

Complementary physical therapies for movement disorders in Parkinson's disease: a systematic review

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Background: The growth and popularity of complementary physical therapies for Parkinson's disease (PD) attempt to fill the gap left by conventional exercises, which does not always directly target wellbeing, enjoyment and social participation. **Aim:** To evaluate the effects of complementary physical therapies on motor performance, quality of life and disease severity in people living with PD. **Methods:** a systematic review with meta-analysis was conducted. Randomized controlled trials, non-randomized controlled trials and case series studies were identified by systematic searching of health and rehabilitation electronic databases. A standardised form was used to extract key data from studies by two independent researchers. **Results:** 1210 participants from 20 randomized controlled trials, two non-randomized controlled trials and 13 case series studies were included. Most studies had moderately strong methodological quality. Dancing, water exercises and robotic gait training showed to be an effective adjunct to medical management for some people living with Parkinson's disease. Virtual reality training, mental practice, aerobic training, boxing and Nordic walking training had a small amount of evidence supporting their use in PD. **Conclusion:** On balance, alternative physical therapies are worthy of consideration when selecting treatment options for people with this common chronic disease. Complementary physical therapies such as dancing, hydrotherapy and robotic gait training appear to afford therapeutic benefits, increasing mobility and quality of life, in some people living with PD.