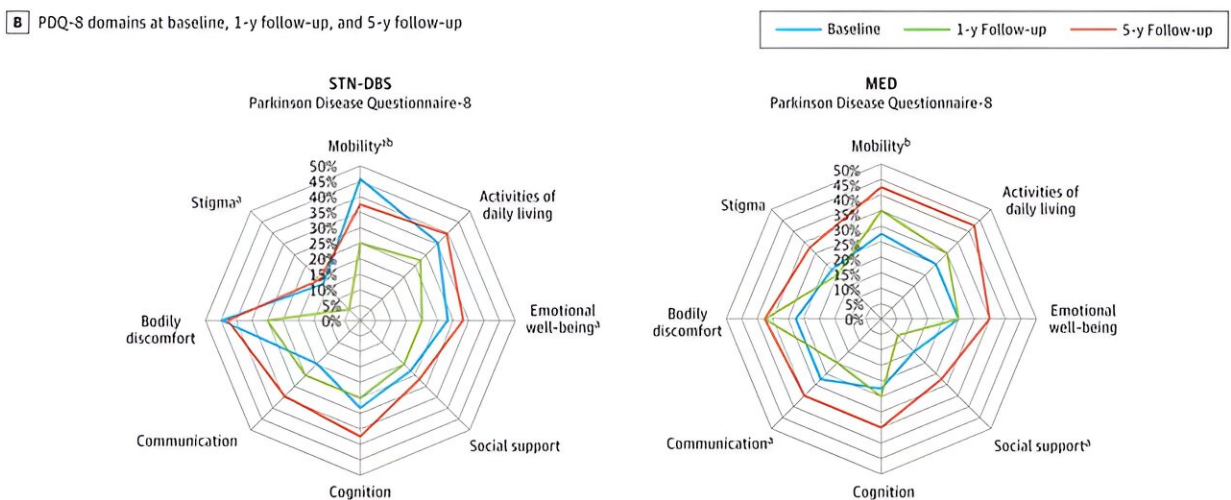
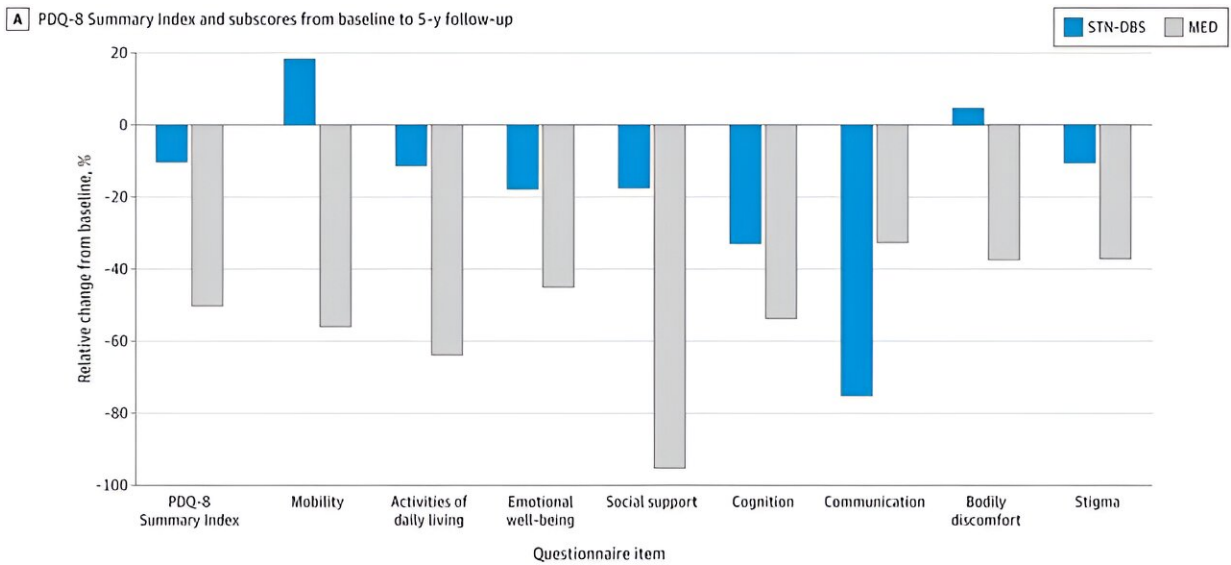


Quality of life outcomes stable with neurostimulation in Parkinson disease: Study

January 22 2024, by Elana Gotkine



Domains of quality of life and motor aspects in the patients receiving deep brain stimulation of the subthalamic nucleus (stn-dbs) vs standard-of-care medical

treatment (med) for the Parkinson's Disease Questionnaire 8 (PDQ-8), positive scores indicate improvement and negative scores indicate worsening. The PDQ-8 domain scores are illustrated as the percentage of maximum scores. More extensive areas represent more severe impairment. Credit: *JAMA Network Open* (2024). DOI: 10.1001/jamanetworkopen.2023.52177

For patients with Parkinson disease (PD), differences in quality of life (QOL) outcomes are seen with deep brain stimulation of the subthalamic nucleus (STN-DBS), according to a study [published](#) online Jan. 18 in *JAMA Network Open*.

Stefanie T. Jost, Ph.D., from the University of Cologne in Germany, and colleagues examined the long-term effects of STN-DBS versus standard-of-care medication (MED) on QOL in a prospective observational, quasi-experimental trial involving patients with PD. Overall, 108 patients underwent propensity score-matching (62 in the STN-DBS group and 46 in the MED group), resulting in a well-balanced matched subcohort with 25 patients in each group.

The researchers found that Parkinson's Disease Questionnaire 8 (PDQ-8) and activities of daily living (ADL) worsened only in the MED group at five-year follow-up (PDQ-8 change, -10.9 ; ADL change, -2.0), while in the STN-DBS group, both outcomes remained stable. There was a moderate correlation observed for changes in PDQ-8 and ADL. STN-DBS outcomes were favorable for motor complications, mobility, and levodopa-equivalent daily dose reduction (mean differences in change scores between STN-DBS and MED, -2.0 , -1.0 , and -821.4 , respectively).

"These findings may provide helpful information when counseling patients on the efficacy of STN-DBS for PD and monitoring [patients](#)

postoperatively in long-term follow-up," the authors write.

More information: Stefanie T. Jost et al, Neurostimulation for Advanced Parkinson Disease and Quality of Life at 5 Years, *JAMA Network Open* (2024). [DOI: 10.1001/jamanetworkopen.2023.52177](https://doi.org/10.1001/jamanetworkopen.2023.52177)

2024 HealthDay. All rights reserved.

Citation: Quality of life outcomes stable with neurostimulation in Parkinson disease: Study (2024, January 22) retrieved 27 April 2024 from <https://medicalxpress.com/news/2024-01-quality-life-outcomes-stable-neurostimulation.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.