

PREDICTORS OF 8-YEAR SURVIVAL IN NURSING HOMES: RESULTS FROM THE SENIOR COHORT.

C. Demonceau¹, F. Buckinx¹, J.-Y. Reginster¹, O. Bruyère¹

¹WHO Collaborating Centre for Public Health Aspects of Musculo-Skeletal Health and Ageing, Division of Public Health, Epidemiology and Health Economics, University of Liège, Liège, Belgium

Objective: Although some studies have investigated risk factors for death in nursing homes, they have tended to be limited to short-term observations and focused on a few risk factors. The aim of this study is to identify factors which are predictive of 8-year survival in nursing homes.

Methods: The study used the baseline measurements from the SENIOR (Sample of Elderly Nursing home Individuals: An Observational Research) cohort collected in 2013-2014, which included clinical assessments (i.e., body composition, nutritional status, physical performance, level of dependence and cognition, frailty status). Demographic information, number of medications and medical history were collected from the patients' medical records. Mortality data were collected annually for 8 years, with a final collection in 2022. Potential predictive factors for survival were first assessed in univariate analyses and significant variables were then entered into a stepwise proportional hazards regression model.

Results: Of the 662 participants enrolled in the cohort, 58 (8.8%) were lost to follow-up due to the withdrawal of 2 nursing homes and 71 (10.7%) had no mortality data available (i.e., relocation, refusal to continue the study). Among the 533 patients included in the study, 422 (79.2%) died and 111 (20.8%) were still alive in 2022. Median survival time from enrolment in the cohort was 4 years (1.93-6.94). Multivariate regression showed that younger age (HR =1.04 (1.03-1.06)), higher BMI (HR =0.96 (0.94-0.98)), higher MMSE score (HR =0.97 (0.94-0.99)) and higher SPPB score (HR =0.93 (0.90-0.97)) were protective factors against mortality.

Conclusion: In addition to age, which is a non-modifiable risk factor, our study shows that certain modifiable factors related to physical or mental health contribute to increased survival in nursing homes. Acting on these factors therefore appears to be a public health priority.