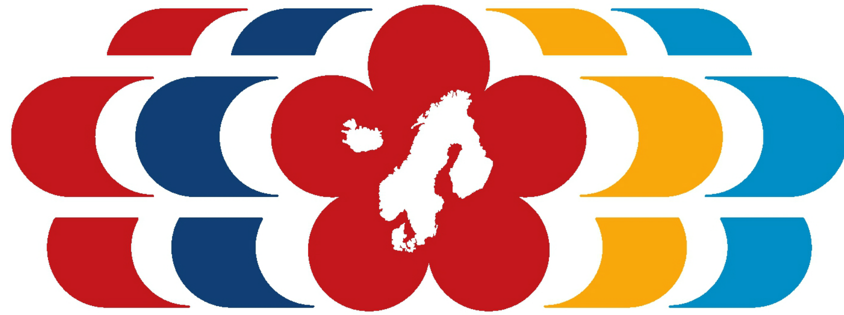

Nordic Gerontological Federation

GeroNord

News on research, developmental work and education within the ageing area in the Nordic Countries

Volume 31, no 2, 2021

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Words from the President

Dear friends & colleagues,

How wonderful, challenging, and exciting it is to be a part of the field of gerontology these days! During the coming years we will see a rapid shift in the demographics of the Nordic countries, and many more around the globe, with an increasing number of older individuals. This change has sometimes been termed the "silver tsunami", but I feel that we can put a more positive spin on it as a tsunami indicates something unexpected and calamitous. Fortunately, we are well aware of the changes ahead and should embrace the challenges and possibilities they entail. We will find ourselves in the very center of this changing world and our expertise and our research will be a vital part of the effort to address these changes successfully.

The United Nations have named the coming decade *the United Nations Decade of Healthy Ageing* with a focus on four areas of action: Age-friendly environments, Combatting ageism, Integrated care, and Long-term care[1]. All these areas have been within the scope of The Nordic Gerontological Federation and something we will continue to focus on.

Another area of interest is the ever-evolving Covid-19 pandemic and the numerous gerontological lessons that can be derived from it. How do we assess risk as opposed to quality of life in our final years of life? What is the price of continuing isolation for the oldest old? Professor Ingmar Skoog at the University of Gothenburg addressed these questions in his "summer talk" on the Swedish radio, P1[2], which can be warmly recommended.

With all these, and many more, interesting areas of research to discuss and develop it is fortunate that we will be able to meet in Denmark very soon. Due to the Covid-19 pandemic there will be only one year between the 25th and the 26th NKG and the chance to meet in person is finally around the corner. The preparations for the congress in Denmark are well underway, with the fitting theme of "Change and Continuity." The abstract submission is now open, and I warmly recommend that you look at the website and start planning your trip: www.26nkg.dk

[1] https://www.who.int/initiatives/decade-of-healthy-ageing
[2] https://sverigesradio.se/avsnitt/ingmar-skoog-sommarprat-2021

Also, I would like to use this opportunity to thank Nils Holand, who has been the president of the NGF for the past three years and handed over the presidency to me at the 25th NKG this summer. Nils has led the NGF with a steady hand through very unusual and uncertain times. He has been devoted to the organization for many years and has offered a sharp vision for its future with a focus on increasing collaboration between the member countries. We are grateful for Nils' valuable contribution and look forward to our continued collaboration in the NGF Executive Board.

Finally, a few words to introduce myself as the new president of NGF. I am a physician, specialized in internal medicine and geriatric medicine. I did my specialist training at Landspitali University Hospital in Reykjavik, Iceland and at the Karolinska Hospital in Stockholm, Sweden. I also finished a PhD in 2018 at the Karolinska Institute with a thesis on biomarkers in preclinical familial Alzheimer disease. I am currently the head of the dementia unit at Landspitali and the focus of my research has stayed within the field of dementia where I have continued to work with biomarkers and the genetic aspects of dementing illnesses. I am honored to be taking on the presidency of the NGF untill the congress in Denmark next year and grateful for the trust the NGF has shown me!

Best wishes to you all,

Steinunn Thordardottir
President of the Nordic Gerontological Federation

CHANGE and CONTINUITY - Call for abstracts

Delegate registration is open! Follow the program, register, and submit at www.26nkg.dk

Deadline for symposium submission is November 16 2021.

