# Shall We Dance: A Parkinson's Dance-Based Program

Rebecca Zawodny, SPT and Anne Boddy, PT, DPT, NCS

## **PURPOSE:**

Parkinson's disease (PD) is a progressive disease that is one of the most prevalent diseases involving the central nervous system, estimated to affect more than 1 million people in the United States. 1,2,3,4

Postural instability and gait abnormalities are some of the motor symptoms associated with this progressive disease. 1,2,3,4

Participating in group therapy sessions such as LSVT and boxing, have demonstrated the improvement in gait measures (gait variability, stride, and freezing of gait) compared to those receiving individual treatment sessions or performing a home exercise program. 1,2,3,4

This poster presents the implementation of a community based dance program for individuals diagnosed with Parkinson's disease.

#### PARTICIPANT DESCRIPTION:

Seven participants from a local Parkinson's Disease support group, volunteer physical therapy students, and University of St. Augustine faculty who attended a forty-five minute dance-based Parkinson's class.



## **DANCE:**

The program "Shall We Dance" fundamental principles are based on stretching, strengthening, balance, sequencing, and rhythm. The integration of dance based movement from ballet, tap, jazz, and choreographic repertoire is applied to engage participants' minds and bodies creating an energizing, social environment for artistic creativity.



**Exercises** 

- Time: 15 minutes
- Static and dynamic movements performed in sitting and standing.
- Stretches & Fundamental principles include: stretching, strengthening, balance, sequencing, and rhythm.

Across the Floor

- Time: 15 minutes
- Sequenced stepping patterns incorporating aspects of coordination, balance, and rhythm performed across the floor.

Dance Routine

- Time: 15 minutes
- Two minute dance routine to be taught over 6-8 sessions with a final performance for family and friends.

## CONCLUSION:

Dance interventions for individuals with PD are shown to be superior to exercise for improving balance and mobility<sup>5,6,7</sup> thus, effectively addressing both motor as well non-motor symptoms such as depression, fear, anxiety, and declined self-efficacy.8,9,10 Further positive effects include improved flexibility and coordination<sup>7,11</sup> and forced-use of the senses of sight, sound, and touch to assist with movement and balance. 12 The use of choreography further allows for the rehearsal of movement sequences, new motor skill learning, and improved cognitive functions. 13 Such improvements have been shown to have an overall positive effect on decreasing fall risk and on improving outcome measures such as the Berg Balance Scale and 6-Minute Walk Test.<sup>7</sup> Lastly, participants have found dance-based programs to be more enjoyable than traditional therapy intervention; promoting long-term compliance, which research has shown may slow the progression of disability in PD.<sup>7,11,13</sup>

#### **CLINICAL APPLICATION:**

The power of dance to concentrate one's mind, body and emotion on movement is the basis of "Shall We Dance" and its mission to provide dancebased classes to enrich the lives of people with PD. Complex mobility training, incorporating large-whole body movements, weight shifting, and direction changes, allows for improvements in flexibility, coordination, and balance in a positive social environment. The results of this dance class demonstrates the positive impact such a program could have at maintaining and improving the quality of life of those diagnosed with Parkinson's Disease.

#### REFERENCES:

