

## TRENDS IN PREVALENCE AND INCIDENCE OF PHARMACOLOGICALLY TREATED DIABETES AMONG ELDERLY RECEIVING HOME CARE SERVICES IN NORWAY (2009-2014): A NATIONWIDE STUDY.

Teigland T.<sup>1,2</sup> RN MSc; Igland J.<sup>2</sup> PhD; Tell G.S.<sup>2</sup> PhD; Haltbakk J.<sup>1</sup> RN PhD; Fismen A.S.<sup>1</sup> RN PhD; Birkeland K.I.<sup>3</sup> PhD; Østbye T.<sup>4</sup> PhD; Peyrot M.<sup>4,5</sup> PhD; Graue M.<sup>1</sup> RN PhD; Iversen M.M.<sup>1</sup> RN PhD

<sup>1</sup>Department of Health and Caring Sciences, Western Norway University of Applied Sciences, Bergen, Norway; <sup>2</sup>Department of Global Public Health and Primary Care, University of Bergen, Bergen, Norway; <sup>3</sup>Institute of Clinical Medicine, University of Oslo, Oslo; <sup>4</sup>Department of Family Medicine and Community Health, Duke University, Durham, NC, USA; <sup>5</sup>Department of Sociology, Loyola University Maryland, Baltimore, MD, USA

### Background

Overall life expectancy, as well as the prevalence and duration of diabetes mellitus (DM), are increasing. In Norway, many elderly people receive home care services (HCS), but the prevalence of elderly with DM in HCS and national trends in prevalence and incidence are not known.

### Aim

To estimate time trends in the prevalence and incidence of pharmacologically treated DM, in the elderly population receiving HCS in Norway during 2009-2014.

### Method

Data were obtained from two nationwide registries. The study population consisted of persons registered in the Norwegian Information System for the Nursing and Care Sector (IPLOS) aged  $\geq 65$  years and receiving HCS during at least one of the years 2009–2014. The Norwegian Prescription Database (NorPD) was utilized to identify this population's prescriptions for glucose lowering drugs (GLD), by ATC-codes. The period prevalence was calculated each year as: elderly with  $\geq 1$  prescription of GLD in the current or previous year divided by the total number of home care recipients the current year. A case of pharmacologically treated DM was defined as incident (new) for a given calendar year if there were no prescriptions of any GLD for that person during the previous 2 years.

### Results

During the study period, the population receiving HCS increased by 12%, from 112 487 in 2009 to 125 593 in 2014. The prevalence of pharmacologically treated DM in HCS increased from 14.2% to 15.7% ( $p < 0.001$ ) and was higher among men than women. The annual incidence rate decreased from 95.4 to 87.5 cases per 10,000 person-years from 2011 to 2014. However, this decrease was only significant among the oldest women. Persons with pharmacologically treated DM were younger and received more hours of HCS than other recipients of HCS.

### Conclusion

The increasing prevalence of pharmacologically treated DM among elderly receiving HCS in the period 2009-2014 and the growing population of HCS recipients, warrant increased attention to treatment and nursing care related to DM in the HCS.