



# Understanding how Nordic walking contributes to adults' quality of life while living with Parkinson's Disease



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## Introduction

Parkinson's Disease (PD) is a neurodegenerative condition that affects nearly 1% of the population above the age of 60 and is characterized by dopamine imbalances in the basal ganglia, resulting in motor control impairments (Reeve et al., 2014)

Quality of life (QOL) is a multi-dimensional concept that consists of physical, psychological, and social functioning (World Health Organization, 1995)

According to Rodrigues de Paula et al. (2006), adults with PD experience impaired QOL compared to those without PD due to:

- Tremors
- Postural instability
- Gait alterations
- Cognitive impairment
- Depression

Physical activity (PA) is recommended to adults with PD as it may offer protective benefits for the onset of some symptoms and may help to promote QOL (Cruise et al., 2011)

Research by Cugusi et al. (2015), van Eijkeren et al. (2008), and Reuter et al. (2011) suggest that Nordic walking may provide QOL benefits for adults with PD, which include:

Improved emotional functioning

Improved physical functioning

Increased strength

Minimized symptoms

Improved social functioning

Increased motivation to be physically active



Figure 1. QOL benefits that Nordic walking may provide to adults with PD

## State of knowledge

- Despite the known benefits of PA, there is limited research exploring *how* Nordic walking contributes to QOL among adults with PD
- In the few studies that have been published on this topic (e.g., Cugusi et al., 2015; van Eijkeren et al., 2008; Reuter et al., 2011), researchers have assessed QOL-related benefits using quantitative measures such as mobility, strength, balance and pain management
- No studies exploring the experiences and value of Nordic walking for adults with PD have been published

## Research objectives

The objectives of this qualitative study are to: (1) understand if and how Nordic walking can contribute to QOL among adults with PD, and (2) explore if it impacts motivation to be physically active

## Methods

Ethics Submission

University of Ottawa Research Ethics Board granted ethics approval on June 6, 2017

Nordic walking

Adults with PD completed 4 weeks of Nordic walking as part of a larger study. Consisted of:

- 3 walking sessions per week
- Each session lasted 30 – 45 minutes

Participants

5 men and 3 women with PD

- Mean age = 65.9 years
- Mean time since diagnosis = 6.7 years

Data collection

Semi-structured interviews were conducted with participants <1 year after Nordic walking training

- Interviews were audio-recorded and transcribed verbatim

Data analysis

Thematic analysis (Braun & Clark 2006) will be used to analyze data

## Anticipated contributions

- Gain an understanding of adults with PD's experiences with a Nordic walking program
- Understand which dimensions of QOL may be promoted through a Nordic walking program
- Understand if participating in a Nordic walking program can motivate adults with PD to sustain a physically active lifestyle
- Inform the development of future PA programs designed for adults with PD

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\*\*\* List of references and contact information available on request.