their experiences. Older people will participate in the accumulation of understanding the aspects of well-being in old age. The project is funded by the Finland’s Slot Machine Association (RAY 2011-2014). In this project the focus is on older peoples’ experiences of meaning in life as well as on their resources and coping. Meaning in life and experiences of meaningfulness are linked closely to logotherapy, in which resources, valuation of life and possibilities and hope are the main cornerstones. In the first phase of the project older people are interviewed in order to raise their own experiences and definitions on mental well-being. Also, older people have been invited to open seminars with presentations and discussion about mental well-being. In the second phase, there will be peer support groups based on a logotherapeutic approach. Furthermore, we will develop a peer group, and train peer group instructors. In this phase, a logotherapeutic model is distributed and implemented in dementia care by training social and health care personnel. So far, the experiences have proved that there is a keen interest in mental well-being in old age. Both attendance to open seminars and interest towards the training have been very active. Combining a resource focused approach to logotherapeutic model has been successful and many professionals have found it useful in their practice.

P2-72

Title: The importance of the patient expression to provide good care for persons with dementia

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Co-Authors: Associate professor Veslemøy Egede-Nissen, Associate professor Rita Jakobsen, Professor Venke Sørlie

**Background:** Health services frequently receive negative media publicity concerning neglect in elderly patient’s care.  
**Objective:** To describe professional caregiver’s experiences of the importance of patient expressions to succeed in providing good care for persons with dementia.  
**Theoretical framework:** Lögstrup’s relational philosophy of ethics.  
**Methods:** Qualitative, in-depth individual narrative interviews with 12 professional caregivers from two different nursing homes.  
**Data analyses:** The transcribed interview texts were subjected to a phenomenological – hermeneutical interpretation involving three stages: Naïve reading, structural analyses and comprehensive understanding.  
**Results:** To provide good care to patients with dementia, the professional caregivers emphasized the importance of sensing the patient expressions through sentient attentiveness and recognition

of the patient as a person. They highlighted the importance of understanding the patient’s emotional expressions, body expressions, unrest and rest. They also described reciprocity of expressions in the patient- caregiver relationship where the patient recognized the caregivers as persons and professional caregivers.  
**Conclusion:** Our study points to the importance of a good reciprocal patient-professional caregiver relationship to succeed in providing good care for patients suffering from dementia.

P2-73

Informal caregivers view of collaboration, communication and information to a person with dementia in sweden

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**Background:** People with dementia are often cared for by informal caregivers combined with formal care. Informal caregiver’s experiences of formal care through the trajectory of dementia are important for understanding how formal care is working and how the care can be developed.  
**Objectives:** To explore informal caregiver’s view of collaboration, communication and information with formal care when providing care to a person with dementia in the trajectory from diagnosis to end of life in a Swedish context.  
**Method:** Four focus groups interviews were provided with informal caregivers and persons with dementia. An interview guide was used, for discussing how communication with formal care works, the characteristics when it is working well and less well, how informal caregivers wish interaction with formal care should work and suggestions for improvement. The transcribed verbatim was analysed using latent content analysis.  
**Results:** Preliminary results showed that the participants had different experience, good or bad, from both caring for a relative in the home and caring for a relative in a nursing home. The themes appearing after analyse were: for participants contextual situation “An unwanted lifestyle with changes in roles”, for participant’s description of collaboration with professionals “Getting resources or finding your own way.” and participant’s description of the information and communication was “Either safe or struggling”.  
**Conclusion:** For informal caregivers to feel safe with care and service for the person with dementia the information is needed to be individualised and personalised through the entire trajectory.  
On the behalf of RightTimePlaceCare consortium. <http://www.righttimeplacecare.eu>

P2-74

Acute hospitalization of the old medical patient: changes in muscle strength and functional performance during hospitalization and 30 days after discharge

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**Introduction:** Acute hospitalization of older medical patients is associated with loss of muscle strength and functional performance, and new disabilities in Activities of Daily Living. As older patients possess low physiologic reserve capacity the consequence of hospitalization may be loss of functional independency.  
**Aim:** To determine the effect of acute hospitalization on muscle strength and functional performance in older medical patients.  
**Methods:** A prospective cohort study in older medical patients (+65 years) acutely admitted to the hospital. Muscle strength was assessed by isometric knee-extension strength (IKES) and handgrip strength (HGS), and functional performance was assessed with the Timed Up and Go test (TUG) on admission, at discharge, and 30 days after discharge. During hospitalization 24-hour mobility was quantified using accelerometers.  
**Results:** The 33 participants had a mean age of 82,7±(SD 8,2) and a median length of stay of 7,5 days (IQR 4,25-11). IKES and HGS did not change over time. IKES was 1.00 Nm/kg, 1.08 Nm/kg and 1.11 Nm/kg at the three assessment dates (p=0.138) and the corresponding results in HGS were 24.2 kg, 23.3 kg, and 23.5 kg (p=0.265). TUG improved during hospitalization, from 17.3±2.1 sec. on admittance, to 13.3±1.3 sec. at discharge (p=0.003). No further improvement was found at the 30-day follow-up, 12.4±1.0 sec. (p=0,064). IKES was on the threshold level of independent functioning, and the TUG below that of age-matched peers. The median time spent in lying, sitting and standing/walking was 17.4 hours/day, 4.8 hours/day and 0.8 hours/day, respectively.  
**Conclusion:** Muscle strength remained unchanged during hospitalization and 30 days after discharge in old medical patients. Despite a low level of mobility during hospitalization, functional performance improved from admittance to discharge, without further improvement after discharge. The IKES and the TUG values were low, which indicate a need for rehabilitation.



P2-75

### Risk factors for community-based home help services among patients with Alzheimer’s disease

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**Objective:** To identify factors that predict the use of community-based home help services in long-term cholinesterase inhibitor (ChEI)-treated patients with Alzheimer’s disease (AD).  
**Methods:** The Swedish Alzheimer Treatment Study (SATS) is an open, prospective, non-randomized, multicentre study in a routine clinical setting. Patients with AD living at home at the time of inclusion received treatment with donepezil, rivastigmine or galantamine. They were assessed with MMSE, IADL and PSMS scales at baseline and every 6 months over 3 years. The first 880 patients who had the opportunity to complete the full study were assessed regarding the use of home help services and adult day care. The following factors were investigated: gender, APOE e4 carrier status, living alone or with spouse, education level, age, illness duration and cognitive and functional level at baseline.  
**Results:** One hundred and thirty-nine patients (16%) received home help services at the start of ChEI treatment (average, 5.7 hours/week). After 3 years, 31% of the remaining 286 patients living at home used a mean of 8.7 h of home help/week. Among the patients with an MMSE score of 10–14, 8% of those living with a spouse used home help services compared with 62% of those living alone. Use of adult day care increased from 3% to 19% during the 3-year study among the patients without home help services; 89% of those using day care were not living alone. Solitary living (p<0.001), older age (p=0.004) and lower ADL abilities at baseline (p<0.001) were risk factors for use of home help services. These 4 variables correctly classified 90% of the patients regarding whether they used these services.  
**Conclusions:** Functional, but not cognitive, ability influenced the need for home help in AD patients. Solitary living, age and functional status predicted the use of community-based home help services with high accuracy. Patients not living alone seemed to use adult day care as a substitute for home help services.

P2-76

### Relatives’ experiences of acute hospitalization of an elderly family member

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**Background:** Relatives feel responsible for taking care of their elderly family members before, during and after hospitalization

(Lindhardt et al. 2006). Therefore, it is of great importance to understand the needs and experiences of relatives, since their help and support are significant factors for the elderly, to remain living at home and being independent of formal care. Objective. To illuminate relatives’ experiences of care and collaboration with health care professionals during the acute hospitalization of their elderly family member.  
**Design:** A qualitative descriptive study.  
**Method and theory:** A survey study (n=180) comprising a structured questionnaire for relatives to acute hospitalized elderly was conducted in medical wards at Copenhagen University Hospital, Hvidovre. In the last pages of the questionnaire, the relatives were given the opportunity to write subjective descriptions of experiences and thoughts concerning the hospitalization. The current analysis is based on the qualitative data from these subjective descriptions (n=78). Manifest and latent content analyses were performed.  
**Results:** Preliminary results indicate that issues of importance for the relatives are: lack of communication and information both at admittance, during hospitalization and at discharge, the experienced grief when seeing a beloved person not receiving sufficient care. Feeling anger and powerlessness, and at the same time having an empathic understanding for the staff’s working conditions.  
**Conclusions:** Relatives seem to be keen observers of the busy practice in acute wards, and to have a clear vision of good care quality. This makes them a resource, who, if involved in both the individual care case and in organisational in-ward developments, may contribute with valuable observations and knowledge. Hence, a systematic involvement of relatives seems called for.

P2-77

### Foot care knowledge – important in older people care

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**Background:** The growing number of older people increases the need for social and health care services. One aspect that needs to pay attention is foot health care. Every third of older people aged 65 and over living at home have at least one foot problem and the prevalence of foot problems in long-term care (LTC) is even higher. The ability to self-care foot health decreases during ageing e.g. due to inability to bend to feet, decreased manual dexterity or poor vision. Therefore, the role of the health care personnel is essential in supporting older people’s foot health. The support requires adequate knowledge about foot health and care. In this study, our aim is to analyse the knowledge of nurses working in the sheltered housing. The goal is to find the lacks in the knowledge to develop interventions to promote foot health in older people.  
**Methods:** The data were collected with a structured self-admin-

istered knowledge test consisting of 55 items divided in five subscales (11 items each): skin care, nail care, care of structural deformities, care of specific foot diseases and properties of footwear. The data were analysed with descriptive and inferential statistics.  
**Results:** Foot care knowledge among nurses varied. On the level of sumvariables, the highest scores were obtained in skin (mean 8.2/SD 2.1) and nail (8.9/1.3) care, followed by footwear knowledge (7.8/1.3). The lowest scores were achieved in care of disease specific foot problems (6.9/2.0) and care of foot structural problems (5.5/2.0).  
**Conclusions:** There is a need for continuing education among nurses to ensure their sufficient knowledge to provide evidence based foot care and prevent foot problems in older people. In future, the evaluation of the implementation of foot care knowledge in clinical practice is important to recognize supporting and inhibiting factors to foot care.

