Loneliness could increase chance of Parkinson's disease, study indicates

By Susan Kreimer

New YORK, Oct. 2 (UPI) -- A new study suggests that loneliness may be associated with a significant increased risk of developing Parkinson's disease, the second most common neurodegenerative condition after Alzheimer's disease. Photo by Lucas Rychvalsky/Pixabay
"The findings add to the evidence that loneliness is a substantial psychosocial determinant of health," the authors noted in the study published Monday in JAMA Neurology.

People who indicated they were lonely had a 37% greater likelihood of receiving a diagnosis of Parkinson's, the study indicated.

This association persisted after investigators accounted for demographic factors, socioeconomic status, social isolation, genetic risk, smoking, physical activity, body mass index, diabetes, hypertension, stroke, heart attack, depression and even seeing a psychiatrist.

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According to the Parkinson's Foundation, the disease affects 10 million people worldwide. Nearly 1 million people in the United States are impacted, and this number is expected to rise to 1.2 million by 2030.

The incidence increases with age, but an estimated 4% of people with Parkinson's are diagnosed before age 50. Men are 1 1/2 times more likely to develop Parkinson’s than women.

The study's lead author, Dr. Antonio Terracciano, told UPI via email that "loneliness and other measures of social connectedness have been previously associated with other neurodegenerative diseases, such as Alzheimer's disease and
related dementias. Still, to our knowledge, no previous study had tested the association with Parkinson's disease."

Terracciano is a professor in the department of geriatrics at Florida State University College of Medicine in Tallahassee.

"The study findings add new evidence for Parkinson's disease and further support the recommendations on the potential protective and healing effects of personally meaningful social connection," Terracciano said.

Researchers used a population-based sample of UK Biobank participants aged 38 to 73 years with loneliness data and without a diagnosis of Parkinson's at baseline. Participants were first assessed from March 13, 2006, to Oct. 1, 2010, and followed for up to 15 years.

The study measured loneliness by posing the question, "Do you often feel lonely?" Responses were coded as 0 for no and 1 for yes.

Of the 491,603 participants -- 54.4% female and with an average age of 56.54 years -- 2,822 developed Parkinson's during the follow-up period.

The investigators defined loneliness as "a distressing subjective feeling that arises from the discrepancy between one's desired and perceived social relationships."

They noted it is marked by "heightened emotional vulnerability, hypervigilance and perseverative cognition," or continuous thinking about negative events in the past or in the future.
“In addition to its emotional toll, individuals who feel lonely tend to engage in unhealthy lifestyles and have worse clinical profiles,” they wrote.

Dr. Alessandro Di Rocco, who was not involved in the research, told UPI via email that "this is a groundbreaking study, with very interesting and surprising findings, that highlights how loneliness can affect not just psychological well-being, but can increase the risk of developing Parkinson's disease."

Di Rocco is a professor of neurology in the Zucker School of Medicine at Hofstra Northwell and system director of neurology, Parkinson's and movement disorders at Northwell Health in New Hyde Park, N.Y.

He added that the findings could be explained by "specific lifestyle consequences related to being alone," such as less healthy eating habits, a lower level of physical activity and decreased socialization.

Dr. Nandakumar Narayanan, also not involved in the study, told UPI that the study's authors should be commended for following a large group of participants over a very long period of time to evaluate a potential association between loneliness and Parkinson's.

Narayanan is an associate professor of neurology in the University of Iowa Carver College of Medicine and a neurologist at University of Iowa Hospitals and Clinics in Iowa City.

He added, however, that the study has a lot of limitations.
"First, no matter how strong an association is, there are many pitfalls in establishing what causes what," he said.

"Second, variables may influence each other in complex ways that can't be measured.

"Third, loneliness on a survey is a single yes-or-no response. Their Parkinson's diagnosis came from hospital admission and death records, which might be incomplete. Finally, it is not clear if the UK Biobank study population generalizes to the general public."

Despite the potential for confounding variables, "this study helps to expand our understanding about how social factors influence our overall health," Dr. Molly Cincotta told UPI via email.

Cincotta is a neurologist at Temple University Hospital and assistant professor of clinical neurology at the Lewis Katz School of Medicine at Temple University in Philadelphia.

"We know, for example, that social engagement can be protective against cognitive changes and dementia," said Cincotta, who was not involved in the study.

"This is something that we saw very dramatically in recent years with the COVID-19 pandemic, where many elderly folks living alone or in nursing homes experienced a decline in their cognitive function even if they never contracted the disease."

Dr. Kathleen M. Shannon, who was not involved in the study, told UPI that Parkinson's is "an increasingly prevalent brain disease with significant personal, societal and financial impacts."
Shannon is a professor and chair in the department of neurology at the University of Wisconsin School of Medicine and Public Health in Madison.

Although neurologists generally don't see patients a decade before disease onset, she said "there is a growing interest in describing changes that occur before diagnosis," she said.

In general, loneliness is associated with poor aging outcomes. "If we wish to live our best senior lives, we must find passion and purpose, forge strong relationships and embrace healthy habits like a great diet and exercise," Shannon said.

"I always tell my patients that rest is overrated -- rest equals rust -- and they should be as active physically and socially as they can be."

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