We invite you to the 26th Nordic Congress of Gerontology in Odense, Denmark, June 8–10, 2022.

On behalf of the Danish Society of Gerontology, the Danish Geriatric Society, and the Nordic Gerontological Federation, we invite you to join the 26th Nordic Congress of Gerontology (NKG) to share our engagement in ageing and later life.

Life is about change and continuity. We experience ourselves and our surroundings differently throughout life. For most people, later life is often characterized by major transitions, moving towards frailty and multiple losses – but it may also be a part of life with more time to engage in preferred activities, explore new possibilities, and come to terms with or embrace new challenges. The corona pandemic proved to be a challenge to the world beyond imagination, particularly to frail and vulnerable people and societies. However, it has also given us valuable new insights and reminded us of the values in life.

On behalf of the organizers, we invite professionals, scholars, policy makers, and

companies to explore questions of change and continuity in the perspective of ageing and later life. Plenary lectures, symposia, oral sessions, posters, and exhibitions will reflect themes from a multitude of gerontological and geriatric topics, particularly: Digitisation and technology - Housing, generations and mobility - Lifestyle, engagement and transition - Education and competences in ageing societies - Morbidity, medical treatment and ageing processes - A good life and a good death.

We welcome presentations and discussions to address perspectives that have major impact on societies and future generations: Citizen perspective, Ethnicity, Inequality, Sustainability and ecology, The coronavirus pandemic and lockdown.

The congress will give you a chance to get to know Odense, the enchanting city of Hans Christian Andersen – just an hour by train from Copenhagen. The new venue, Odeon, is situated in charming cobble stone streets a few steps from the poet's house and museum. Part of the city has recently been reconstructed into easily accessed cultural and shopping districts, not to mention the parks along the river and the new, recreational harbour area. Change and Continuity!

Looking forward to greeting you in Odense in 2022!
On behalf of the organizing committee,

Jette Thuesen, President
Pia Nimann Kannegaard, Secretary General

The 25NKG

The first ever virtual Nordic Congress of Gerontology

The road to the opening ceremony of 25NKG in June 2020 was unusually long and bumpy. When we started planning the congress in 2017, we often talked about the extremely challenging 20th Nordic Congress of Gerontology held in 2010 and organized by the Icelandic member societies. In 2010 we had a huge volcanic eruption in Eyjafjallajökull glacier which had a devastating effect on international flights all over Europe. The eruption started a little over 2 months before the congress, and put the whole operation into enormous jeopardy. Fortunately, international travel was mostly back to normal when the congress started in June, and it ended up being a success after all. We joked that there was no way we could have such a challenging time again, that Iceland had already had its fair share of surprises in relation to planning this congress. How wrong we were!

In beginning of the year 2020 the scientific program for the theme “The Age of Ageing” was being finalized. We had gotten free access to all of Reykjavik swimming pools, to secure physical activity and relaxation in the hot tubs for all the conference participants during the congress. And we were actively planning to carbon neutralize the congress. The NGF executive committee had chosen Marta Szebehely as the receiver of the Sohlberg prize and we in the local organizing committee had chosen Agnete Aslaug Kjær as the promising researcher from Denmark. Eight travel grants had been awarded to participants from Denmark, Finland, Iceland and Sweden, but no application came from Norway or the Baltic countries. Registration was going very well, and we had over 80 symposia submitted. We were thrilled for 25NKG in June 2020!

In March 2020 we were optimistic that this COVID problem would blow over before the conference in June but soon we realized that we had abandoned all such hope and one of our organizing committee members wondered if we should start planning for the first ever virtual Nordic Congress of Gerontology. At this time most of us thought this was an interesting but absurd idea and had it as a plan D, as none of us had much experience with virtual congress. But a year later, June 2-4, 2021, the first ever virtual Nordic Congress of Gerontology became a reality. With 465 participants from 30 countries, scientific program with seven excellent keynote speakers, 21 symposia, 119 oral lectures and 218 posters and

a maximum of eight parallel sessions as breakout sessions at a time. This shows that during this pandemic we have literally been hurled into a new digital age which has torn down boundaries and made physical location irrelevant. We were able to come together safely and without restrictions and be inspired by each other, meet new people with new ideas, expand our network and take a well-deserved break from the challenges of our day-to-day work. International collaboration has never been easier and in the virtual world we have access to a large group of people who can aspire us to create a better quality of life for us all as we age. Together we are stronger and move faster towards this common goal.