P2-78

### Frail or frailer? A longitudinal study of elderly individuals in institutional old age care

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**Background:** Due to decreased number of beds in institutions, it is assumed that the need of care has increased among those elderly individuals living in institution. This population is however underrepresented in gerontological research.  
**Objective:** The aim of this study is to longitudinally describe a population of the elderly living in institutions with focus on morbidity, use of drugs, and risk of malnutrition, pressure ulcers, and falls, and to explore their associations with frailty and mortality.  
**Method:** SHADES is a longitudinal study in which all individuals who lived in selected institutions for permanent living for elderly were invited to participate. Participants were examined every six months and totally at six IPTs (In-Person Testing). A total of 423 individuals participated in IPT1 and 130 individuals were examined on six occasions. It was 184 individuals who died during the study.  
**Results:** The mean age at IPT1 was 85 years (M = 84.8, sd = 7.27) and almost two thirds were women (301). They had on average three diagnoses and the most common diagnosis was some kind of dementia. Further, they accounted on average for seven drugs, most commonly aspirin. The number of diagnoses did not change over time, but at IPT6 there was a significant reduction of drugs to a mean of nearly six (F = 7.37\*). Participants also showed significant worsening conditions according to risk assessments with modified Norton Scale (F = 35.43\*\*) and Mini Nutritional Assessment (F = 5.71\*\*) but not in Downton Fall Risk Index (F = 3.30 ns). Already at IPT1 the participants were frail with risks for pressure ulcers, falls and malnutrition.

**Discussion and Conclusion:** The next step is to perform Cox Regression Models in order to examine which factors that relate to increased burden of care, hospitalization and mortality. The results will provide important knowledge that can be used to improve an individualized care for elderly living in institutions and the old age care in general

P2-79

### Predictors of grip strength development in older adults

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Loss of muscle strength in older persons may lead to several negative outcomes such as disability, limited daily living activities, and falls resulting in injuries. Hence, muscle strength is an important public health issue. Grip strength is often used as a marker, not only for muscle strength, but also for biological vitality, since it is a cost-effective measure sensitive to age-related changes and to changes in biological functioning. The mechanisms behind negative development in grip strength are still not well understood, although some risk factors have been suggested, such as low physical activity, and morbidity. The Swedish Adoption/Twin Study of Aging (SATSA) provides a unique opportunity to study the longitudinal development of grip strength with seven measurement points over 22 years. With access to data from questionnaires collected up to twenty years before the assessment of grip strength we are able to study which early midlife factors that predict the age trajectories. Latent growth modeling was used for the longitudinal analyses. The present study showed how demographic, health-related, and life-style related factors influence performance on grip strength development in participants 40-88 years of age at baseline. Age trajectories for grip strength were analyzed separately for men and women. The results are discussed in the perspective of cohort and gender differences in grip strength.

P2-80

### Socioeconomic position and political participation among men and women 77+ in Sweden.

A longitudinal study of education, income, social class, and voting.

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**Introduction:** Political participation e.g. voting is important for

the possibility to influence national and regional politics. From an egalitarian perspective it is desirable that all persons independent of age, sex, and socioeconomic position have equal possibility to vote.

The association between socioeconomic position and health and between socioeconomic position and life situation among elderly is well studied; less is known about the association between socioeconomic position and political participation. We study the relation between three measures of socioeconomic position (social class based on occupation, years of education, and income) and voting.

**Methods:** Two nationally representative samples of Swedes aged 53-75 where interviewed in 1968 and 1981 respectively. Survivors from 1968 where again interviewed in 1992 (n = 461), survivors from 1981 in 2002 (n = 614).

Both 1992 and 2002 were election years in Sweden. A single item question regarding voting was posed – did you vote in the election? Socioeconomic position is measured as education, income, and social class.

Logistic regressions controlling for sex, age, age-square, walking ability (walking 100 meters and walking stairs) and walking aids (no aids/cane(s), quadruped(s), crutch(es), and walker/wheel-chair/never go out) was used.

**Results:** Significant differences in voting was found for both men and women for all three measures of socioeconomic position – persons with a high socioeconomic position was more likely to have voted. The associations were stronger for education and income and less strong for social class. The relation to social class was only significant on the 10-percent level among men. The associations were stronger among men than among women. A significantly lower proportion of women voted.

**Conclusions:** There are systematic differences in political participation measured as voting. This might indicate that there are systematic injustices in the possibility to vote.

P2-81

## Depression vs. antidepressants intake in institutionalised people with mild to moderate dementia

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**Objectives:** Depression in institutionalised people with dementia is difficult to diagnose and treat. This study aimed to explore the relations between the medical diagnosis of depression, dementia screening and antidepressants prescription.

**Method:** A cross-sectional study of 123 institutionalised people with mild to moderate dementia was conducted in the central region of Portugal. Socio-demographics, information on medical diagnosis of depression and antidepressants used were collected with a questionnaire. Indicators of depression were screened with the Cornell Scale using the algorithm proposed by Brown et

al.(2009). Severity of dementia was assessed with the Mini-Mental State Examination. Descriptive statistics and chi-square test (X2) were applied.

**Results:** Residents mean age was 82.6(±6.8) years old. In the medical records, 16.3% (n=20) of the residents were diagnosed with depression and 51.2%(n=63) were prescribed with antidepressants. According to the Cornell Scale 43.9%(n=54) of the residents had probable depression. From the residents prescribed, 10 were medically diagnosed with depression, 20 presented indicators of depression and 8 had diagnostic and indicators of depression. Therefore, 33(52.4%) residents used antidepressants without medical diagnostic or indicators of depression. An association between the medical diagnosis and antidepressants intake (X2=14.4; <0.01) was found, however depression with the Cornell scale was not associated with medical diagnosis or antidepressants.

**Conclusion:** Half of the residents prescribed with antidepressants were not medically diagnosed or presented indicators of depression with the scale. The lack of association between Cornell Scale results and antidepressants intake alert for the possibility of inappropriate medication usage or inability of the instrument to screen depression in mild to moderate dementia. More research is needed to improve recognition of depression in dementia and explore the use of medication.

P2-82

## The effect of worries on cancer patients

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**Object:** Cancer patients tend to be worries about their medical conditions, interpersonal relationships, social activities, and work. They also lose their support network as they progress through the stages of cancer. In comparison to young patients, elderly ones face the decline of their social support networks, as their spouses are probably deceased and their children live independently. This decline in social support may lower the ability of the patient to deal with worries, which will have negative effects like depression, through perceived number of support givers. We examined the causal relationship between these factors with regard to cancer patients.

**Method:** We use the data of 31 cancer patients (over 65 years, N = 13, mean age: 70.08, SD = 4.43; under 65 years, N = 18, mean age: 56.11, SD = 8.55) who participated in group therapy at a hospital. They were asked to respond to a questionnaire in the first session. We queried them about the “perceived amount of emotional support,” “the number of support givers,” “the number of family members that lived with them,” and their “age (over 65/under 65).”

**Results:** Path analyses indicated that the number of family members living with elderly patients was low ( $\beta = -.46$ ,  $p < .05$ ), which affected the patients’ perception of the number of

support givers ( $\beta = .53$ ,  $p < .01$ ), which in turn influenced their perception of perceived support ( $\beta = .51$ ,  $p < .01$ ).

**Conclusion:** The perceived amount of support was influenced by the number of family members living with the patient, which was influenced by the perception of the number of support givers. The loss of social support has a negative effect on elderly patients’ perception of the amount of support. To increase their perceived support, they should be involved in activities like group therapy that can constitute informal support.

P2-83

## Oral status among service housing residents in Helsinki and its prognosis value

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**Aims:** The aim of this cross-sectional study was to determine the older service house residents’ oral status and its associations with nutritional status and eating habits. We also explored the prognostic value of oral status to mortality.

**Methods:** In 2007 we assessed the nutritional status all service housing residents in the metropolitan area of Helsinki, Finland. Of them, 67% consented and had oral health status data available (N=1369). With personal interview and assessment demographic data, medical history, functional and cognitive status, information on oral status, oral health problems and eating habits and diets were gathered. The residents’ oral status was classified according to the type of dentition and their nutritional status was assessed with the Mini Nutritional Assessment (MNA).

**Results:** More than half of the residents (52%) had lost all their teeth, 7% (n=94) being totally edentulous without prosthesis and 45% (n=614) having complete prosthesis in upper or lower jaws. 48% (n=661) had some natural teeth left. Of totally edentulous subjects, 23% were malnourished whereas respective figure among other groups were 12%. Totally edentulous subjects ate more often pureed or soft food (47% vs. 7% vs. 11%,  $p<0.001$ ). Totally edentulous suffered from chewing problems and swallowing difficulties more often than those residents with prosthesis or some natural teeth left, but used dental services less frequently. Of the totally edentulous residents, 52% were deceased during 3-year follow-up. The respective figure in group edentulous with prosthesis was 48% and dentate residents 40% ( $p=0.005$ ).

**Conclusions:** Edentulousness is still common among older service housing residents, and oral status is associated with nutritional status and mortality of service housing residents. These results suggest the need for co-operation between nursing staff and dental care services.

P2-84

## Testing the 10Q tool in assessing the quality of care

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**Objective:** To assess the quality of care by analyzing the patient records in one nursing home in the city of Helsinki.

**Method:** The systematic sampling included 61 patient records (35 % of the residents). The patient records were analyzed by the structured 10Q tool. It is developed for assessing the quality of care according to the notes in patient records. The patient records were also analyzed inductively using an observation sheet.

**Theories:** Care is usually perceived as a continuous process. The phases of the care process are: need assessment, planning/goal setting, interventions and assessment. The care plan in patient record is comprised of these phases.

**Results:** Of the residents 57 % had an updated care plan, which was drawn up or updated within three months. About 18 % of the residents didn’t have a care plan at all. When there was a care plan, it was drawn up in a multi-professional team for 23 % of the residents. Need assessment was done and recorded for 94 % of the residents. Three main dimensions of residents’ needs (physical, psychological, social) were noticed in half of the records. Spiritual needs were seldom assessed. Interventions were recorded on an individual level for 63 % of the residents. In most of the care plans the goals of care were assessed in daily notes, and the condition of the residents was assessed regularly.

