

META ANALYSIS: SOCIAL ISOLATION AND MORTALITY IN ELDERLY

Ayu Novita Wulandari¹⁾, Didik Gunawan Tamtomo²⁾,
Bhisma Murti¹⁾

¹⁾Masters Program in Public Health, Universitas Sebelas Maret

²⁾Faculty of Medicine, Universitas Sebelas Maret

ABSTRACT

Background: Ageing populations, urbanisation, and fewer extended families are increasing levels of social isolation in many countries. Social isolation and loneliness are both sources of chronic stress and implicit hypervigilance that lead to reduced sleep quality, physiological changes in cardiovascular health, impaired immune function, neuroendocrine effects, and elevated cortisol levels. The purpose of this study was to investigate the association between social isolation and the risk of mortality in elderly.

Subjects and Method: This systematic review and meta-analysis were conducted based on PRISMA statements' flow diagram and checklist. The article search was conducted based on the eligibility criteria using the PICO model, i.e Population: elderly, Intervention: social isolation, Comparison: without social isolation, and Outcome: mortality. 4 electronic databases (Pubmed, Google Scholar, Science Direct, and Scopus) were explored. The search strategy was structured using the following concept of keywords, "Social Isolation" AND "Mortality" AND "Elderly". Only published studies with full text availability were searched. The inclusion criteria were cohort studies, age of participants ≥ 60 years, and reported adjusted Hazard Ratio. Meta-analysis was conducted using Review Manager 5.3.

Results: 10 studies from Finland, Canada, United Kingdom, Amsterdam, Japan, and United States were met the inclusion criteria. A meta analysis resulted that social isolation in elderly increased the risk of mortality 1.17 times than those without social isolation (aHR= 1.17; 95% CI= 1.08 to 1.27; p= 0.002).

Conclusion: Social isolation in elderly increases the risk of mortality than those without social isolation.

Keywords: social isolation, mortality, elderly

Correspondence:

Ayu Novita Wulandari. Masters Program in Public Health, Universitas Sebelas Maret. Jl. Ir. Sutami 36A, Surakarta, Central Java 57126, Indonesia. Email: ayunovitawulandari-98@gmail.com. Mobile: +6282281301325.