Effects of loneliness and social isolation on mortality in older people

A longitudinal study finds that social isolation and loneliness in older people may be associated with increased all-cause mortality.

Overview: Social isolation is an objective and measurable reflection of reduced social network size and lack of social contact. It is not unique to older people but it can affect older people more than other age groups because of the effects of bereavement, age discrimination, and continuation of social isolation from mid-life. Loneliness is the psychological manifestation of social isolation. Social isolation and loneliness have been associated with increases in cardiovascular disease, mortality and other poor health outcomes, but it is not clear whether social isolation and loneliness are independent processes.

Current advice: The UK Government’s policy ‘Improving opportunities for older people’ notes that retirement is seen as an increasingly active phase of life in which people have opportunities to continue contributing to society and take personal responsibility for their own wellbeing. To support this policy, funding was made available to help older people most at risk of longer-term loneliness and social isolation to remain active.

New evidence: Steptoe et al. (2013) reported results of an analysis of 6500 people aged 52 years and older (around two-thirds were aged over 60 years), who participated in the English Longitudinal Study of Ageing in 2004–05, assessing social isolation, loneliness and all-cause mortality until March 2012. Social isolation and loneliness were defined as the top quintile in assessments of social isolation in terms of contact with family and friends and participation in civic organisations, and on the revised University of California, Los Angeles loneliness scale.

Both social isolation and loneliness were more common in people who were older, unmarried, and with lower levels of education and wealth. Women were more likely to be lonely, but there were no gender differences in social isolation. Overall, 918 people (14%) had died by March 2012, with a higher rate in men (16%) than in women (12%, p<0.001). A higher proportion of people died who were socially isolated (22%) than those who were not (12%). After adjustment for age and sex, the hazard ratio (HR) for mortality in the high social isolation group was 1.50 (95% confidence interval [CI] 1.30 to 1.73, p<0.001).

Similarly, more people died who were lonely (20%) compared with those who were not (13%). After adjustment for age and sex, the HR for loneliness was 1.26 (95% CI 1.08 to 1.46, p=0.003).

No interaction was seen between social isolation and loneliness. Social isolation remained significantly associated with mortality after adjustment for demographic factors, although the association for loneliness became non-significant.

Commentary: “There is increasing recognition of the importance of social isolation, and loneliness, in determining both quality of life and the risk of premature mortality. The prevalence of both factors is increasing, especially in the older population, making it important to understand the mechanisms of
their effects, and their potential mitigation. This study confirms associations with increased mortality, but also seeks to differentiate their separate impacts. The association of social isolation with increased mortality remained significant after adjusting for demography and baseline health, and was unchanged when loneliness was included in the model. However the effect of loneliness was not independent of demographic characteristics or health problems, and did not contribute to the risk associated with social isolation.

So, we should theoretically achieve greater impact on mortality by reducing social isolation rather than loneliness, but how could we most cost-effectively do this? To some extent this study obscures rather than clarifies this issue, because if emotional processes relating to loneliness do not explain the mortality impact of social isolation, what does? Lifestyle, access to immediate help, and specific benefits of social contact may all contribute, but until we are clearer about the causal pathway, our interventions will necessarily be broad rather than specific. Given that the study also showed that the variations in risk applied across the full spectrum of social connectedness, not just the extremes, better understanding of these associations becomes even more important to successful intervention.”

– Dr Mike Sadler, Clinical Non-Executive Director, Southern Health NHS Foundation Trust

Study sponsorship: US National Institute on Aging and UK Government departments coordinated by the Office for National Statistics.

About this article: This article appeared in the September 2013 issue of the Eyes on Evidence e-bulletin. This free monthly e-bulletin from NICE Evidence outlines interesting new evidence and what it means for current practice. They do not constitute formal NICE guidance. The opinions of contributors do not necessarily reflect the views of NICE.

To receive the Eyes on Evidence e-bulletin, please complete the online registration form.