**Conclusions:** The most serious problem in care, the tool revealed, was that some residents didn’t have a care plan at all or the care plan was not updated. The care and especially rehabilitative care without a proper care plan and documentation is easily reactive, not goal oriented. By assessing the patient records and analyzing the care process, it is possible to see the weaknesses of the care and the care planning. The 10Q tool gives one option for this kind of assessment.

P2-85

## Pattern of impairments in Activities of daily living in patients with Mild Cognitive Impairment and Alzheimer disease

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**Objectives:** Restrictions in life style with loss of ability to function adequate and independent is one of the most troubling aspects of dementia, and may be experienced in early stages of cognitive decline. Complex instrumental activities of daily living (I-ADL) are



of primary interest because loss of competence in I-ADL activities is a defining diagnostic feature of Alzheimer disease (AD) and related dementing disorders. The aim of this study is to examine the association between MCI (Mild cognitive impairment) and AD in dependency in I-ADL, as well as identifying items of I-ADL which are the most affected. **Method:** The cross-sectional data for this study is carried out using the database "The Patient Registry for Dementia Assessment in Norway". Patients examined for cognitive impairment, age &#8805; 65 years and diagnosed with either MCI (n=313) or AD (n=342) are included. I-ADL is the main outcome, assessed by The I-ADL Scale by Lawton and Brody (1969). Diagnoses of the patients were assessed by the doctors at the memory clinics, often in consensus meetings. Age, gender, partnership status, depression and education will be variables to control for in the statistical analysis. **Results:** Result shows an association between I-ADL and MCI and AD, still statistical significant after controlling for age, gender, partnership status, education and depression. Analysis of the items in the I-ADL assessment show significant differences between MCI and AD groups in all of the patterns concerning normal functioning and severe difficulties, while there are no significant differences in the some difficulties score in the two groups, with the exception of "use of telephone" and "handling finances". **Conclusion:** There are associations between I-ADL and MCI and AD after controlling for age, gender, partnership status, depression and education. Patients with MCI have better score than patients with AD, but the patients with diagnosis MCI have problems in I-ADL activities as well.

P2-86

## Effectiveness and costs of intensive exercise intervention on Alzheimer's patients - A randomized, controlled trial

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**Aim:** To study the effectiveness of self-management support (SMS) in an objective-oriented group intervention including empowerment of participants, support of their mastery and self-efficacy on dementia patients and their spousal caregivers, and, specifically, to explore the effects of intervention on dementia patients' QOL and on spousal caregivers' sense of competence and psychological well-being. The use and costs of couples' health and social care services will be calculated during a 2-year follow-up. **Methods:** During 2011-12, 160 dementia patients and their spouses will be recruited for a randomized controlled trial and randomized into two arms: 1) 80 for normal community care and 2) 80 for group-based SMS (4 hours) sessions including topics

wished by participants. They may include, e.g. topics on dementia, community services, active lifestyle and prevention for cognitive decline, spousal relationship and emotional well-being. Coping with anger, fear and sadness may be discussed as well as issues related to nutrition. The participants have their weekly group sessions (10 participants/group) 8 times and the spouses have concurrently their own. Taxi transport will be arranged. Group leaders visit the couples prior the group intervention to get acquainted with them and to encourage them to express their preferences for the sessions. The intervention is based on peer support, use of group dynamics and on empowering participants to take active agency in their life. The SMS will encourage participants to identify their strengths and to solve their problems. If either of the couple is significantly depressed, psychogeriatrician's consultation may be offered. **Results and conclusions:** The design of the study and the baseline findings will be presented. This is the first study to explore the efficacy of group support for self-management skills that has been shown to be effective in other contexts.

P2-87

## Returning to own home after intermediate care can be predicted by TUG and P-ADL.

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**Background:** Intermediate care units in nursing homes can provide specialized treatment and rehabilitative measures to community-living older patients with acute illness or injuries, discharged from hospital. A goal of intermediate care is the return to original residence, but patients are frequently discharged to other nursing facilities or hospital. In this study we investigate whether physical function, personal activities of daily living (P-ADL), mental function or depressive symptoms are indicators of the ability to return to home after intermediate care. **Method:** Data was collected from a register of patients over 70 years in intermediate care, being admitted from either orthopaedic or medical units in hospital. Recording of data during admission at the intermediate unit started June 2011. There were some missing sets of data and only patients with complete sets of data were included. Nursing staff and a research physiotherapist performed the assessment using standardized tests; Timed "Up & Go" (TUG), Barthel Index (BI), Mini Mental State Examination (MMSE), Geriatric Depression Scale (GDS). Demographic and administrative data were obtained from patients' records. **Results:** Datasets of 118 patients out of 239 were complete and used for analysis. Included participants were 85 years old (mean) and 72% were women. 73% of the participants were able to return to home after intermediate care. Those who did return at home had a shorter TUG (p=.026) and a higher BI score

(p&#706;.001). There were no differences with regards to cognitive function (MMSE) (p=.186) or depressive symptoms (GDS) (p=.358). **Conclusions:** It appears that patients' physical function and P-ADL may influence on the decision to return to home or other facilities more than depressive symptoms or cognitive dysfunction. Further research should investigate decision making about discharge destination. It is important to be aware of the inclusion bias, as only 118 out of 239 patients had complete sets of data.

P2-88

## Lack of guided exercise for older adults with mobility limitations

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Independently living older people with decreased mobility are threatened by a collapse in functional capacity, an increased need for support and a growing risk for falls. Mobility can be improved with goal-oriented strength and balance exercises; this is relatively most effective in older people with decreased mobility. However, there is not enough guided exercise for these people in Finland. The national Strength in Old Age Programme produced in 2005-2009 good practices for older people's health exercise in order to solve this dilemma. The target group consisted of independently living older adults (75+) with decreased functional capacity. The second stage of the programme was launched in 2010. The aim is to implement good practices in cooperation with nongovernmental organizations and the public sector in 38 municipalities that were chosen in three sets. The programme is coordinated by the Age Institute and financed by Finland's Slot Machine Association, the Ministry of Social Affairs and Health and the Ministry of Education and Culture. The objective is to implement good practices in how to reach, counsel and organize guided strength and balance exercise as well as outdoor activities for the sedentary older adults at home with decreased mobility. The aim is reached by a wide training program and intensive mentoring which supports the process of implementation of good practices. Comprehensive follow-ups and evaluations are included. The process of implementation in the first set of municipalities has started. Through mentoring the deficiencies in exercise activities were recognized and plans for implementing good practices were made. Information and communication were used to reach the target group. Older people with decreased mobility have expressed their interest in exercising. Professionals and volunteers were involved in the training and the organization of exercise activities was launched. The results of the first follow-up will be available in early 2012.

P2-89

## Early psychosocial group intervention to enhance self-management skills of older people with dementia and their caregivers – design of a randomized controlled trial.

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**Aim:** To study the effectiveness of self-management support (SMS) in an objective-oriented group intervention including empowerment of participants, support of their mastery and self-efficacy on dementia patients and their spousal caregivers, and, specifically, to explore the effects of intervention on dementia patients' QOL and on spousal caregivers' sense of competence and psychological well-being. The use and costs of couples' health and social care services will be calculated during a 2-year follow-up. **Methods:** During 2011-12, 160 dementia patients and their spouses will be recruited for a randomized controlled trial and randomized into two arms: 1) 80 for normal community care and 2) 80 for group-based SMS (4 hours) sessions including topics wished by participants. They may include, e.g. topics on dementia, community services, active lifestyle and prevention for cognitive decline, spousal relationship and emotional well-being. Coping with anger, fear and sadness may be discussed as well as issues related to nutrition. The participants have their weekly group sessions (10 participants/group) 8 times and the spouses have concurrently their own. Taxi transport will be arranged. Group leaders visit the couples prior the group intervention to get acquainted with them and to encourage them to express their preferences for the sessions. The intervention is based on peer support, use of group dynamics and on empowering participants to take active agency in their life. The SMS will encourage participants to identify their strengths and to solve their problems. If either of the couple is significantly depressed, psychogeriatrician's consultation may be offered. **Results and conclusions:** The design of the study and the baseline findings will be presented. This is the first study to explore the efficacy of group support for self-management skills that has been shown to be effective in other contexts.



P2-90

## Life Course and Generations

### Research and practice development project 2011–13

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**Objectives:** The Central Union for the Welfare of the Aged (Finland) is carrying out a research and practice development project called Life Course and Generations (2011–13). The general aim of the project is to increase knowledge about different generations, to encourage intergenerational dialogue and to bring together people of different ages. This is done in order to support particularly older people's psychosocial wellbeing and inclusion, and to reduce their loneliness and exclusion.

More specifically, the project aims to:

- Study how people of different ages understand life course and their own place in the generational chain, as well as what they think about people older and younger than themselves
- Campaign to promote active public discussion about positive interaction between generations, as well as to initiate intergenerational activities and communities (under the title Four Generations Meet)

- Create an access-to-all database about intergenerational activities to share good practices

Methods: As research data and methods, the study uses (1) qualitative group discussions, age diaries and newspaper contents which are analysed by discourse analytic methods (2011–13), and a quantitative Webropol questionnaire which is analysed by statistical methods (2012–13). The Four Generations Meet Campaign challenges relevant actors to present and create intergenerational activities. The Campaign is a part of the European Year for Active Ageing and Solidarity between Generations 2012.

**Theories:** Social construction and historical perspectives of generational understandings; socio-cultural inspiration.

**Results and conclusions** are reported at the end of the project in 2013.

P2-91

## Patients' perspective on telephone follow-up after ED discharge

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**Background:** It is known from studies that follow-up to older people after Emergency Department (ED) discharge prevents readmission. In a study we showed that older people recently discharged from the ED had unanswered questions about their illness, general wellbeing, medicine and follow-up.

**Objective:** The overall purpose of this study is to describe the transition from the ED to home from the older peoples and the

primary health care nurses' perspective. The object is: a) To describe older peoples' questions related to their stay in the ED and whether they felt confident with the discharge, b) To examine if the follow-up phone call affected the older peoples' confidents; ability to carry out prescribed treatment after discharge; and experience with follow-up phone calls, c) To examine how a geriatric nurse can facilitate collaboration between the ED and primary sector.

**Method:** The study is a prospective descriptive study with questionnaires and focus group interviews. Included were older people > 70 years discharged from ED. Intervention: A geriatric nurse phoned the participants within 2-5 days after discharge. They asked for their wellbeing and offered to answer questions in relation to the ED visit. If they were very confused they were offered further geriatric intervention.

**Results:** From December 2010 to June 2011, we included 455 older people >70 years discharged from ED after a short stay, 197 men and 258 women. Results showed that 37% had questions concerning their illness, medication or social situation; 23% had questions related to the recent ED stay; 12% felt uneasy with the discharge; and 11% received further geriatric intervention.

All of the older people expressed their gratitude of receiving a follow-up phone call after discharge.

**Conclusion:** Follow-up phone calls help to identify older people with unresolved issues in relation to discharge from ED; it gives confident after discharge; and should be considered a firm offer in the future.

P2-92

## With or without ESAS?

Older persons concerns regarding extended security alarm systems (ESAS)

Author: Martina Boström  
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**Background:** Important goals for society is to create settings to promote safety and independent aging in place and to meet individual's needs. Since older persons prefer to age in their own homes, extended security alarm systems (ESAS) through monitoring might increase safety and security on one hand and invasion of privacy on the other, which raises moral concerns. The arguments for increased safety and security on one hand and invasion of privacy on the other hand are well debated among researchers, but little still seems to be known about the older persons own perceptions, attitudes or feelings towards ESAS. Purpose: To identify and describe old persons feelings for freedom and surveillance in relation to ESAS.

**Methods:** A qualitative, descriptive and inductive study was based on five focus group interviews with older persons living in senior housing, selected by snowball sampling, based on three inclusion criterias; (1) age of 65 years or older; (2) living in senior housing; and (3) experience or use of personal emergency response system.

**Results:** Older person's perceived moral ambivalence between; "independence vs. safety" where the participants' enthusiasms for feeling free and independent, but at the same times their request for safety even if being monitored was recognized. In the category "privacy vs. monitoring" older persons seem to distinguish between monitoring their actions from monitoring their internal organs and in the category "in the best interest of me vs. in the best interest of others" there seemed to be an ambivalence between using a ESAS for one's own needs and using a monitoring system to satisfy others. The main theme was named "maintaining" showing that as long as they could maintain their feelings of safety or maintain control, like for instance maintain their identity or what the technique should or not should do or, they were willing to except surveillance on the expense of privacy and integrity.

**Conclusions:** This study indicate there are ambivalent feelings regarding freedom and surveillance and which ESAS that stimulate maintenance of control, identity and personality. They seem to have motivation to give in their integrity if it with certainty leads to safety.

P2-93

## 2-year mortality in community-living, cognitively intact hip fracture patients according to indoor or outdoor falls.

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Co-Authors: Bård Bogen, Professor Anette Ranhoff

2-year mortality in community-living, cognitively intact hip fracture patients according to indoor or outdoor falls Steihaug OM, Bogen B, Ranhoff AH

**Background:** The notion that persons who fall outdoors are different from those who fall indoors has gained interest in recent years. Persons who fall indoors tend to be older and to have poorer physical function than those who fall outdoors. Hip fracture patients who fell indoors have poorer physical function, have more chronic diseases, more in-hospital complications and a greater 1-year mortality. In this study we investigate 2-year mortality in hip fracture patients, according to indoor or outdoor falls.

**Method:** Data from a cohort of cognitively intact, community-living hip fracture patients participating in an intervention was used. Patients were consequently recruited at hospitalisation for hip fracture at a local hospital in Bergen, Norway, 2006-07. Mortality data was obtained through hospital records.

**Results:** Data from 100 hip fracture patients was available. 2 patients reported that the hip fracture was not caused by a fall, and data was missing for 1 person. Thus, the analysis is based on 97 cases. The average age of the participants was 79.7 (SD 8.1), and 77% were female. 64 patients had fallen indoors and were older than those who had fallen outdoors (81.4 vs 76.5, p=.005). 20% of those who fell indoors had died after 2 years, compared to 12% of those who had fallen outdoors, giving an odds ratio of 1.85 (95%CI 0.55-6.20). The average age of those who died

was similar (79.0 vs 80.5, p=.513). Logistic regression with age as covariate failed to give a significant difference between indoor and outdoor fallers with regards to mortality (B=-1.81, p=.749). **Discussion:** 2-year mortality was 1.9 times higher in persons who fell indoors. The issue of fall location and mortality merits further investigation.

P2-94

## Reciprocal struggle in person transfer tasks - Caregivers' experiences in dementia care

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Co-Authors: PhD and RPT Petra von Heideken Wågert, Professor and RPT Anne Söderlund, Associated professor and RN Eva Götell

**Objective:** Dementia is one of the main conditions to be associated with a severe activity limitation among older people and one of the main reasons older people access special care units. This presentation will be presenting caregivers experiences' of person transfer situations involving people with dementia. **Method:** Qualitative focus group interviews were conducted. Ten caregivers, five in each focus group participated. Data were extracted in phrases and sentences using content analysis. **Result:** One theme was condensed: 'Reciprocal struggle in the person transfer task'. Three sub-themes emerged: 'Communication strategies', 'Environmental factors', and 'The goal may be inaccessible'.

**Conclusion:** Person transfer situations involving people with dementia can fluctuate, therefore the ongoing challenge will be to ensure a dynamic approach based on the person with dementia's different needs at different times. Behavioral markers hold for identification of antecedents and consequences and measures need to be developed in domains including social interaction, psychomotor aspects of function and environmental factors. These measures would allow us to link better the antecedents to the consequences of the behavior and by those tailoring interventions to facilitate person transfer situations involving people with dementia.

P2-95

Clinical applicability of EEG in evaluating treatment effects and progression of Alzheimer’s Disease using an EEG index based on cholinergic activity

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Co-Authors: PhD Gisli Johannesson, PhD Kristinn Johnson, Dr. Thorkell Gudmundsson, Nicolas Blin

**Background:** The only medications indicated for treatment of mild AD are the cholinesterase inhibitors. The effects of the medicines are measured by cognitive tests and by caregiver reports but there are no direct biological means of evaluating treatment effects. A theoretically possible method is to measure the cholinergic response of these drugs in the brain. It has been proposed that the EEG changes seen in AD are primarily a reflection of cholinergic dysfunction. We postulate that by establishing a “cholinergic index” in EEG registration, the treatment effects of cholinergic drugs could be measured and thereby the treatment response

**Methods:** In a clinical trial where 110 participants participated, an EEG registration was obtained from each participant before and after a 0.15 mg im. administration of scopolamine. Since scopolamine affects the cholinergic neurotransmitter system, a cholinergic EEG index was created by applying Statistical Pattern Recognition (SPR) to a large set of EEG features, by considering the group before and after scopolamine administration as two distinct groups. The resulting classifier results in an index that correlates with the cholinergic activity in the subject. A longitudinal study with 40 AD patients over 1–3 years (4–11 visits) was then performed, before and after installation of cholinergic treatment. The cholinergic index was calculated for each participant at each visit.

**Results:** The scopolamine study indicates that the EEG cholinergic index constructed by SPR correlate with the state of the cholinergic system in the brain. The cholinergic index used in the longitudinal study showed treatment effect in some patients and seem to some extent correlate with treatment effect.

**Conclusion:** A cholinergic index produced by EEG-SPR method could be valuable in measuring the effect of cholinergic treatment in AD as well as following progression of the disease but further studies are needed. The underlying technology is well known, widely available and inexpensive in relation to other imaging techniques.

P2-96

Diagnostic accuracy of EEG in differential diagnosis between controls, AD, Lewy body dementia, and Parkinson’s disease dementia

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**Background:** Alzheimer’s disease (AD) is the most common neurodegenerative disease in the elderly population. Lewy body dementia (LBD) and Parkinson’s disease dementia (PDD) combined are the second most prevalent cause of neurodegenerative dementia. The only current available biomarker for LBD/PDD is a dopamine scan but the method cannot differentiate between the different extrapyramidal syndromes. Medications are especially challenging in LBD as these patients are extremely sensitive for neuroleptics, a medication that is used for symptoms prevalent in this disease. It is therefore of importance for the treatment of these patients that they are correctly diagnosed.

**Methods:** A database has been formed with EEG registrations from 226 healthy individuals (NRM), 239 mild AD subjects, 22 individuals with LBD, and 26 individuals with PDD. In each comparison of two distinct groups, a classifier has been constructed by applying statistical pattern recognition (SPR) to a large set of EEG features.

**Results:** The classification system consists of the following six classifiers: NRM–AD (86%, 86%, 85%), NRM–PDD (95%, 100%, 91%), NRM–LBD (95%, 95%, 96%), AD–PDD (88%, 91%, 86%), AD–LBD (88%, 91%, 85%), and PDD–LBD (86%, 90%, 82%). The numbers in parentheses are accuracy, sensitivity, and specificity, respectively, of the corresponding classifier.

**Conclusion:** EEG registrations, analyzed by a contemporary statistical method, statistical pattern recognition, seems to be a promising method for differential diagnosis of the various neurodegenerative disorders causing dementia. This seems specifically to be true for Lewy body dementia and Parkinson’s disease dementia as these groups seem to be distinct from both healthy individuals and Alzheimer’s dementia.

P2-97

Safety at Home – for persons with a dementia disease

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Co-Authors: Professor Lena Borell, Professor Per-Olof Sandman

The aging population in Sweden is growing and as a result the number of people with dementia diseases will increase. The national well-fare system is challenged with the task of

providing housing and social conditions where the elderly adult with some kind of disability will be safe and secure.

**Aim:** The aim of this study is to identify and describe safety risks related to persons with dementia disease living at home, from the perspective of the persons with dementia, their significant other and professional care providers. The aim is also to identify and describe how these safety risks are handled and how the safety risks have impact on their lives.

