

## The Relationship Between Loneliness and Quality of Life in Older Adults

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**Background/Objective:** Loneliness is the self-perceived discrepancy in an individual's desired and actual social relationships. Loneliness is common among older adults and is associated with chronic illness and poorer mental health outcomes. Our objective was to determine the relationship between loneliness and quality of life (QOL) in older adult patients, controlling for depression and anxiety.

**Methods:** Secondary data analysis was conducted on baseline data from the Caregiver Outcomes of Alzheimer's Disease Screening (COADS) Trial, an ongoing trial evaluating benefits and risks of Alzheimer's disease and related dementias (ADRD) screening. Patients were  $\geq 65$  years old with no history of ADRD. Measures include the 5-item NIH Toolbox Loneliness measure, QOL, measured by the physical (PCS) and mental health component (MCS) scores of SF-36, and depression and anxiety, measured by PHQ-9 and GAD-7, respectively. We conducted a Spearman correlation and ran unadjusted and adjusted linear regression models to assess the relationship between loneliness and QOL.

**Results:** Patient mean (SD) age was 73.7 (5.1) years; 44.8% male; 91.5% white; 7.5% black. We found that loneliness was moderately correlated with QOL measured by SF-36 MCS ( $r = -0.43$ ,  $p < 0.001$ ), anxiety ( $r = 0.44$ ,  $p < 0.001$ ), and depression ( $r = 0.42$ ,  $p < 0.001$ ), while weakly correlated with QOL measured by SF-36 PCS ( $r = -0.15$ ,  $p < 0.001$ ). Loneliness was associated with lower MCS ( $p < 0.001$ ) and PCS ( $p < 0.001$ ). After adjusting for depression and anxiety, only MCS ( $p < 0.001$ ) was reduced by loneliness. Additionally, we found a positive association between PCS and patient report of comfortable level of income, before ( $p = 0.002$ ) and after ( $p = 0.002$ ) adjustment.

**Conclusion:** We found that loneliness was significantly associated with worse quality of life as measured by mental health constructs among older adult primary care patients. Therefore, we recommend primary care providers assess loneliness with their older adult patients and if present, consider interventions aimed at reducing loneliness such as activities that maintain meaningful social relationships.