

VALIDATING NEW NIH CLINICAL TOOLS IN PARKINSON'S DISEASE WITH/WITHOUT DEPRESSION

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The clinical impact of Parkinson's Disease (PD) and depression are well recognized and of considerable clinical significance, but less understood is their unique role and complex interaction in terms of quality of life and cognitive outcomes. As such, measurement of quality of life and neurocognitive function in patients with PD, particularly in the presence of comorbid depression, may have prognostic significance. Standard assessment tools have been used to evaluate quality of life and neurocognitive effects of PD and depression, but their use has been limited by poor psychometric properties and more importantly, lengthy administration time. To overcome these limitations, NIH developed two important tools, the Health-Related Quality of Life (Neuro-QOL) measure, and the NIH Toolbox Assessment of Neurological and Behavioral Function (NIH Toolbox). However, the Neuro-QOL and the NIH Toolbox have not been standardized in patients with Parkinson's disease. This research study Validating New NIH Clinical Tools in Parkinson's Disease with/without Depression will utilize the Neuro-QOL and the NIH Toolbox in a representative and well described cohort of 160 patients with Parkinson's disease (aim 1) and will discern the effects attributable to Parkinson's or depressive symptomatology (aim 2). This proposed project will advance NINDS' mission of developing new standardized tests as part of the NIH Blueprint for neuroscience, particularly quality of life and neurocognitive measures, in patients with Parkinson's disease and comorbid depression. Further, this project will address the American Recovery and Reinvestment Act goals of 1) infrastructure investment - through conducting multidisciplinary research to create a synergistic psychometric test development platform for present and future endeavors, and 2) job preservation and creation - by employing current faculty, early career investigators and hiring new research personnel and postdoctoral scholars. This project is efficiently designed to be completed, inclusive of statistical analyses, within a two-year time frame. PUBLIC HEALTH RELEVANCE: This project is significant as it addresses scientific knowledge gaps in sophisticated quality of life and neurocognitive assessment tools, specifically the Neuro-QOL and the NIH Toolbox neurocognitive battery, through the use of a well-controlled psychometric research study. The Neuro-QOL and NIH Toolbox will be administered in a cohort of patients with Parkinson's disease with and without depression to optimize their use in the research and clinical arenas. Further, this project will discern the quality of life and neurocognitive effects attributable to Parkinson's or depressive symptomatology.

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