**Method:** Given the nature of the aim, a qualitative approach is used. Twelve persons with a dementia disease and their significant others have been recruited through a convenience sample. The study also includes twelve professional care providers. After obtaining informed consent, data were collected through open-ended interviews for which an interview guide was used. The participants were interviewed individually and the recorded interviews were transcribed. The collected data are analysed with content analysis. In this study, the focus will be on what is obvious, manifest. Analysis of the data was started during the data collection in order to clarify whether there was any ambiguity in the material implying the need of additional questions. The analysis also gave guidance for when the material was saturated.

**Results and conclusion:** In the spring of 2012 we expect to present preliminary results and answer these questions:

- Which safety risks, related to living at home for persons with dementia, do persons with dementia, their significant others and professional care providers identify?
- How are the safety risks handled?
- Which impact do safety risks have on their lives?

P2-98

Elderly living in institutions and their visits to acute care - Patterns; needs or habits?

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**Background:** Every year 1.4 million visits are made to acute care or hospital in Sweden. Elderly make about one third of these visits and many of them are considered to be unnecessary. Little is known about the patterns of hospitalization and visits to acute care among elderly living in institutions.

**Objective:** The aim of this study is to longitudinally describe patterns of hospitalization and visits to the acute care among elderly living in institutions.

**Method:** SHADES is a longitudinal study including 423 elderly (mean age of 84.8 years, ± 7.27, 71% females) living in institutions in Sweden. Participants were examined every six months during three years. One-hundred thirty individuals participated in all the six in-person testings.

**Results:** At baseline 16 % of the respondents had visited the

acute care at least once and around a fourth had been hospitalized the last six months. The most common reasons for visits to acute care were falls and infections. The reasons for hospitalization were mostly complications after falls (n=25) and circulatory diseases (n=24). About one third (n=48) of those who participated at all six IPTs visited the acute care in the hospital at least once during the study and nearly half (n=60) were hospitalized at least once during the study period.

**Discussion and Conclusion:** Hospitalization and visits to acute care are common among persons living in institutions. The next step is to analyze the longitudinal trajectories of visits to the acute care and hospitalization in this group of elderly living in institutions. For the presentation analyzes will also be performed with the aim to examine which factors (e.g. diseases, drugs, function in daily life, social network factors) that relate to visits to the acute care and hospitalization. The results will provide important knowledge that can be used to prevent unnecessary hospitalization in order to provide continuity in the institutional care for the elderly and to save costs.

P2-99

Music as a means in everyday care

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This question originated from earlier experiences with music therapy at Betaniahjemmet but also a lecture given by Birgitta Andersson, a Swedish music therapist. Andersson pointed out that music can be a means in everyday care especially when dealing with demented elders.

From theorists such as Synnøve Friis, we know that music can counteract loneliness and inactivity, create trust, security and self-respect, develop intellectual functions, and support a higher functional level, mentally as well as physically.

With this in mind, the objective was to strengthen the individual resident’s sense of identity through music, taking a point of departure in the individual’s experience with music, resources and disabilities. Thus the musical activities in this project were chosen and adapted to each participant.

The target group consisted of 16 residents with medium or severe cognitive disabilities but they were also targeted due to other issues such as aphasia and isolation, and all of them being fond of music.

The project employed two music teachers, one who taught a specific instrument for each of the participants who used to play an instrument and the other had individual singing sessions or small groups with the participants who were used to singing. Based on RAI assessments and the teachers’ and participants’ oral statements and evaluation, the project has resulted in participants being more present, but there also seems to be an improvement in their general well-being, as they are happier. One participant even said “that she didn’t have the time to die now”, being so busy rehearsing her instrument. Short-term memory is improved as they can remember the teacher and that



they have an appointment to see one another. The conclusion is that inclusion, sense of community and attention as well as singing or playing music that they know from, when they were younger, makes a huge difference in the everyday life of these participants.

P2-100

### Impact on Participation and Autonomy for older persons and its Validity and Reliability

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**Objectives:** Recent studies of older persons indicate that self-determination is not fully respected within the health care sector. Restrictions in older persons self-determination, has been suggested to affect mental ill-health. The questionnaire Impact on Participation and Autonomy (IPA) was constructed to measure a person’s perceived impact of chronic disability on participation and self-determination/decisional autonomy. Since the IPA based its psychometric properties on persons under the age of 75, further studies for older persons are needed.  
**Aim:** To examine the psychometric properties of the IPA for people 65 years and older.  
**Methods:** The study was performed in two steps; a validity test on the Swedish version of the IPA (IPA-S) and a test-retest reliability study on a revised version. Inclusion criteria were people aged 65 and older who were dependent on others in at least one activity.  
**Results:** Validity of the IPA-S The participants emphasized the relevance of the questionnaire, but some items were perceived as having focus on executional autonomy. Therefore, the questionnaire was changed in order to more clearly measure the participants’ self-determination. The revision of the IPA-S resulted in the questionnaire called IPA-O (-for older persons), with 22 items about perceived self-determination. Test-retest reliability of the IPA-O In total, 15 of the 22 items showed high test-retest reliability. Only one item had low test-retest reliability.  
**Conclusions:** IPA-O can be used for older persons both in client work to ensure older persons right to self-determination and participation in the planning of their care and in rehabilitation and as an evaluation tool.  
**Keywords:** IPA, occupational therapy, questionnaire, rehabilitation, self-determination, test-retest

P2-101

### Can two become one? Experiences of implementing an integrated health and social care organisation

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Coordination problems are common between local authorities and providers of health and social care services for older people with complex health problems and severe care needs. The problems result from a breakdown in communication and a lack of coordinated care planning between care providers. There are also boundary disputes between the service providers regarding responsibility for care provision and funding. As a result many elderly people fall between the cracks in today’s highly specialised care system. The study describes experiences from a developmental project for integrating health and social care services for elderly people in Norrtälje. The project is unique in establishing an integrated structure for funding, organising and delivering care services to older people with severe care needs. Both qualitative and quantitative data were collected and analysed.  
**Experiences include:** The introduction of a system of customer choice increased the number of service providers which complicated the integration process. Multiple service providers also led to an increase in communication problems. However, Norrtälje has had the opportunity to develop their customer choice model in a way that will improve cooperation and integrate care services in a unique way. Focusing on coordinating the patient’s discharge from hospital and following-up care planning in the home was successful.  
**The benefits of the project:** To be able to prioritise from the elderly person’s perspective rather than that of the service providers. An advantage for the service providers was that they were financed by the new joint organisation with the municipality being able to coordinate care services without complicated financial negotiations with the county council.

P2-102

### Health Services to Elderly a collaboration between Diakonhjemmet Hospital and Diakonhjemmet University College about clinical practice, research and education.

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**Objective:** Increase the quality of health services to older people at Diakonhjemmet Hospital.  
**Methods and theories:** It is expected that the number of people over 80 years will nearly triplicate from 2010 to 2050. As a result of normal ageing, individuals may experience psychosocial losses, comorbidity, functional decline and polypharmacy and may therefore be in need of comprehensive health services. To reach our objective three main areas were identified: Collaboration on clinical practice, promoting research across departments and developing a multidisciplinary master degree study. The collaboration is organized across departments in hospital and hospital/university college all working with old patients. As health professionals in the collaboration we have differing skills in this field and we all meet a complexity of health-related problems. We are in the collaboration able to share our expertise and thereby increase the quality of health services to elderly.  
**Results:** Clinical practice has yearly organized seminars about “elderly people and medication” and about “dementia”, has initialized a geriatric outpatient service for assessment of medication and has last year distributed 11 scholarships for skills development and seminars connected to our field. Research has developed a quality registry with a common dataset across departments in the hospital, has yearly arranged internal research seminars by presenting the newest research and has last year distributed scholarships to prepare 2 candidates for PhD. Master degree study started in 2010. 39 students are now attending a part-time master degree study, a study which enhances clinical competence in our field.  
**Conclusions:** The collaboration between departments in the hospital and the University College in our field has enhanced. We have achieved results, but we still see a need for further development of the collaboration through co-operation in research and in clinical practice.

P2-103

### Self-reported mental health in still active older athletes and an age-matched group of people from the general population The Birkebeiner Aging Study

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**Background and aim:** Long-term regular endurance training as performed by active cross-country skiers is associated with good somatic health. Less is known about their mental health. The aim is to study self-reported mental health in older still active skiers, participating in the Birkebeiner cross-country ski race of 54 km and with a difference in altitude of 1000 meters – and to

compare them with an age- and sex-matched group of people from the Tromsø VI population study.  
**Methods:** The Birkebeiner Aging study is a study of health and life style self-reported by postal questionnaire. It has a cross-sectional as well as longitudinal design. Participants in the Birkebeiner cross-country ski race who are 65+ years are included from the 2009 and 2010 races. In this sub-study they are compared with randomly selected age- and sex-matched participants in the Tromsø VI study. In both populations, the questionnaires include questions about health and life style used by the national and regional health surveys in Norway (the CONOR questions). The questions about mental health were; “Have you had, or do you have mental problems that have caused you to call for help?”, “Did you use tranquilizing drugs during the last four weeks?”, and “Did you use antidepressants during the last four weeks?”  
**Results:** 555 skiers (509 men and 46 women) and the same number of men and women with the same age-distribution from the Tromsø VI study answered the questions. 25/541 (4.6%) of the skiers and 32/533 (6.0%) of the Tromsø VI population reported mental problems (p=0.043). Tranquilizers were used by only 2/527 (0.3%) of the skiers and 16/540 (3.0%) of the Tromsø VI population, while antidepressants were used by 3/527 (0.6%) and 11/540 (2.0%) respectively.  
**Conclusion:** Few of the older still active athletes reported mental problems and very few used psychotropic medication. Mental problems and the use of psychotropic drugs were more common, but still not frequently reported, among older people from a population study.

