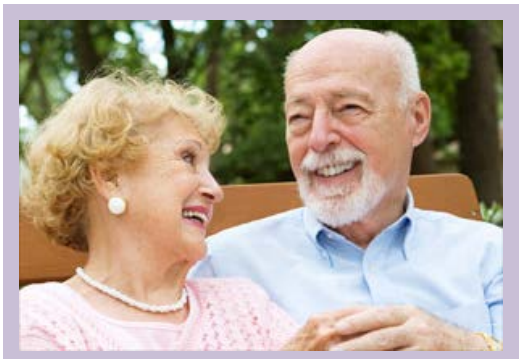
May 1, 2013 Columns

SIGnatures: Sound Connections

Special Interest Group 8, Public Health Issues Related to Hearing and Balance

by Barbara E. Weinstein



"Mr. Mark," an 81-year-old recent retiree suffering from multiple chronic conditions, reported to his primary care physician appearing withdrawn and less communicative than on previous routine visits. Something had changed radically in Mr. Mark's demeanor and overall health status. He appeared confused, and struggled to understand as the doctor tried to elicit information about compliance with medication regimens, and also to share results of recent laboratory tests.

The doctor informed Mr. Mark that he had elevated blood sugar levels, putting him at risk for diabetes complications. Mr. Mark did not appear concerned with these findings, an atypical reaction for the successful, well-informed and previously articulate businessman. Also out of character for Mr. Mark, his responses were somewhat off-topic and he seemed to be having difficulty following the conversation.

Mr. Mark told his physician, "Things aren't the same since I retired," and that despite the value he placed on remaining socially connected, he felt lonely and isolated. Mr. Mark noted that frequent misunderstandings when conversing with family members—and his inability to remember portions of the conversation—had caused him to withdraw from family and friends. He suspected he had a hearing loss.

Although only rarely included among chronic conditions associated with social isolation, multiple studies portray age-related hearing loss as a potentially treatable antecedent of social isolation. Given the documented links between social isolation, morbidity and mortality, physicians and audiologists should consider audiologic links to social isolation as a rationale for recommending interventions designed to promote social connectedness. But as we'll see, it took time—and some persuasion—for Mr. Mark's doctor to reach that conclusion.

A case of depression?

The doctor administered the Patient Health Questionnaire, a quick depression screen. Based on the scores, he prescribed an antidepressant to help Mr. Mark through this difficult period in his life. But Mr. Mark adamantly refused, stating that he did not want to take more medication, given the adverse effects of polypharmacy. Mr. Mark recognized that he was facing a "preference-sensitive decision," in that an antidepressant might improve one condition but make his other conditions worse—a common concern with people with multimorbidity. He agreed to take his diabetes medicines routinely, and said he wanted to explore noninvasive options.

Concerned about his difficulty understanding others and feeling left out of conversations, Mr. Mark noted that a former colleague had recently purchased a pair of hearing aids and had been very happy with them. Mr. Mark preferred them as a possible solution with fewer adverse risks. The physician

★EDITOR'S PICKS

Planet of Sound

Overheard: Listen Up Class

screened his hearing using the "watch tick" test, and said that hearing aids would probably not help, given the limited evidence on hearing aid use as related to depression and feelings of social isolation.

But Mr. Mark was persistent and insisted on a referral, saying that he observed his friend experiencing meaningful benefits within three months of getting hearing aids. Specifically, he sensed that the quality of his friend's interactions with others had changed when he was wearing the hearing aids. Out of respect for Mr. Mark's motivation, and in keeping with principles of patient-centered care, the doctor encouraged Mr. Mark to make an appointment with an audiologist and to also return to make sure that his blood sugar levels had improved.

Mr. Mark arranged an appointment with the same audiologist who had helped his friend. Mr. and Mrs. Mark were convinced that the feelings of depression and social isolation, so out of character for him, were due to subtle changes in hearing and the resulting communication challenges with family, colleagues and friends. And their conviction was not without basis: As noted by Kim Kiely and colleagues in a 2012 study in Journals of Gerontology, older adults with a self-perceived hearing handicap have higher odds of reporting depressive symptoms.

