

Potential Health Effects of Loneliness in the Pandemic Era

Srikanta Banerjee

S Banerjee¹, G Burkholder², G Szirony¹, B Sana³

¹College of Health Professions, Walden University, Minneapolis, USA

²School of Psychology, Walden University, Minneapolis, USA

³Johns Hopkins Medical Institute, Johns Hopkins University, Baltimore, USA

Contact: srikanta.banerjee2@mail.waldenu.edu

Background:

COVID-19 has posed a public health problem leading to considerably higher healthcare costs in the U.S. population. Additionally, social connectedness has been demonstrated to be directly correlated with improved disease management and outcome of treatment. The purpose of the current study was to explore 10-year mortality outcomes of loneliness.

Methods:

We assessed data from the 1999-2008 National Health and Nutrition Examination Survey, with mortality data obtained through 2015. All individuals from this nationally representative study were 20 years and older. Hazard ratios with 95% confidence intervals (CIs) for all-cause and cardiovascular disease (CVD) mortality were estimated using Cox Regression models.

Results:

Out of 994 participants (54% females vs. 46% males) with loneliness, 324 deaths were reported (including 71 CVD deaths) during an average of 10-year follow-up. The hazard ratio for mortality among those experiencing social isolation was 1.28 (95% CI = 1.17-1.39). The adjusted HR for all-cause mortality [1.24 (CI 1.12-1.38, $p < 0.05$)] and CVD mortality [1.31 (CI 1.09-2.56, $p < 0.05$)] were significant, after additional adjustment for demographic and health risk factors. There was also an increase in COVID-19 related loneliness search behavior.

Conclusions:

Individuals who experience loneliness have a significantly higher likelihood of overall and CVD-mortality than those who are socially connected. Consequently, addressing loneliness in the face of social distancing and isolation may contribute to lower premature death risk and improve CVD-mortality in this vulnerable population.

Key messages:

- Loneliness may longitudinally lead to increased mortality from cardiovascular disease.
- Future public health interventions should incorporate active efforts to address loneliness.