P2-104

### Self-reported General Health in Still Active Older Athletes The Birkebeiner Aging Study

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**Objective:** Maintenance of physical and mental health is a key factor to successful ageing. The causal mechanisms leading to successful ageing are not fully understood. The aim of this study was to explore information about general health in old athletes and to compare them to a general population.  
**Methods:** A cross-sectional study of health and life style factors in 656 Norwegians, aged 65 years and above, participating in the 54 km Birkebeiner cross-country ski race was conducted in 2009 and 2010. Most of the participants had participated in this race several times (median 14). The variables of interest were collected from postal self-reports on medical and sociodemographic information. We used the validated SF-12® Health Survey screening tool to calculate a mental and a physical component summary (MCS and



PCS) that provide glimpses into mental and physical functioning and overall health-related-quality of life. The controls were provided from the 2343 individuals aged 65+ who responded to the Life-course, Generation and Gender (LOGG) survey. **Results:** 550 (84%) and 2282 (97%) responded to the questionnaires in the cases and controls respectively. Mean age (SD) was 68.7 (4,0) and 71,2 (4.5) years, the male:female ratio was 10.5:1. and 1.02:1, and high:low level of education was 1.4:1 and 1:3.5 in the Birkebeiner skiers versus the population controls. The physical health SF-12 score was mean (SD) 53.92 (4.57) and 46.14 (10.79), in cases and controls respectively (p<0.001) and the mental health SF-12 score was mean (SD) 57.17 (5.52) and 55.95 (7.05), respectively, (p<0.001), linear regression, adjusted for age, gender, and education. **Conclusions:** After perpetual exercise old athletes have a significantly better self-rated physical and mental health score than the general population in this study.

P2-105

### Systematic, multidimensional preventive health check-ups among 75- and 80-year-olds led to multiple interventions

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**Aims:** The aim of this developmental project is to screen systematically all 75- and 80-year olds in Järvenpää, Finland and promote their health and functioning by tailored interventions. **Methods:** In 2010, 143/176 (81%) of all 80-year-olds and 96/212 (45%) of all 75-year-olds were performed a comprehensive health assessment by nurses and their primary care doctors in Järvenpää, Finland. All home-dwelling participants were interviewed for demographics, social activities, psychological well-being, symptoms, diagnoses and medications. They were systematically assessed for their vision and hearing, previous falls and fractures, cognition (MMSE, clock drawing test), nutrition (MNA), use of alcohol and tobacco, mood (GDS), physical functioning (Barthel, Lawton), orthostatism, use of vitamin D and oral status. **Results:** Most participants were active and had good psychological well-being. Of participants, 77% felt themselves healthy or quite healthy, 71% had current hobbies related to physical activity and 44% other social hobbies. However, numerous abnormalities were found in assessments and tests. Altogether 57% of participants’ were sent to further interventions: 35% were sent to further diagnostic tests, 18% to blood pressure follow-ups, 13% to further cognitive tests, 10% were admitted to specialists, 5% to physiotherapists, 6% to oral check-ups and 8% received physicians’ medical certificates for economical or social advantages. **Conclusions:** Systematic health check-ups among 75- and 80-year-olds reveal that although older people feel well, they have potential for preventive interventions.

P2-106

### DaneAge Future Study 2010

Author: Michael Teit Nielsen  
DaneAge Association (Ældre Sagen)

DaneAge Future Study 2010 DaneAge Association has previously produced the “Future Study”, a survey following age-cohorts, in 1987, 1997 and 2002. In 2010, with the help of Statistics Denmark, a new “Future Study” was initiated, with new cohorts in age groups 50-54, 60-64, 70-74, and 80-84, approximately 1,000 interviewees in each age group. The method is a mix of on-line questionnaire and telephone interviews. The results are currently being published on-line at www.aeldresagen.dk, spring 2011-Spring 2012. DaneAge expects to publish an abbreviated print-version in the spring of 2012, followed by an English-language version. Areas analyzed include, among others: Housing situation, family relations, health (physical and mental), new technology, the welfare state, volunteer work, civic society, identity, happiness, subjective age, financial donations. Some of the questions can be found in the previous Future Study, others are new. One notable finding in DaneAge’s Future Study 2010 is that a majority of interviewees answer that they are happy and content, having an optimistic outlook on life and the extent to which they can control and decide in their own life. On the other hand, especially the younger age groups are worried about the future of the Danish welfare model, financial deficits and lack of labor within health care and nursing luring in the future. Michael Teit Nielsen, Development Director, Ph.D., DaneAge Association (Ældre Sagen)

P2-107

### Vitamin D in patients referred to an out-patient geriatric service for memory problems or falls

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**Background and aim:** Vitamin D deficiency is associated with muscle weakness and can possibly increase fall risk, as well as associated with cognitive impairment. Analysis of vitamin D (25-OH-cholecalciferol) has not been a routine in our fall-assessment and memory clinics. The aim of this quality study is to find the prevalence of vitamin D deficiency in patients referred for assessment of falls and/or memory problems to our out-patient geriatric service. **Methods:** A prospective observation study, with the aim to improve practice. All patients referred for fall assessment and/or

memory problems are consecutively included. Analysis of vitamin D (25-OH-cholecalciferol) is done together with routine blood analyses. Area of reference from the laboratory is 37-131. Clinical information about age, gender, cause of referral, diagnoses, BMI and mobility problems are obtained from patient records. Costs of analyses are calculated. **Results:** From 1. August to 31. December 67 patients (44 women) were referred. Vitamine D analyses were done from 67 patients and 6 (9%) had levels below the recommended (range 20-36). All the patients with vitamin D deficiency had memory problems (4 diagnosed with dementia), and 3 did also have mobility problems. One patient was age 70-80, three 80-90 and two 90+ years old. BMI was ranging from 21-23, and low BMI did not correlate with low vitamin D. **Conclusion:** 9% of the patients had vitamin D deficiency. Half of them had both mobility problems and cognitive impairment. The patients were included during late summer and autumn when the vitamin D levels are expected to be higher than in winter and spring. The datacollection will therefore continue.

P2-108

### The effect on functional balance and fear of falling using The Otago Exercise for the frail elderly. Group-based versus home-based intervention.

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**Introduction:** Otago Exercise Programme (OEP) is an homebased strength- and balance- exercise-programme that has demonstrated success to decrease falls and improve functioning in older home-dwelling persons. Recent studies have shown better effect of group- based exercise on functioning in older persons. The aim of this study was to compare the effect of OEP performed as group or home training in frail older home-dwelling on balance, mobility and fear of falling. **Methods:** The study was a single blind RCT, participants (n=125) were older fall-prone persons referred to an outpatient falls clinic. Participants were allocated to OEP delivered as group-based (GB) or home-based (HB) training, led by physiotherapists. Group training was performed twice a week. Home training followed the OEP protocol including 4 visits. Intervention period was 12 weeks. Participants were assessed with Berg Balance Scale (BBS), Timed Up-and-Go (TUG), 30 second Sit-To-Stand (STS) and 7 items Falls Efficacy Scale International (FES-I). Assessments were performed at baseline, end of intervention (3 months) and 3 months after end of intervention (6 months). Group differences in change were assessed by Analysis of Covariance, controlling for baseline values, and changes for each of the groups by paired sample t-tests. **Results:** Ninety-one women (72,8 %) and 34 men (27,2%) participated, mean age was 82.5 (±5.7) years. Mini Mental

Status Examination score was 27.1(±2.3). Mean score at Barthel ADL Index was 17.9 (±2.3). Seventy-four percent had fallen previous year, 37% had a hospital stay due to fall-related injuries. Table shows BBS, STS, TUG and FES-I scores at baseline and follow-up tests. Both groups improved functioning. There were group differences in change in favor of group training for BBS and STS from baseline to 3 months, and for STS and FES-I from baseline to 6 months. **Conclusion:** Both interventions improved functioning, most effects persisted 3 months after end of intervention. Balance and functional leg strength improved more for GB. Fear of falling was significantly lower for GB at 6 months follow-up. In frail home-dwelling persons OEP performed in a group is even more effective.

\* Illustration see note at the end of Chapter

P2-109

### Social-pedagogical treatment of elderly people’s subjective well-being in social care home

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The present study is actualized in socio political and economical contexts related to active ageing comprehension and the necessity of providing participation opportunities of elderly people in integration process in the social care home as a new social environment. The investigation objectives are: 1) to explore the elderly people subjective well-being in social care home; 2) to describe the intervention of social pedagogue for facilitation of opportunities of elderly people participation in design of life and work activities in social care home; 3) to explore the interaction structures between the elderly people wellbeing and quality of institutional integration by providing of participation opportunities, To rich the research objectives qualitative research used mix-methods (video observation, semi-structured interview and narrative interview has been conducted to find the evidences to elderly people wellbeing in integration process related to participation opportunities provided by social pedagogue. The theoretical background of research is based on inter-disciplinary understanding of wellbeing as quality indicator if institution integration process (Skiba 2006;Burkart 2005;Raz 1986;Anderson 2011 etc.).62 respondents of the age 65-91 were involved into the research, 10 of them (active participants) were selected for interviewing and video observation. The data processing applying AQUAD-6 programme, the code linkages explore implicit interaction structures between wellbeing and participation meta-codes and explore the implicate interaction structures between participation codes and wellbeing codes. Implicants as evidences for making conclusions will be presented for discussion: participation in institutional integration establishes and enhances the well-being of elderly people. It gives people an opportunity of confidence rebirth.

P2-110

## Mental health and quality of life in older family caregivers

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Co-Authors: PhD, Senior Lecturer Bettina Stenbock-Hult

The role of family caregiving is becoming more important as more and more older people are living at home. Since the family caregivers themselves tend to be old, their health and well-being is at stake. The purpose of this study was to investigate mental health and well-being of older family caregivers. The study was part of a larger project the purpose of which was to create a model for family caregiving in Finland and Estonia. A questionnaire was sent to 3000 persons aged 65 or more in southern Finland, 604 persons replied and 144 of them were family caregivers. Over 60 % of the family caregivers rated their mental health as good or very good. The difference between them and the other older persons was not big ( $p=.032$ ). They did not experience more problems (lack of initiative, zest for life and decision making capacity, fear) than the others. Measured by GHQ-12 the family caregivers were at risk of being mentally stressed (mean 3.1) while the others were not (mean 1.3). The family caregivers reported more frequently having diagnosed musculoskeletal problems than the others. When it came to diagnosed depression there was no difference between the groups. The global quality of life of the family caregivers measured by VAS (0 – 100) was somewhat lower among the family caregivers (63) than among the others (71), although it was clearly positive. The family caregivers generally experienced their life as meaningful or very meaningful (67 %) and only 13 % felt lonely rather or very often. The percentage of family caregivers feeling rather or very secure was high (73 %) although significantly lower than among the others of the same age (89 %). The mental health and quality of life in the family caregivers in this study was quite good, but it was even better among those who were not family caregivers. Because of the large dropout the results cannot be generalised, but they indicate that family caregivers do have mental resources that should be recognized and supported.