In a 2012 study published in Age and Ageing, Bamini Gopinath and colleagues found that those with significant self-reported hearing handicap—based on scores on the Hearing Handicap Inventory for the Elderly—also have significantly lower mean physical component and mental composite scores on the Short Form-36 (a scale used to quantify aspects of health and well-being). Some studies have noted that people with more chronic conditions become more functionally impaired sooner than people with fewer chronic conditions, and others linked depression with feelings of social isolation in community-based older adults. Perceived hearing difficulties are associated with social isolation as well, unlike other conditions such as diabetes.

Better hearing, better well-being

Stressors such as self-reported visual loss have a direct relationship with lower mental health—for example, more severe symptoms of depression—and an indirect relationship with social isolation, according to a 2011 study by Jamila Bookwala and Brendan Lawson in The Gerontologist. As an example, depression associated with a stressor, such as visual problems, restricts the ability to carry out routine day-to-day physical activities. This restriction, in turn, increases the sense of social isolation. In 1982, my colleague Ira M. Ventry and I conducted one of the first audiologic studies on social isolation, demonstrating a stronger link between subjective social isolation, hearing handicap and hearing loss than between objective social isolation and audiometric variables. Continuing along this chain of reasoning, studies suggest individuals who lack social connections or report frequent feelings of loneliness tend to suffer higher rates of cognitive decline, depression, morbidity and mortality.

For Mr. Mark, a complete audiologic evaluation revealed a moderate, bilateral sensorineural hearing loss, with difficulty understanding speech in the presence of competing voices. The problem became more pronounced when the signal-to-noise ratio was poor. A score of 20 on the Hearing Health Care Intervention Readiness self-report questionnaire confirmed that Mr. Mark was having difficulty understanding others in situations he considered to be important, was experiencing feelings of loneliness, and perceived himself to be isolated from friends and family. Additionally, his sense of self-efficacy seemed strong, in that he expressed confidence in his ability to use and benefit from hearing aids, if recommended.

The audiologist recommended a trial period with hearing aids, with three sessions of counseling-based audiologic rehabilitation. Mr. Mark returned for the hearing aid fitting and orientation, fine-tuning of the hearing aids, and counseling over a period of three months. When his audiologist again administered the Hearing Health Care Intervention Readiness questionnaire three months post-fitting, Mr. Mark said he was experiencing less difficulty communicating with friends, relatives and co-workers, and that he was beginning to feel less lonely and less isolated. Six months after obtaining his hearing aids, Mr. Mark returned to his physician, who was relieved to see that Mr. Mark was back to his old self—less withdrawn and more engaged. Indeed, Mr. Mark's score on the Patient Health Questionnaire was no longer consistent with mild depression.

The ability to communicate and maintain social relationships is an important contributor to the value older people attach to their lives. And given the graying of America, perceived social isolation and disconnectedness are becoming a more urgent societal burden. Although older adults who perceive high levels of social support tend to have better coping strategies, greater self-esteem and sense of

control, multiple studies suggest those who are socially disconnected have poorer physical and mental health outcomes. Our challenge as audiologists is to demonstrate outcomes that older adults like Mr. Mark prize: namely, social engagement with family members and friends.

Barbara E. Weinstein, PhD, CCC-A, is professor and executive officer of the AuD program at the Graduate Center, City University of New York. Weinstein's research interests include geriatric and rehabilitative audiology and outcomes assessment. She is an affiliate of ASHA Special Interest Group 8, Public Health Issues Related to Hearing and Balance. bweinstein@gc.cuny.edu

cite as: Weinstein, B. E. (2013, May 01). SIGnatures: Sound Connections : Special Interest Group 8, Public Health Issues Related to Hearing and Balance. The ASHA Leader.