Even though we did not get the opportunity to meet other attendees over coffee or a drink this year we hope that we will all meet in 26NKG in Denmark and together build bridges to better aging.

On behalf of the organizing committee,

Steinunn Þórðardóttir, President of 25NKG
Ólöf Guðný Geirsdóttir, Secretary General of 25NKG

Grants and Prizes at the 26NKG

Grants for participation in the 26NKG

The Nordic Gerontological Federation offers 13 grants for congress participation, two grants for each Nordic country and one for each of the three Baltic countries.
Deadline for application is February 15 2022.
Read more about the grants for 26NKG participation.

The NGF prize for promising researcher in gerontology

At the 26th Nordic Congress of Gerontology in Odense the NGF prize for promising researcher in gerontology will be handed out for the 5th time. The prize is intended for a researcher from a Nordic country.
Deadline for nominations is December 15 2021.
Read more about the NGF prize.

The Sohlberg Prize

The Nordic Gerontological Federation invites for nominations of candidates for the most prestigious Nordic Prize in Gerontology, the Sohlberg prize.
Deadline for nominations is December 15 2021.
Read more about The Sohlberg Prize.

Gerontology in the Nordic countries: Iceland

This is the first of a new series of features in GeroNord that will give a brief insight of the status of gerontology in the member countries; Iceland, Sweden, Denmark, Finland and Norway. This very first feature takes us to Iceland.

In Iceland, the members of the Nordic Gerontological Federation are the Icelandic Geriatric Medicine Society (Félag íslenskra öldrunarlækna-FÍÖ) and the Icelandic Gerontological Society (Öldrunarfræðafélag Islands). Both organizations have been deeply involved with the organzing of the 25NKG that took place online on June 2-4, 2021, one year later than first scheduled, due to the corona pandemic. In 2000 and 2010 the NKG took place physically in Reykjavik, Iceland.

This status is based on information kindly provided by Sirrý Sif Sigurlaugardóttir, president of the Gerontological Society, and Ólafur Samúelsson, president of the Geriatric Medicine Society.

The Icelandic Geriatric Medicine Society was founded in 1989 and has had a collaboration with the Icelandic Gerontological Society from the start. In 2021, the members count 31 doctors. Members include specialists in Geriatric Medicine, Internal Medicine, Psychiatry and General Medicine. The society is a part of the Icelandic Medical Society.
Website: http://www.oldrunarlaeknar.is/

The Icelandic Gerontological Society was founded in 1874. In 2021 the members count around 200 people. The board members of the IGS reflects that there's a wide range of different professional groups among the members; the board include a social worker, physiotherepist, occupational therapist, a person with pedagogical training and a nurse.
Website: www.oldrun.is

Overview

Iceland has a total population of just over 360,000 thousand people and two-thirds live in the Reykjavik area. The proportion of people over 65 years of age is just under 15% and just under 2% are 85 years and older but rapidly growing.
Approximately 85% of the health care is publicly funded.

Topics related to gerontology and geriatric specialties can be studied both at the University of Reykjavik and the University of Akureyri.

There are both acute and postacute care departments run by geriatric specialists in Iceland. There is an ambulatory service for evaluation and follow up of geriatric patients and a specialized memory clinic for diagnosis, treatment and follow up of dementia. Geriatricians in collaboration with general practitioners also service selected nursing homes.

Interest among physicians in formal geriatric training has been growing during the past decade. The majority of Icelandic geratritians are specialists in Internal Medicine with Geratrics as a subspeciality but the speciality of geriatrics is recognized as an independent speciality.
The majority of specialist physicians in Iceland have had their postgraduate training abroad, either in Europe or North America. The Icelandic health authorities accept specialist degrees from recognized training programs following the standards of each country.

A curriculum in geriatric medicine is integrated in undergraduate medical training in Iceland and recently a 2 year curriculum in Geriatric specialist training, as a subsepeciality of Internal and General Medicine, was established.