P2-111

## Recent trends in complex health problems in the oldest old in Sweden 1992-2010/11

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Studies addressing multiple morbid conditions in elderly populations usually focus on disease and physiological indicators relevant for the medical care system. Few studies include both

medical and functional indicators, which together can indicate the need for integrated care from several different service providers of medical and long-term care (home-help, institutional care) as well as informal caregivers. When assessing eldercare needs and the wellbeing of the oldest old, trends of complex health problems seem more useful than single health items that may follow diverse trends over time. This study identified severe problems in three health domains (health items/symptoms, mobility, cognition/communication) in three nationally representative samples of the Swedish population aged 77+ (1992:  $n=537$ ; 2002:  $n=561$ ; 2010:  $n=841$ ), including institutionalized people and proxy interviews for those who were too frail to be interviewed themselves. People with severe problems in two/three domains were considered having complex health problems. Changes in the prevalence of people with complex health problems between 1992, 2002 and 2010 were analysed with logistic regressions as well as differences according to age, gender, and education. Results showed a significant increase of elderly people with complex health problems from 19% in 1992 to 26% in 2002. Between 2002 and 2010/11 there has been no significant change. Gender, age and education had significant independent effects on the odds of having complex health problems. Patterns were similar for men and women.

A preliminary conclusion is that the deterioration in health among the oldest old between 1992 and 2002 has levelled out. Results will be discussed with a special emphasis on methodological issues. From a social policy perspective, rather stable prevalence rates of complex health problems among the oldest old since 2002 emphasize the need for extensive collaboration between medical and social services.

P2-112

## Assessment of the physical environment – a way to high quality care

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It is important to focus on the design quality in nursing home facilities since the residents are frail and vulnerable, often suffering from both functional and cognitive impairment. With increasing levels of frailty they spend most of their time within the home and are depending on the building design quality to a great extent. This paper, describes a part of a project using the Sheffield Care Environment Assessment Matrix (SCEAM; Parker et al., 2004) for evaluating design quality in nursing home facility. The tool was developed to measure design features of the nursing home environment as built and as used and covers different aspects in the environment. The incitement for the study was the Swedish evidence-based guidelines concerning dementia care from 2010. The guidelines emphasize the physical environment as an essential factor for achieving good-quality healthcare and supporting a person-centred care. The recommendation is that dementia residential facilities should have a domestic layout and

provide the residents with private rooms or apartments with opportunities for personal belongings. Furthermore, the physical environment should offer a calm sound level and enhance the ability of orientation for residents with different factors such as colour coding. Opportunities for outdoor activities are also important for the well-being of residents. Thus, the society faces many challenges in developing high-quality environments since the buildings in many cases not meet modern standards. In this process, there is a need for tools that evaluate the quality of the environment. SCEAM is an interesting tool covering many of the important aspects of a person-centred care and can therefore be used both for planning new environments and evaluating existing ones. Parker C., Barnes S., McKee K.J., et al. (2004). Quality of life and building design in residential and nursing homes for older people. *Ageing and Society*, 24, 941-962.

P2-113

## Trajectories of social activities and mobility problems from middle age to old age a 34-year follow-up of a nationally representative sample of Swedes

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Co-Authors: Dr Benjamin A. Shaw, Dr Ingemar Kåreholt, Dr Carin Lennartsson

**Objectives:** To investigate how trajectories of social activities, such as spending time with family and friends, observed during a 34-year period (from middle age to old age) were associated with trajectories of mobility problems during the same time period among men and women.

**Methods:** Nationally representative data from the Swedish Level of Living Survey (LNU) and the Swedish Panel Study of the Oldest Old (SWEOLD) were used. LNU data from 1968, 1981, 1991 and 2000 were merged with SWEOLD data from 1992 and 2002 to create a longitudinal dataset with four observation periods covering the period 1968-2002. The sample consisted of those aged 40-60 years at baseline who survived through the period, and participated in at least three observation periods ( $n=698$ ). Trajectories of social activity were identified through cluster analysis, and then used as predictors of mobility trajectories in multilevel regression models.

**Results:** Most people had a socially active life as they moved from middle age into old age. Five trajectories of social activity were identified: continuously very active, continuously active, increasing social activity, decreasing social activity, and continuously inactive. Upholding a very active social life was more common among women than men.

Mobility problems increased significantly over time for both women and men. Among men, decreasing activity levels over time were associated with a faster increase in mobility problems. Among women, those who were continuously inactive or who decreased their activity levels had higher levels of mobility problems, but the increase in mobility problems with age was

similar across trajectories of social activity.

**Conclusions:** Most men and women had high levels of social activity in midlife, and continued their high activity levels into late life. Decreasing social activity was related to worse mobility in both men and women. The nature and direction of these associations need to be explored further.

P2-114

## Clinical challenges related to urinary incontinence one year after hip fractures

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Co-Author: Professor Liv Wergeland Sørbye

**Introduction:** Norway has a higher incidence of hip fractures than any other country. Patients with hip fracture routinely receive an indwelling catheter (IC) preoperatively. This should be removed within 24 h. Our aim was to identify possible poor outcomes do to extended use of IC. Also we intended to discover indicators that might predict clinical challenges related to urinary incontinence one year after hip fracture.

**Materials and methods:** A total of 331 patients were admitted to two acute-care hospitals during 2004-2006 for hip fracture. Inclusion criteria were age 65 years or older. All patients lived in their own home at admission. We used the Resident Assessment Instrument for Acute Care (InterRAI-AC).

**Results:** At 72 h after surgery, 35 patients (11%) had not had the indwelling catheter removed. Continued use of IC was significantly impacted by patient mental and cognitive status, including delirium, discouraged mood, and cognitive impairment ( $p<0.000$ ,  $p=0.018$ , and  $p=0.002$ , respectively). In addition, continued use of the IC was associated with more urinary tract infections and more severe pain. After 12 months patients with urinary incontinence (UI) during the hospital stay, had lower functioning levels than those with no previous UI. They had moved four times more frequently to a nursing home, and had over twice the mortality.

**Conclusion:** Guidelines supporting health professionals to remove IC within 24 h postoperatively should be followed. Patient with UI are at risk for adverse outcome after hip fracture and should be followed up with a multidisciplinary team after discharged from hospital.

**Keywords:** Hip fracture, urinary incontinence, indwelling catheter, 65 years or older, 12-month follow-up study, interRAI-AC, comprehensive assessment



P2-115

## New trends in forming intimate relationships

Is it a lifestyle choice?

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As life-expectancy has increased and attitudes towards both non-marital and post-marital relationships have become more flexible, it has opened new possibilities to form intimate relationships at older ages. The destandaridization of intimate relationships has e.g. made cohabitation and LAT relationships more popular, especially after divorce or after becoming a widow/er. This study looks at the phenomena from a perspective of a longitudinal survey data from a Finnish research project, GOAL, Good Ageing in Lahti Region (n=2815 at baseline). The information is gathered from men and women in three birth cohorts (born 1926-30, 1936-40, 1946-50). The data from 2002–2008 is used to track recent changes in intimate relationships. The current relationship status is seen in the light of possible previous relationships, for which the used data offers retrospective information. According to the study, co-habitation as well as living in a LAT relationship is mostly the choice of those who have been previously married, or lived in a cohabitation in earlier phase of life. For the majority, cohabitation seems to be a long-term choice. As previous demographic research, this data also shows a clear trend of popularization of cohabitation in 1980's in all three age cohorts. Still, new marriages are formed as often as cohabitative relationships in the recent past of respondent's lives. LAT relationships seem to be gaining ever more popularity among elderly, who are choosing between forms of togetherness. The study also sheds light into the attitudes towards different aspects and feelings of becoming older, of the respondents living in the above mentioned living arrangements. The results show that people living in more unconventional relationships are more acceptable towards new forms of elderly lifestyles. Becoming older is more positively viewed especially by people living in an intimate relationship. It can be concluded that lifestyle and living arrangements are closely linked.

P2-116

## Institutionalized elderly – a movement class results

Physiotherapy intervention

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Co-Authors: Physioterapist - Master António Coutinho

**Purpose:** Evaluate the effects of a movement class in the flexibility, muscle strength, balance, fear of fall, quality of life and functional performance, in institutionalized elderly.

**Subjects:** 30 subjects were randomly assigned in one convenience sample.  
**Methods:** A comparative study was accomplished between t0 and t1, before and after the movement class. The results of the study were measured by the Medical Outcomes Studies 12-item Short-Form (MOS SF-12), Physical Performance Test (PPT-9), Berg Balance Scale, Dynamometer, Modified Back-scratch Test, Chair Sit-and-reach Test, Timed Up n Go test and Falls Efficacy Scale International - FES-I.  
**Results:** There were obtained significant data (p &#8804;0,05) for the variables in study, with the experimental protocol (between t0 and t1), with an increase of the variables.  
**Conclusion:** The implementation of a experimental protocol during 4 weeks, showed significant improvements at the level of the state of life, physical acting, muscle strength, flexibility of the superior and inferior members, balance mobility and fear of fall.

