

PhD Student **Kristine Stoltenberg Addington**, MSc

Place of enrolment: University of Copenhagen, Faculty of Health and Medical Sciences

Principal supervisor: Associate Professor Maria Kristensen, University of Copenhagen, Department of Public Health.

Title of project: Younger Adults Living with Diabetes Complications: A Mixed-Methods Study Investigating the Burden of Complications and Developing a Co-Created Support Intervention

ABSTRACT

Background: Diabetes is increasing worldwide, leading to increased morbidity and mortality, and constitutes a large burden for societies, healthcare systems and individuals. The growing diabetes prevalence combined with increasing life expectancy means that people live longer with diabetes, potentially developing diabetes-related complications at an early age. In addition, multidecade improvements in complication prevalence have not been observed among younger age groups (<45 years). Younger adults are living in what should be the most productive period of their life. Hence, complications are detrimental. Although 24.000 in the age group 18-45 years live with diabetes in Denmark, little is known about their burden of complications. The primary aim of this PhD is to expand the current knowledge about younger adults (aged 18-45 years) living with diabetes-related complications, including prevalence of complications, associated sociodemographic characteristics, resources and needs for support and to develop a tailored intervention to improve their quality of life and well-being.

Methods: Data is collected using mixed-methods, combined with participatory approaches. The project consists of 3 phases. Phase 1 is a registry-based study investigating the prevalence of diabetes complications among younger adults (18-45 years). The age-specific prevalence of diabetes complications will be modelled separately for each year, diabetes type, sex and selected sociodemographic characteristics, using a binomial model with log-link and a smooth parametric function of age. Based on findings from phase 1, phase 2 contains a qualitative study with 15 semi-structured interviews and 2 focus groups exploring resources and needs in the target group and identifying relevant intervention themes. Thematic network analysis and theoretical concepts of containment, illness identity and social practice theory will be applied during the analysis. Findings from previous phases will inform phase 3, co-creation and pilot testing of a tailored intervention to promote quality of life and prevent further deterioration among younger adults with diabetes complications.

Results: The study will contribute to a better understanding of younger adults living with diabetes complications and support improvement of quality of life among a supposedly vulnerable part of the diabetes population.