Main gerontological themes in Iceland

As elsewhere there is a growing increase in the population of elderly individuals. In the health care sector this has led to an increasing shortage of hospital beds and lack of sufficient home care and rehabilitation resourses in spite of endless warnings for almost three decades. Linked to this is a debate for better social and pension support for elderly people. This is a continuous theme in the political discussion and in the media with ever increasing strength. Focus on increasing variability of appropriate care and support is more and more visible in debate and research.

Another current theme politically and in the public debate is the organisational split between social home care services and home health care. Home care nursing is run by the state and the health care services are run by the municipalities. This complicates funding in the area of eldercare in the home and makes payment for services a matter of contest.
As in many other countries we have seen in Iceland during the pandemic that more elderly have gotten to know technologically mediated means of communication, Ipad, computer etc. Now in many places, like centers for the elderly, they are hosting technologcal seminars for elderly people.

Examples of activities in the organisations

Every year The Icelandic Gerontological Society gives out one or two grants to support ongoing research in gerontology. In 2020 the organisation awarded money to a PhD project about home care nursing for people with dementia and their spouses, as well as a PhD project about how to prevent older people from becoming malnourished. Supporting ongoing research is one of the main purposes of the organisation.

Another main purpose for the gerontological society is to mediate knowledge to both researchers and other specialists as well as to the general public. This is done through the website and the Facebook page.
The Icelandic Gerontological Society also hosts lectures open to the public about gerontological topics that have been quite succesful, not least because they have been recorded and the recordings have been able to travel all around Iceland. The population lives quite scattered in Iceland, and especially in winther getting around can be challenging.

The free lectures have been aimed both at the public and professionals and people giving unpaid care. Four lectures in a row of half a day have been aimed at professionals only and have included a small participation fee.

In the Icelandic Geriatric Medicine Society, the members are involved in some of the cutting edge research in Iceland.

An example is the AGES-Reykjavik study, which is conducted by the Icelandic Heart Association and funded by the National Institute of Aging (USA). This is one of the largest and most comprehensive cohort studies on aging in the world. Its main focus are the interactions between age, genes and the environment and how they are reflected in disability in old age or through common age associated diseases such as cardiovascular disease, dementia and osteoporosis. Icelandic geriatricians are also involved in various other local and international research projects.

Icelandic geriatritians have also activiely taken part in dementia research, for example:

- A Nordic research collaboration within the Nordic network in dementia diagnostics (NIDD) which is aimed at developing new diagnostic tools for different types of neurodegenerative diseases causing dementia.
- The establishment of an Icelandic national dementia registry, based on the same methodology as the Swedish dementia registry (SveDem). A large study on patients with mild cognitive impairment (MCI) within the Memory clinic at Landspitali, University hospital in Reykjavik, with focus on diagnostic tools and prognosis.
- A collaboration with Decode genetics on the interaction between genotype and phenotype of patients with dementia.
- A few studies revolving around artificial intelligence have also been carried out or are underway, using artificial intelligence as an aid for brain imaging, neuropsychological assessment, and speech pathology.

In Iceland there is a recently established curriculum for specialisation in Geriatric Medicine as a subspeciality to either Internal Medicine or General Medicine which is a new exciting possibility for the continous growth of the specialty. The Icelandic Medical Society organizes an annual, CME recognized, meeting of which geriatriciants have taken active part in organizing and presentations. The IGS has monthly member meetings and a full participation at the NKG, the biannual congresses of the NGF.

News from the Nordic countries

Sweden

Higher education institutions are investing in the graduate school on aging and health

Twelve higher education institutions are joining forces to finance the national graduate school on aging and health, SWEAH, after the funding from the Swedish Research Council ceases.

Since the start in 2014, the interdisciplinary graduate school has hosted about 90 doctoral students, of which just over half have defended their dissertations.

Unique investment

The national graduate school SWEAH's new partnership, which begins from 1 January 2022, is unique. The fact that twelve higher education institutions provide co-financing to ensure the continued development of SWEAH shows how important it is to invest in educating future researchers in the important research area of aging and health, the coordinator for SWEAH at Lund University, Professor Susanne Iwarsson, says.

Read online on SWEAH’s webpage.