P2-117

## “Ageing” identity and wellbeing in a crossroad: unemployment in early old age

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In occidental societies, working classes are psychosocially an economically dependent paid work (1). Traditionally it assures basic needs and shapes identity. Involuntary job loss can provoke ill-being as it may result in deprivation, depressive feelings, anxiety, and low self-esteem (2). Given labour market reconfiguration, redundancy may represent premature ending of professional activity for older actives. However, precarious working conditions may lead to a desire of early retirement. From a sociological viewpoint, how can it be understood, the impact of involuntary job loss on middle age men's wellbeing? What significance is attributed to work and work absence by older less-qualified actives? To approach this overlooked topic, life histories were collected through semi-structured interviews on unemployed blue-collar Portuguese men over 55 years old. Results show that employment is less significative for wellbeing and unemployment is perceived as upsizing in case of i) reduced familiar and financial engagements; ii) welfare pensions that secure basic needs; iii) work is alienating, inhibitor of control and self-fulfilment and health damaging; v) a retiree status is interiorized instead of “unemployed”. Work is an adulthood mandatory role, a “normal” life-course that is not necessarily beneficial and labour market status is intertwined with different life cycle stages. Some of the ill-being caused by unemployment can be diverted when an “aged” identity is incarnated and this event is incorporated as part of the ageing “natural” process.  
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P2-118

## Influencing health behaviors of the older person: when grandchildren prevent grandparents’ health risks.

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Co-Author: Alice Delerue Matos

Recent research has stressed the mutuality of the influence process within grandchild-grandparent dyads by highlighting grandchildren as catalysts of some of the elders' behavioural patterns change. Through an affectual relationship established with their grandchildren some elders' access information that they would not grasp unassisted. The elders show some permeability to grandchildren's' influence, despite some resistance to change core values and beliefs. Considering this background we set out to explore possible influence on the elders' health related attitudes and behaviours exerted by their grandchildren. For this purpose a qualitative study involving 34 interviews was conducted in the northern region of Portugal. Several spheres of health related/oriented beliefs and habits such as nutrition, medication, physical activity and social interaction were examined. Results show that besides functional and emotional support, the adolescents, inform and persuade grandparents to operate changes in areas felt to be vital for wellbeing. They made the seniors aware of the benefits of healthy diets, and the avoidance of hazardous habits such as smoking or heavy drinking. Grandchildren were particularly zealous when the elder had to comply with strict routines (dietary, pharmacological or others) due to health problems. Grandchildren also encouraged grandparents to participate in social events and leisure activities, as they were conscious of the importance of social interaction for wellbeing. Different types and degrees of influence of grandchildren were identified: the most influential grandchildren have a strong affectual relationship, with whom they interact and support intensely. We conclude that the potential of grandchildren as agents of socialization must be considered while designing policies and programs not only for the social integration of the elderly people but also for their adoption of healthier life-styles.

P2-119

## The associations between birth conditions and performance in the testing situation

First observations on functional capacity assessments in the Helsinki Birth Cohort Study

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Co-Authors: Prof. Johan Eriksson, Dr. Pertti Pohjolainen, Liisa Penttinen

One of the primary aims of Helsinki Birth Cohort Study (HBCS) is to assess how growth and environmental factors acting during the fetal period and childhood are related to health in adult life. A randomly selected group of participants born 1934-44 have been followed up from 2001- onwards, picked from the original epidemiological cohort (n=8760). The participants are now turning to the third age of life, with their current age ranging from 68 to 78 years. This presentation describes the setting of functional capacity assessment planned for the HBCS; reports the associations between birth weight and e.g. maximal isometric and isotonic muscle strength (measured using a Good Strength Metitur dynamometer chair, a 30-s chair-stand test and 30-s bicep curl), and psychomotor functioning (e.g. reaction time measured using a Good Response Metitur device); and examines how the testing situation might influence the performance-based measurements. The functional capacity assessments started in fall 2011 and continue till the end of year 2012. The presentation uses the data available in June 2012 when the expected number of tested participants is approximately 600. The methods include functional capacity tests and the detailed analysis of videotaped test situations (e.g. reaction time testing). Results of both methods will be shown in the presentation. According to the video data, hand movement delays indicate participant's hesitation in reaction time testing. This observation suggests that performance in the testing situation should be taken into account when assessing functional capacity. While the study advances our understanding of the associations between birth conditions and physical functional capacity in the third age, it also provides insights how the functional capacity assessment is organized and achieved as a human endeavor in the testing situation. This approach might yield new ideas for creating practices and tools for comprehensive assessments for old adults.



P2-120

Cognitive trajectories in later life in relation to distal covariates and survival  
Findings from the Swedish the population-based H70 and Lund 80+ Studies

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Co-Authors: PhD. Valgeir Thorvaldsson, PhD Björn Slaug, PhD Torbjörn Svensson

**Background:** A better understanding of late life cognition requires longitudinal cohort studies following individuals until death, in addition to information about previous health and overall life conditions.

**Objectives:** To compare cognitive trajectories in two population-based samples in relation to subsequent survival, health and distal conditions.

**Material:** Data were drawn from the H70 and the Lund 80+ Study. H70 is based on prospective longitudinal population-based panels of 70 year olds in the city of Gothenburg. The first cohort was first measured at age 70 with subsequent measurements until death. The Lund 80+ is based on population-based panels of 80 years and older in the university city of Lund. In both studies subjects were re-examined for intra-individual stability and change in biological, physical, psychological, and social functioning.

**Methods:** The cognitive battery included three tests: a) Synonyms measuring verbal ability, b). Block Design measuring spatial ability an indicator of fluid ability, and c). Figure Identification which is a measure of perceptual speed. To allow comparisons across tests and samples we standardized scores to a distribution with a mean of 50 and SD of 10, using the baseline distribution for each test at the first occasion.

**Results:** A similar performance decline was observed in both studies and within the same age range (80+). Trajectories were however more pronounced for fluid and speeded tests. The decline was largely related to distance from death, rather than indicative of age. Overall health was significantly associated with rate of decline. Demographics, especially education, were significantly associated with less of decline.

**Conclusions:** Cognitive decline is associated with subsequent survival; a terminal decline pattern was confirmed in both studies despite the fact that the samples vary considerably in overall health, demographics and many other background variables.

P2-121

Skill development for nurses in home care - an intervention study

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This study focuses on increasing knowledge and practice skills among nurses in home care - related to evaluation of vision and hearing as well as lighting conditions in the homes of the elderly.

**Background:** Studies suggest that there seems to be limited attention to vision and hearing impairments and lighting conditions in the homes of the elderly. Multimorbidity and age-related changes in the vision and hearing function lead to reduced eyesight and hearing. The impairment increases with age. It is well documented that impairment of vision and hearing can affect people's quality of life. Elderly with combined visual and hearing impairment are a particularly vulnerable group who need special attention.

**Objective:** A training programme for nurses in home care was developed in order to increase knowledge within the three areas - the eyesight and the hearing of the elderly, and the indoor lighting at home. The overall objective was to develop nurses' competence and place nurses in the position to perform simple screening tests for vision and hearing. A form for assessing and surveying the indoor lighting was used. It was a goal for the nurses to develop sufficient competence to suggest changes, recommendations and references for further report.

**Method:** The study is an intervention study where a training programme was developed. Nurses in the home care from five different locations in Norway participated in the programme. The intervention was planned with an intervention group and a control group, with 10 nurses in each group. The intervention group participated in the training programme of four days, each day 6 hours. The programme consisted of lectures related to vision, hearing and lighting factors and practical exercises. A mapping tool was used and the intervention group will survey and follow up five patients each (over 80 years) for about 8 weeks. Both intervention and control groups performed a multiple choice knowledge test before the training programme started and will repeat this again in March 2012. The test consists of 30 questions, with 10 questions in each of the three areas.

**Results:** Experiences from the training programme and results from the multiple choice-tests will be presented and discussed at the conference.

P1-122

Model of learning for practitioners in dementia care with music therapy as the joint focal point

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The project is a PhD research in progress, which aims to develop a model of learning for practitioners in dementia care, which has music therapy as the joint focal point and focus on the relational meeting.Through development of a cross-disciplinary cooperation between the music therapist and the care providers in connection with a course of music therapy, will following areas be elucidated: How can the musical and interpersonal competencies of the individual care provider be developed with the purpose to effect the relational meeting with persons suffering from dementia, in a way that the care provider is able to develop and transfer new knowledge and acquired skills to the daily nursing and care through the application of tangible tools from the musical activities? And further: What impact does the emphasis on development of the care provider's musical and interpersonal competencies have on quality of life and well-being among persons suffering from dementia?

The model of learning includes using the Dementia Care Mapping Method and the theoretical frame of reference for the project; for example Daniel Stern's theory of senses of self, forms of vitality, the present moment, Barry Reisbergs research on retrogenesis and the recent research on mirror neurons. Methodically the project is organized as a case study of a music therapy course in which includes process data, outcome data and follow-up data that assess the effect of the course in connection with the effect of the learning process of the practitioners. Four persons suffering from dementia living in a care facility and four care providers are included. Preliminary results indicate that the care providers are able to develop and transfer new knowledge and acquired skills to the daily nursing and care through the application of tangible tools from the musical activities, which has an effect on quality of life and wellbeing for persons suffering from dementia.

\* Note: Illustraion to P2-108

	BASELINE					
	Home training			Group training		
	n	mean	(SD)	n	mean	(SD)
BBS	63	35.7	(10.7)	62	34.6	(10.8)
TUG	62	18.9	(7.8)	59	19.3	(8.0)
STS	62	5.1	(4.4)	59	3.9	(4.5)
FES-I	56	13.1	(4.2)	56	13.5	(4.7)
	3 MONTHS					
	Home training			Group training		
	n	mean	(SD)	n	mean	(SD)
BBS	46	41.3	(10.4)	46	43.4	(9.4)
TUG	41	15.0	(6.2)	44	14.5	(6.7)
STS	45	5.9	(4.3)	43	6.9	(5.1)
FES-I	44	11.4	(3.5)	44	10.7	(3.7)
	6 MONTHS					
	Home training			Group training		
	n	mean	(SD)	n	mean	(SD)
BBS	39	41.5	(9.0)	39	42.1	(10.8)
TUG	39	15.5	(6.1)	36	13.8	(6.3)
STS	40	5.6	(4.3)	37	6.3	(5.7)
FES-I	38	11.2	(3.6)	37	10.3	(3.9)
Group differences in change (p-value)						
	0-3 MONTHS	3-6 MONTHS	0-6 MONTHS			
BBS	0.019	0.608	0.365			
TUG	0.076	0.555	0.055			
STS	0.006	0.643	0.029			
FES-I	0.128	0.294	0.006			
BBS = Berg Balance Scale; TUG= Timed Up-and-Go; STS =30 second sit-to-stand test; FES-I = 7 item Falls Efficacy Scale International						

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