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Effects of a structured dance program in Parkinson's disease. A Greek pilot study

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ABSTRACT

Introduction: Dance for Parkinson's Disease® (DfPD®) is a structured dance program that has never been evaluated in Greek PD population. This study assesses for the first time the efficacy, safety and feasibility of DfPD® program in Greek PD patients.

Material and methods: A total of 16 early-to-mid-stage PD patients (50% men, aged 56 ± 12) underwent a total of 16 60-min classes of adjusted to Greek music and dance culture DfPD®, twice weekly, over 8 weeks. Assessments were performed at baseline and at the end of the study period and included quality of life (PDQ-8), depressive symptoms (BDI-II), fatigue (PFS-16), cognitive functions (MoCA), balance (BBS) and body mass index (BMI). Safety (possible falls, injuries, muscle soreness or excessive fatigue) and feasibility (technical and financial parameters, willingness for participation and continuation, recruitment rates) were also assessed.

Results: Statistically significant improvements were found in quality of life (29 ± 47%, $p = 0{,}020$), depressive symptoms (26 ± 52%, $p = 0{,}046$), fatigue (13 ± 20%, $p = 0{,}021$), cognitive functions (17 ± 23%, $p = 0{,}010$), balance (5 ± 4%, $p = 0{,}003$) and BMI (2 ± 2%, $p = 0{,}010$). No adverse events, high adherence (93,75%) and low attrition (12,5%) rates were reported.

Conclusion: A twice weekly 60-min DfPD® class for 8 weeks is a safe and feasible non-pharmacological complementary therapeutic intervention for Greek PD patients and may improve their quality of life, depressive symptoms, fatigue, cognitive functions, balance, and BMI. Further research on this intervention is warranted.