Iceland

SELMA: A designated support system to homecare in Reykjavik

Homecare in Reykjavík, Iceland, is a nursing-led municipal service, integrated with the social home service. However, the medical services are provided by the government and run by Primary Health Care, with little interaction between the systems. In our aging population, frailty and hospital admissions increase, but most of the elderly want to live at home for as

long as possible (WHO, 2017[3]). There is a call for a stronger homecare service, with enhanced integration of homecare and primary care and the development of more competent homecare nursing. To be able to lighten the pressure on hospitals and giving people a better chance to stay longer at home with more healthcare support. To reach that, an integrated team, SELMA, was formed with clinical nursing specialists from the Department of Welfare in Reykjavík and GPs from the primary health service, hired through a private healthcare company. It was designed as a designated support system for the homecare service. The SELMA team provides services from Monday to Friday from 9 a.m. until 5 p.m., with one nurse and one doctor per shift, offering telephonic counselling to nurses in homecare and additional home visits to patients, if needed, for proactive and semi-acute interventions.

An important element of the SELMA nurses' role is coordinating and empowering the collaboration and communication with homecare nurses and primary care as well as outpatient clinics. The emphasis has been on clear and simple messaging, aiming at a better flow of services and information between homecare and primary care. SELMA's contribution has steadily increased during its first year of practice with good results. It has proved to be an important support for the fundamental services of homecare, strengthening the resources of homecare nurses and contributing to the improved care of frail elderly living at home. During its first six months, SELMA supported homecare nurses with their patients in 92 cases, and in 75 of those, ER admission and hospitalization were prevented (81%). The results have also shown that SELMA's backup for nurses in homecare can also play a key role in enhancing the flow and continuity of service by encouraging and leading a conversation across health and social services in difficult and complex cases, characterized by helplessness at each level of service.

"This is a great team and a great addition to the resources of homecare nurses in providing the best care available for our patients at any given time". (Nurse, NN1)

Margrét Guðnadóttir, RN, MSc, ANP
Project manager of SELMA in Homecare of Reykjavik, Iceland

[3] World Health Organization (2017). Global strategy and action plan on ageing and health. World Health Organization, Geneva. https://www.who.int/ageing/WHO-GSAP-2017.pdf?ua=1

Recent doctoral dissertations

Geriatric Assessment in Clinical Practice — Current Situation and Challenges in Implementation

Hanna Kerminen has been awarded a PhD at the Faculty of Medicine and Health Technology of Tampere University, Finland, on March 26th 2021.

Background and aim

Comprehensive geriatric assessment (CGA) is a central part of geriatric medicine. However, the concept of CGA is not well established, and the use of the term CGA is incoherent and unclear in both research and clinical practice. There is also a paucity of research considering CGA use in daily clinical practice. The aim of the thesis has been to get knowledge on a) how do Finnish geriatricians use CGA in their clinical practices, b) how the data acquired from a widely used geriatric assessment instrument (interRAI) may be utilised to detect hospitalised patients with an increased risk of adverse hospital outcomes, and c) on the challenges of the geriatric assessment implementation process by describing the preliminary results of a depression screening protocol implemented among respiratory insufficiency patients at a pulmonary outpatient clinic in a tertiary hospital.

Methods and material

Study I involved a web-based questionnaire survey about CGA use among 95 geriatrician members of the Finnish Geriatrics Society. The evaluated domains were the assessment of cognition, assessment of nutrition and functional ability, evaluation of depression, and measurement of orthostatic blood pressure.
Studies II and III were retrospective cohort studies of patients aged ≥70 years hospitalised

in two geriatric hospitals over 3 years. These studies used data from interRAI-Post Acute Care (interRAI-PAC) assessments combined with hospital discharge records. Study II included 2,188 hospitalised patients, and Study III included 1,167 patients discharged to home from the index hospitalisation period. The FI was derived from interRAI-PAC data. The associations of interRAI-PAC scales and FI with hospital outcomes were analysed. Hospital outcomes included in-hospital mortality, prolonged hospital stay, and emergency department admission. Study III investigated the associations of interRAI-PAC variables and scales with 90-day readmission of the patients.

