

## Hearing Loss Is Significantly Associated with Depression

Depressive disorders and hearing loss are the two leading causes of disabled living among adults in high-income countries. Could the two be related? Hearing impairment is an invisible handicap that can impose a heavy social and economic burden on the lives of those who experience it as well as their families, friends, and communities. Hearing loss can have an isolating effect on people and may be a cause of considerable negative social, psychological, cognitive, and health effects that detract from overall well-being.

In the first nationally representative study on the association between hearing loss and depression, researchers sought to determine the nature of this link. The results indicated that hearing loss was significantly associated with an increased risk of depression in adults of all ages and was most pronounced in those aged 18 to 69. Data from the 2005 to 2010 National Health and Nutrition Examination Survey of 18,318 adults 18 and older were used, and a mild hearing loss was defined as a 20- to 34-dB loss. The average age was 49.6 years, and 51.7 percent of the participants were women.

Women were much more likely to report depression symptoms than men, but less likely to report a hearing loss. A lower education level was strongly associated with depression but also had a strong link to hearing loss. Some lifestyle factors were associated with hearing loss and depression as well. Living alone, higher body mass index, a history of smoking, binge drinking, and poorer

health status were associated with both hearing loss and depression, as were specific health conditions: high blood pressure, diabetes, heart disease, cancer, vision trouble, and sleep disorders.

Overall, significantly higher odds of depression were associated with any degree of hearing loss compared to those who hear normally, but some sex-specific models revealed that men and women shared many of the same risk factors associated with depression, such as lower household income, binge drinking, sleep disorders, vision trouble, and general health status.

The prevalence of depression also increased as hearing loss worsened, except for those who were deaf and least likely to report depression. Interestingly, symptoms were significantly worse in participants age 60 or older with a mild hearing loss, but not in those with moderate to severe hearing loss. Researchers supposed that the lower depression rates signified that those participants obtained help through hearing treatment.

In a related study, the National Council on the Aging found that people with a hearing loss who did not use hearing aids stated that they felt sad, depressed, worried, anxious, or paranoid more often. They also pursued social activities less often, and felt more emotional turmoil and insecurity. The prevalence of depression among the participants in this study was lower in those who reported using hearing aids. ■