Medical News & Perspectives

November 1, 2017

# Loneliness Might Be a Killer, but What’s the Best Way to Protect Against It?

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JAMA. Published online November 1, 2017. doi:10.1001/jama.2017.14591

Every year, British researcher Christina Victor, PhD, spots advertisements for charitable programs designed to ensure that no senior spends the Christmas holiday alone.

Those ads, though well-intentioned, epitomize common misconceptions about loneliness, says Victor, a professor of gerontology and public health at Brunel University London. In reality, [studies](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4940959/pdf/12889_2016_Article_3248.pdf) suggest loneliness afflicts both young and old and it’s unlikely that total strangers can assuage it by inviting the lonely to feast on figgy pudding. In fact, Victor’s [research](https://benthamopen.com/contents/pdf/TOPSYJ/TOPSYJ-8-97.pdf) has found that older people are lonelier in the summer than around Christmas.

Loneliness has received wide media attention recently, thanks to research that has identified it as a public health threat. “We absolutely have the evidence” that loneliness and social isolation predict an increased premature mortality risk, said Julianne Holt-Lunstad, PhD, professor of psychology and neuroscience at Brigham Young University in Provo, Utah. She and her colleagues [note](http://www.apa.org/pubs/journals/releases/amp-amp0000103.pdf) that “advancing social connection” should be a US public health priority, and the [World Health Organization now lists](http://www.who.int/hia/evidence/doh/en/) “social support networks” as a “determinant of health.”

Loneliness has also been linked to cardiovascular disease, Alzheimer disease, stroke, and insomnia, among other conditions. While public awareness about the potential harms of loneliness seems to have increased, the prevalence of severe loneliness in people aged 65 years or older has remained fairly stable at around 10% for at least half a century, said Nicole Valtorta, PhD, a public health research associate at Newcastle University’s Institute of Health and Society in Britain.

Scientists are still debating whether loneliness—defined as a distressing discrepancy between desired and actual levels of social contact—is a risk factor for poor health or whether poor health is a risk factor for loneliness. Perhaps the relationship is bidirectional, or perhaps unaccounted-for confounders explain the connection between loneliness and poor health.

Nevertheless, the association remains, spurring the search for effective interventions. Unfortunately, the evidence suggests that what many people would consider commonsense solutions don’t necessarily lift the veil of loneliness.

Is Loneliness Lethal?

At the annual American Psychological Association meeting earlier this year, Holt-Lunstad presented the results of 2 meta-analyses of studies examining whether loneliness and social isolation influence the risk of dying early.

One of Holt-Lunstad’s meta-analyses involved 148 studies, with a total of more than 300 000 participants, and concluded that greater social connection halves the risk of dying prematurely. The other meta-analysis included 70 studies representing more than 3.4 million people and found that loneliness, social isolation, and living alone all had a significant and equal effect on the risk of dying prematurely that was at least as great as the effect of other well-accepted risk factors such as obesity.

“One of the issues that we need to pay attention to is that loneliness and social isolation are different,” Holt-Lunstad said. Lonely people are not necessarily isolated, and isolated people are not necessarily lonely. But while they might be different, they carry similar health risks, she said, adding that she is concerned that “there may be a perception that as long as you don’t feel lonely, you’re fine.”

But Victor isn’t convinced that loneliness is as big a risk factor as, say, smoking and obesity. Much of the research into the health effects of loneliness has been imprecise because it failed to control for all potential confounders, Victor said. Plus, “a lot of these studies are cross-sectional. You don’t know which way the relationship is going.”

Longitudinal studies have, however, similarly implicated loneliness as a potential health risk. A [systematic review and meta-analysis](http://heart.bmj.com/content/heartjnl/102/13/1009.full.pdf) published in 2016 that focused on longitudinal studies concluded that “deficiencies in social relationships,” which encompassed both loneliness and social isolation, are linked to a 29% and 32% increased risk of developing coronary heart disease and stroke, respectively.

In a separate [longitudinal study](http://onlinelibrary.wiley.com/doi/10.1002/gps.4495/abstract) published in 2016, researchers from Harvard and Peking universities analyzed 12 years’ worth of data from men and women aged 65 years or older and found that loneliness and depressive symptoms appeared to be related risk factors of worsening cognition. On the other hand, low cognitive function did not lead to worsening loneliness over time.

“I think that it’s clearly a [health] risk factor,” first author Nancy Donovan, MD, said of loneliness. “Various types of psychosocial stress appear to be bad for the human body and brain and are clearly associated with lots of adverse health consequences.”

Though the findings overall are mixed, the best current evidence suggests that loneliness may cause adverse health effects by promoting inflammation, said Donovan, a geriatric psychiatrist at the Center for Alzheimer Research and Treatment at Brigham and Women’s Hospital in Boston.

Loneliness might also be an early, relatively easy-to-detect marker for preclinical Alzheimer disease, suggests an article Donovan coauthored. She and her collaborators recently [reported](http://jamanetwork.com/journals/jamapsychiatry/fullarticle/2575729) in *JAMA Psychiatry* that loneliness was associated with a higher cortical amyloid burden in 79 cognitively normal elderly adults. Cortical amyloid burden is being investigated as a potential biomarker for identifying asymptomatic adults with the greatest risk of Alzheimer disease. However, large-scale population screening for amyloid burden [is unlikely to be practical](http://jamanetwork.com/journals/jamapsychiatry/fullarticle/2575727).