Study IV was a retrospective evaluation of the outcomes of a depression screening protocol using the records of 238 patients. In the protocol, the patients completed the Depression vi Scale (DEPS) questionnaire. Patients whose scores were indicative of depression were offered the opportunity to further undergo an assessment of mood at a psychiatric outpatient clinic.

Results

Study I: The majority of geriatricians involved in the study (94%) used CGA, but a minority (38%) administered it to all new patients (response rate 49%). Ten respondents (11%) incorporated all five domains into the assessment, whereas others selected domains according to their clinical judgement.

Study II: The discriminative ability of the FI for in-hospital mortality (area under the curve [AUC] 0.73) and prolonged hospital stay (AUC 0.75) was good. However, the short hierarchical scale for the activities of daily living (ADLH) was as good as the FI in predicting these outcomes.

Study III: The risk factors associated with readmission in univariate analysis were age, admission from home (vs. acute hospital admission), Alzheimer's disease, unsteady gait, fatigue, unstable condition, ADL impairment, body mass index (BMI), FI, bowel incontinence, hearing difficulties, and poor self-rated health. In multivariate analysis, age, ADL impairment, and BMI persisted as risk factors.

Study IV: The DEPS was administered to 66% of the patients in the first year of screening, but the coverage increased to 88% in the second year. Of the patients, 34% (n=21) scored ≥9 points, thus exceeding the cut-off for referral. Only 13 patients were referred, as the remainder declined the referral. Finally, seven patients were evaluated at a psychiatric outpatient clinic, and all were deemed to have depression.

Conclusion

Most Finnish geriatricians used CGA, but CGA use was not systematic, and the content of CGA was variable. This type of incomplete evaluation may lead to inadequate detection of geriatric syndromes. It was possible to derive the FI from interRAI-PAC data, and this FI predicted adverse hospital outcomes as expected. However, its predictive ability was not better than that of the short ADLH scale. In clinical practice, assessment of ADL is a simple and valid way to evaluate a patient's prognosis. interRAI-PAC evaluation performed upon admission to geriatric hospitals revealed patient-related risk factors for readmission. Based on the identified risk factors, it is recommended that the patient's functional ability, ADL needs, and individual factors underlying ADL impairment as well as nutritional and mobility problems should be carefully addressed and managed during hospitalisation to diminish the risk for readmission. Depression screening improved the detection of depressive symptoms, but its effect on the patients' treatment and clinical courses was small. Rather than referring patients to a psychiatric unit, the evaluation and management of depression should be undertaken at a same unit where a screening is performed.

Go here to learn more about the dissertation (in Finnish)

Contact: hanna.kerminen@tuni.fi

Lifestyle and 25-hydroxyvitamin D, and its associations with cognitive function among Icelandic older adults: AGES-Reykjavik study

Hrafnhildur Eymundsdóttir has been awarded a PhD at the University of Iceland, School of Health Sciences, Food Science and Nutrition in June 2021.

Background and aim

Studies show that by delaying the onset of dementia symptoms, preventive measures have the potential to reduce the prevalence of dementia dramatically in the coming decades. Major risk factors for developing dementia include advancing age and genetic profile. However, delayed onset of symptoms may be achieved through improvements in lifestyle e.g. physical activity, body weight management and nutrition.

The overall aim of the thesis was to investigate the association between lifestyle factors and the risk of developing dementia. The study examines the relationship between serum vitamin D levels, physical activity, body mass index, and cognitive function. The study further examines lifestyle factors among individuals who have been diagnosed with dementia or mild cognitive impairment (MCI) in relation to their serum vitamin D levels.

Methods and material

The study is based on cross-sectional and longitudinal data from the Age, Gene/Environment Susceptibility AGES–Reykjavik study. The AGES–Reykjavik study is a continuation of the Reykjavik Study from the Icelandic Heart Associations. During 2002–2006. 5,764 persons were chosen randomly from the survivors of the Reykjavik Study cohort and re-examined for the AGES–Reykjavik study. Between 2007-2011, all surviving AGES–Reykjavik (AGES I) participants (58%, N = 3,316) returned for a 5-year follow-up visit (AGES II). In AGES I and AGES II, participants underwent a clinical examination and completed questionnaires and a cognitive test battery.

The thesis builds on three studies with an epidemiological approach. The first study was a cross-sectional study examining the associations between serum 25-hydroxy vitamin D levels (25OHD) and cognitive function among old adults (aged 65-96 years). The final analytical sample included 4,304 non-demented participants. Serum 25OHD was categorized into deficient (≤ 30 nmol/L, 8%), insufficient (31-49 nmol/L, 25%) and normal-high levels (>50 nmol/L, 67%). Cognitive function assessments included measurements of memory function (MF), speed of processing (SP) and executive function (EF).

The second study was a cross-sectional study examining the associations between serum vitamin D levels and lifestyle factors depending on cognitive status, comprising 5,162 subjects (aged 65-96 years), stratified by cognitive status, i.e., dementia (n = 307), MCI (n =492) and normal cognitive status (NCS) (n = 4,363). Lifestyle variables were assessed (physical activity, body mass index, cod liver oil consumption, supplements, smoking, alcohol and fatty fish consumption and 25OHD was measured.

The third study was a longitudinal study examining the associations between body weight changes and cognitive status, comprising a cohort of 2,620 older adults (aged 65-96 years). Cognitive function outcomes included speed of processing (SP), executive function (EF) and memory function (MF). Longitudinal changes in body weight were classified into three groups; weight loss (WL), weight gain (WG) and stable weight (SW).

Results

Serum 25OHD was positively associated with cognitive function. Adjustment for physical activity and other potential confounders diminished this association only partially. Compared to participants with normal-high levels of 25OHD, those with deficient levels had decreased odds for highspeed of processing, high memory function and high executive function.

Older people with dementia or mild cognitive impairment diagnosis were significantly lower in vitamin D levels than NCS participants. According to linear models cod liver oil and dietary supplements were associated with higher 25OHD in all three cognitive status groups. However, physical activity ≥3h/week, body mass index < 30kg/m^2, non-smoking, alcohol consumption and fatty fish consumption ≥3x/week were related to higher 25OHD in NCS only but not in participants with dementia or MCI.

In longitudinal analysis the mean follow-up time was 5.2 years, 843 participants (32.2%) lost weight (-6.7 ± 3.8 kg), 505 (19.3%) gained weight (5.7 ± 2.9 kg) and 1,272 (48.5%) were weight stable (-0.1 ± 1.5 kg). Participants who experienced weight loss were significantly more likely to have declined in MF and SP compared to the SW group. Weight changes were not associated with EF. Weight loss was associated with a higher risk of MCI, while weight gain was associated with higher dementia risk when compared to stable weight.

Conclusion

According to the results of this study, lifestyle is associated with cognitive function among older adults. Around a third of the participants who were free from dementia, had either deficient or insufficient levels of vitamin D and, those who were deficient were more likely to have a lower cognitive function, in all three domains, as compared to normal vitamin D levels. Older people living in the community in Iceland with dementia, have lower 25OHD compared to healthy individuals, although the majority of them still have vitamin D levels within the normal range. Yet, older people with dementia rely more on vitamin D supplements than their healthy counterparts. Physical activity reported among participants with dementia and MCI is low and is not associated with 25OHD. Although participants with dementia had a poorer lifestyle than healthy participants, differences in lifestyle did not fully explain the observed lower levels of 25OHD in the dementia group. Individuals who lost weight had a higher risk of declining cognitive function, while separated analysis showed that weight gain might contribute to the risk of developing dementia. Significant body weight changes in older adulthood may, independently, indicate impending changes in cognitive function. When preventing cognitive decline and dementia among older adults, public healthcare systems should generally consider the lifestyle approach.

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The Board & Executive Committee of the NGF

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Jette Thuesen: 1. Vice president
Nils Holand: 2. Vice president
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Finnish Society for Growth and Ageing Research (Kasvun ja vanhenemisen tutkijat ry - Föreningenför forskning i uppväxt och åldrande): Elisa Tiilikainen.

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The Icelandic Geriatrics Society (Félag Íslenskra Öldrunarlækna): Steinunn Þórðardóttir.

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Norwegian Geriatrics Association (Norsk geriatrisk förening): Nils Holand.

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Swedish Geriatrics Society (Svensk Geriatrisk Förening): Peter Nordström.

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