

## Movement Problems in Older Autistic Adults

Summary Reports describe results from newly published research using data from SPARK participants.

### ■ Study Title

Self-reported Parkinsonism Features in Older Autistic Adults: A Descriptive Study

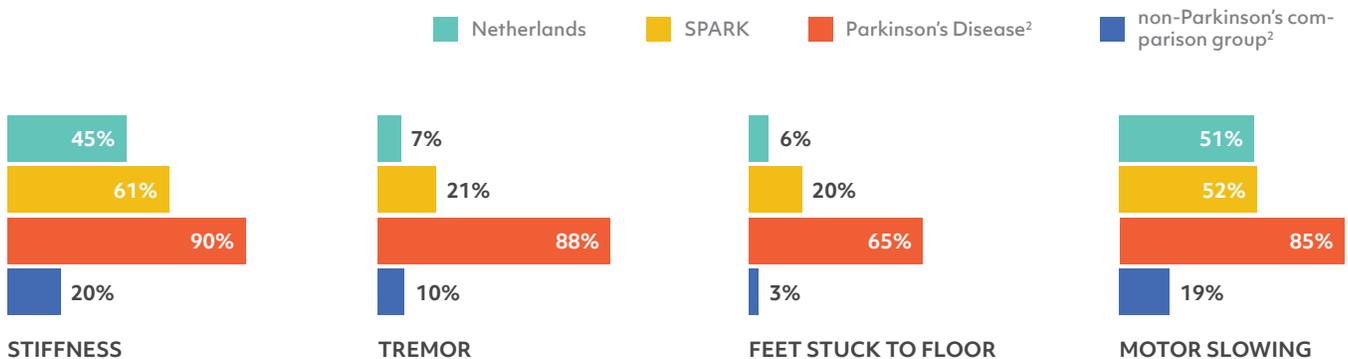
### ■ What was the study about?

Researchers wanted to find out if autistic adults who don't have intellectual disability have features of parkinsonism, a group of movement disorders. Symptoms include tremors, stiffness in the legs, a slowing down of movement, and an unstable posture. Parkinsonism may be caused by various conditions, by certain drugs, or by Parkinson's Disease. It typically affects people over age 60. Previous studies have found that autistic adults are more likely to have parkinsonism symptoms than adults who are not autistic.

### ■ How was the research done?

About 500 autistic adults completed the online Parkinsonism Screening Questionnaire, which asks about motor symptoms. The questionnaire is a screening tool and does not diagnose Parkinson's Disease. About 300 participants were in the Netherlands, and 209 were SPARK participants in the United States. They were ages 50 to 83 and did not have intellectual disability.

### ■ What did the researchers learn?



- About 17 percent of the participants in the Netherlands and 33 percent of the SPARK participants reported having features of parkinsonism.<sup>1</sup> By comparison, only about 3 percent of people who do not have autism have those symptoms, according to previous research.
- The symptoms reported by some SPARK participants included tremors, stiffness, a feeling of being stuck to the floor when starting to walk, and a slowing of motor movements.
- Antipsychotic medications, which are “commonly prescribed to autistic adults,” can cause parkinsonism symptoms while the person is taking them.<sup>1</sup> But the study found no difference in current use of antipsychotics between the participants with and without parkinsonism symptoms.

- As a group, the autistic participants scored, on average, higher than the general population on the parkinsonism questionnaire. But they scored lower than people who have Parkinson's Disease.

## ■ What was new and innovative about the study?

Earlier studies of parkinsonism in autistic adults included people who also had intellectual disability. In this study, researchers excluded people with intellectual disability to see if having autism by itself raised the risk of having features of parkinsonism. This was also one of the largest studies on this topic to consider adults' current use of antipsychotic drugs.

## ■ What do the findings mean?

Older autistic adults appear to be more likely to have motor symptoms that are similar to parkinsonism. Researchers do not know why they have these symptoms or whether they face a higher risk of developing Parkinson's Disease.

## ■ What are people saying?

### Study participants:

- "I am so glad that someone is listening to older autistic adults. We don't 'grow out' of autism. We learn to script and act normal to survive."
- "Thank you for doing this. Most autism studies seem to be focused on children or young adults. It's important to me that we are listened to."

### Study researcher **Gregory L. Wallace, Ph.D., associate professor, The George Washington University:**

"Our understanding of aging and autism is very limited. We were motivated by the question, what are aging-related outcomes in autism, and in particular, are people at greater risk for developing certain conditions? Because there is evidence of parkinsonism being one of those conditions, that is why we looked at it in this study."

## ■ What's next?

Future studies, including in-person neurological assessments, should be done to see if autistic adults who report parkinsonism symptoms are at risk for developing Parkinson's Disease. Researchers also plan to study a group of autistic adults over time to see whether parkinsonism symptoms stay the same, improve, or worsen.

## ■ References

1. Geurts H.M. *et al.* *Autism* Epub ahead of print (2021) [PubMed](#)
2. Fereshtehnejad, S.M. *et al.* *Neuroepidemiology* **43**, 178–193 (2014) [PubMed](#)

### About SPARK Research Match

This SPARK program matches participants with research studies that they may want to join. These studies have been evaluated for scientific merit and approved by a scientific committee at SPARK. The program is free to researchers and participants. SPARK does not endorse or conduct these studies. Participants choose if they want to take part in a particular study.

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