

## Press release

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### Basic information

Name: Gitte Valentin      Email: [Gitte.valentin@rm.dk](mailto:Gitte.valentin@rm.dk) Phone: +4524276188

Department of: Clinical Medicine

Main supervisor: Bente Langdahl

Title of dissertation: Social inequalities in incidence and consequences of fragility fractures

Date for defence: 27.10.2021 at (time of day): 11.00 Place: Mødelokale 2, Konferencecenteret, Studenternes Hus, Fredrik Nielsens vej 2-4, Aarhus C or online via Zoom. Please contact Solveig Nielsen ([solveig.nielsen@rm.dk](mailto:solveig.nielsen@rm.dk)) if you would like to attend via Zoom.

Press release (Danish)

Ph.d.-forsvar

Ph.d.-studerende Gitte Valentin skal forsvare sin ph.d. med titlen "Social ulighed i forekomst og konsekvenser af knoglebrud blandt ældre" fra Aarhus Universitet, Health. Det overordnede formål med denne ph.d.-afhandling var, at undersøge om der er social ulighed i forekomst og konsekvenser af knoglebrud blandt ældre. Viden om socialt betingede forskelle i forekomst og konsekvenser af knoglebrud er vigtig for at kunne styrke og målrette forebyggende og rehabiliterende indsatser til sårbare ældre.

Forskningsprojektet er baseret på bl.a. systematisk litteraturgennemgang og analyser af spørgeskemadata fra mere end 100.000 danskere over 50 år. Projektet viste, at ældre som enten har kort uddannelse, lav indkomst eller som bor alene har højere risiko for at få et knoglebrud. Forskelle i sundhedsvaner, som fx rygning, alkohol og fysisk inaktivitet kan forklare en stor del af de socialt betingede forskelle i forekomst af knoglebrud. Projektet viste også at mindre ressourcestærke ældre har en højere risiko for at dø efter et hoftebrud. Derudover fandt projektet, at fysisk såvel som mentalt helbred efter et knoglebrud er ringere hos lavtuddannede.

Disse fund kalder på øget opmærksomhed på mindre ressourcestærke ældre i forhold til frakturforebyggelse og rehabilitering efter et knoglebrud. Indsatserne bør omfatte populationsbaserede tiltag rettet mod at facilitere en sundere livsstil gennem hele livet (fx reducere rygning og alkoholindtag samt at sikre bedre kost og øget fysisk aktivitet). Derudover bør der iværksættes specifikke indsatser rettet mod risikogrupper. Disse initiativer bør indeholde national implementering af såkaldte frakturforebyggelsesprogrammer (FLS) samt øget fokus på særlige behov for pleje og rehabilitering efter et knoglebrud til mindre ressourcestærke ældre.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 27/10 2021 kl. 11.00 i mødelokale 2, Konferencecenteret, Studenternes Hus, Fredrik Nielsens vej 2-4, Aarhus C eller online via Zoom. Kontakt venligst Solveig Nielsen ([solveig.nielsen@rm.dk](mailto:solveig.nielsen@rm.dk)) såfremt du ønsker at deltage via Zoom.

For yderligere oplysninger kontakt ph.d.-studerende Gitte Valentin, e-mail: [Gitte.valentin@rm.dk](mailto:Gitte.valentin@rm.dk), tlf. 24276188.

Bedømmelsesudvalg:

Professor Alma Becic Pedersen (Chairman)  
Klinisk Epidemiologisk Afdeling, Aarhus Universitet

Professor Sharon Brennan-Olsen

School of Health and Social Development, Deakin University

Professor Torben Jørgensen  
Center for Klinisk Forskning og Forebyggelse, Frederiksberg Hospital

Hovedvejleder:  
Professor Bente Langdahl  
Diabetes og Hormonsygdomme, Aarhus Universitetshospital

Press release (English)  
PhD defence

PhD student Gitte Valentin will defend her PhD dissertation with the title: "Social inequalities in incidence and consequences of fragility fractures" from Aarhus University, Health. The overall aim of the PhD dissertation was to establish the impact of socio-economic status on fragility fracture incidence and outcome. Knowledge of the impact of socio-economic status on the incidence and consequences of fractures among elderly is important to inform future health policy aiming to reduce cost and suffering associated with fractures.

The research project was based on systematic reviews and analyses of survey data from more than 100,000 Danes aged 50 years or more. The project found that individuals with low socio-economic status have higher risk of fragility fractures as well as higher risk of dying after a hip fracture compared with individuals with high socio-economic status. Furthermore, we found that post-fracture physical as well as mental health was lower among individuals with low socio-economic status than among individuals with high socio-economic status. Disparities in health behaviour can explain a large amount of the social inequalities in fragility fracture incidence.

These findings call for increased awareness of individuals with low socio-economic status in an effort to prevent future fractures and improve health and longevity for those who have suffered a fragility fracture. The effort should include population-based measures aiming to facilitate healthier life style choices throughout the life (e.g. reduce smoking, alcohol intake, poor nutrition and physical inactivity) as well as specific initiatives targeted at individuals at high risk of fragility fractures. The latter should include nationwide implementation of a coordinated multi-disciplinary fracture prevention program and increased awareness of special care and rehabilitation needs in individuals with low socio-economic status following a fracture.

The defence is public and takes place on 27/10 2021 at 11.00 in mødelokale 2, Konferencecenteret, Studenternes Hus, Fredrik Nielsens vej 2-4, Aarhus C or online via Zoom. Please contact Solveig Nielsen ([solveig.nielsen@rm.dk](mailto:solveig.nielsen@rm.dk)) if you would like to attend via Zoom. .

For more information, please contact PhD student Gitte Valentin, email: [Gitte.valentin@rm.dk](mailto:Gitte.valentin@rm.dk), Phone +45 24276188.

Assessment committee:  
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