

6.D. Pitch presentations: The burden of chronic diseases

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Sociodemographic disparities in burden of osteoporosis among Swedish adult and elderly population

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Background:

Osteoporosis is a common skeletal disease. Previous research has been primarily based on non-prospective designs, and rarely included male and/or migrant populations. We investigated the associations of sociodemographic characteristics with risk of osteoporosis in a Swedish nationwide cohort.

Methods:

This register-based prospective study included 1,900,279 males and 1,961,619 females born in 1920-1960, followed for osteoporosis from age 50 until December 31, 2012. Multivariable Cox regression was used to estimate the

associations with sociodemographic characteristics and was stratified by gender and co-occurrence of fractures.

Results:

12,906 males and 84,621 females aged 50-92 years received a diagnosis of osteoporosis. Incidence rates increased sharply from age 70. At all ages, women on average had 5 times higher rates of receiving first osteoporosis diagnosis than men. Region of birth and education were associated with incidence of osteoporosis in a gender-specific pattern. Compared to Swedish-born women, incidence of osteoporosis without fracture was elevated among female migrants from the former Soviet states (hazard ratio [HR], 1.62; 95% confidence interval [CI], 1.51-1.73) and the Middle East (HR, 1.62; 95% CI, 1.48-1.78), but lower among those from other Nordic countries (HR, 0.94; 95% CI, 0.91-0.97). Compared to Swedish-born men, a higher incidence was observed for male migrants from North America (HR, 2.03; 95% CI, 1.47-2.81). When fracture was accounted for, Swedish-born individuals showed higher incidence compared to migrants from other European countries except Nordic. For all osteoporosis subtypes, higher education was associated with increased incidence in women but not in men.

Conclusions:

Incidence of osteoporosis varies with age, sex, country of origin, length of stay, and educational level. Sociodemographic disparities in osteoporosis need to be considered by healthcare sectors for targeted interventions to reduce future fracture rate.

Key messages:

- This study demonstrates a large burden of osteoporosis in the Swedish adult and elderly population.
- Sizeable sociodemographic disparities in osteoporosis exist even within a country with universal healthcare.