O.1. Health for older adults

Comparison of self-rated health and the global activity limitation indicator as predictors of mortality in the older population

Johan Van Der Heyden

OD Public Health and Surveillance, Scientific Institute of Public Health, Brussels, Belgium
Contact: johan.vanderheyden@wiv-isp.be

Background
Self-rated health (SRH) is a widely used and validated health measure and an excellent predictor of mortality, morbidity, functional status, disability and health consumption. The global activity limitation indicator (GALI), which identifies subjects with longstanding (at least 6 months) limitations due to a health problem by severity level, has been developed more recently and is increasingly used to calculate healthy life expectancies. Both instruments are included in the European Survey of Income and Living Conditions and the European Health Interview Survey. In this study the association between indicators constructed with these instruments, and mortality was studied in a representative sample of the older Belgian population.

Methods
Data were used from the participants of the Belgian Health Interview Survey 2008 aged 65 years and older (n = 2859). An individual linkage with health insurance data allowed to identify persons who died up to the end of 2010. The date of death was estimated from the year of death and the date of the last contact with a health service (either ambulatory care or hospital). The impact of an activity limitation measured by the GALI (AL) and poor SRH on mortality, was assessed by mortality rate ratios (MRR) from a Poisson regression, stratified by gender, and adjusted for age and education.

Results
By the end of 2010, 15.4% of males and 13.6% of females had died. Both in men and women mortality was strongly associated with an AL (MRR respectively 2.43; 95% CI 1.54-3.82 and 2.36; 95% CI 1.39-3.40); a poor SRH was a strong predictor for mortality in men, but not in women (MRR respectively 2.30; 95% CI 1.49-3.54 and 1.38; 95% CI 0.88-2.16). In a model including both SRH and GALI an independent association was found with both measures in men (MRR respectively 1.72; 95% CI 1.06-2.81 and 1.87; 95% CI 1.12-3.10). In women the association with an AL remained high (MRR 2.49; 95%CI 1.37-4.53), but there was no independent association with poor SRH (MRR 0.90; 95%CI 0.54-1.49).

Conclusion
Both SRH and the GALI are good predictors for mortality in the older male population; in older women only the GALI appears to be a good predictor. This finding may contribute to a further valorisation of the GALI in the domain of public health indicators.

Key messages
- The global activity limitation indicator (GALI) is a good predictor of mortality in the older population, both in men and women.
- In older women, the global activity limitation indicator (GALI) is a better predictor of mortality than self-rated health.