Regardless of whether loneliness turns out to be a marker for preclinical Alzheimer disease, enough is known about its health effects that physicians need to be able to recognize it, Holt-Lunstad says.

“The cumulative evidence points to the benefit of including social factors in medical training and continuing education for health care professionals,” she and Brigham Young colleague Timothy Smith, PhD, wrote in an [editorial](http://heart.bmj.com/content/heartjnl/102/13/987.full.pdf).

Recognizing that loneliness gets little attention in health care, CareMore, a delivery system and health plan that provides care for enrollees in Medicare Advantage and Medicaid health plans in 7 states, launched a “Togetherness Program” this year to address seniors’ loneliness in the clinical setting. The program wants to identify lonely seniors and determine what might help them feel engaged, such as community volunteer programs or classes at CareMore centers.

“Despite the fact that loneliness is a common emotional distress syndrome with a high risk factor for early mortality and a broad variety of physical health and psychiatric issues, it still gets little attention in medical training or in health care generally,” CareMore President Sachin Jain, MD, MBA, said in a [statement](http://www.businesswire.com/news/home/20170508005351/en/CareMore%E2%80%99s-%E2%80%98Be-Circle-Connected%E2%80%99-Campaign-Tackles-Unmet).

The program’s success will be determined by assessing improvements in quality of life and clinical outcomes such as increased socialization and decreased depression as well as reduced patient admission rates and bed days, according to CareMore, based in Cerritos, California.

When Intuitive Solutions Fail

The association between loneliness and physical ailments and the fact that loneliness is distressing are reason enough to intervene.

“You can be absolutely certain that loneliness messes up your quality of life,” Victor said. “It’s an unpleasant experience. It compromises well-being.” The problem, she and other researchers in the field say, is that there is a dearth of evidence to support what intuitively seems like good advice for lonely individuals—take a class, get a dog, do volunteer work. Nonprofits in the United Kingdom—where, according to Valtorta and Victor, loneliness is treated as public enemy number 1—send “befrienders” to people the organizations identify as likely to be lonely. “You’re lonely, therefore you need a friend,” the thinking goes, even though it’s very difficult to befriend a stranger, Valtorta said.

Befriending, as a [systematic review](http://bmjopen.bmj.com/content/bmjopen/7/4/e014304.full.pdf) published in April by British and Australian researchers described it, “is an emotional supportive relationship in which one-to-one companionship is provided on a regular basis by a volunteer.” They reviewed 14 studies, 2 of which were conducted in the United States, that assessed a total of 2411 individuals.

Most of the trials showed modest improvement in symptoms targeted by befriending, such as depression and anxiety, but the benefit did not always reach statistical significance. While nonprofits in their countries are increasingly offering befriending services for a range of populations, including people identified as lonely, “the effectiveness of this intervention on health outcomes is largely unknown,” the authors noted.

Listen for Loneliness

Interventions such as befrienders are flawed because they assume loneliness is a social problem with a one-size-fits-all solution, said Laurie Theeke, PhD, RN, an associate professor of nursing at West Virginia University in Morgantown.

In reality, though, loneliness is a psychological construct linked to depression and anxiety, said Theeke, who has developed an intervention called LISTEN, which stands for “Loneliness Intervention using Story Theory to Enhance Nursing-sensitive outcomes.”

Theeke and her collaborators recently published the results of a [pilot study](http://ac.els-cdn.com/S2352013216300436/1-s2.0-S2352013216300436-main.pdf?_tid=55e64c0e-932e-11e7-8285-00000aacb361&acdnat=1504721467_629082df7d4a714f20255d5fae4a2e48) of LISTEN and are now seeking funding to conduct a larger study. The pilot included 27 cognitively normal adults (only 3 were men) who, to avoid confounding because of the grief reaction, had not lost a spouse in the previous 2 years. They were randomized to the LISTEN intervention or to a control group and met in groups of 3 to 5 with a facilitator for 5 weekly 2-hour sessions. Those in the control group received educational information about aging, while LISTEN participants talked about patterns of thought and behavior that were contributing to their perception of loneliness.

“There is a stigma associated with loneliness, and it’s the stigma of social undesirability,” she said. But LISTEN participants learn that “it’s okay to have loneliness and to say it. They like hearing that they’re not the only person who feels this way.”

They talked about times in their life when they weren’t lonely, shared ways that they met the challenge of living with loneliness, and identified potential new solutions to their loneliness.

To put it simply, Theeke said, “LISTEN is like teaching a person how to fish.”

Twelve weeks after the last session, LISTEN participants reported reduced loneliness, enhanced social support, and decreased systolic blood pressure compared with baseline. On the other hand, the control group reported decreased functional ability and reduced quality of life.

Several people who completed the LISTEN study made major life changes afterward, Theeke said. For example, an 89-year-old woman realized that the times in her life that she was least lonely were when she lived with or near her daughter. After completing the study, the woman decided to move to her daughter’s town several states away.

Although the pilot study was geared toward older adults, Theeke thinks LISTEN would also work with younger people. “We designed LISTEN to help people reconnect with their own individualized need to belong. I think that’s why it works,” said Theeke, adding that she hopes eventually to offer LISTEN online as well as face to face.

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