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Tanečno-pohybová terapia u ľudí s Parkinsonovou chorobou

Dance-Movement Therapy for People with Parkinson's Disease

Zuzana Fábry Lucká

Abstract

The study is focused on the issue of non-pharmacological treatment options using movement and dance in the context of the population of people with Parkinson's disease. It defines the specifics of psychomotor and dance-movement therapy in this context and presents the results of comparative scientific studies from abroad.

Keywords: Dance. Dance-movement therapy. Parkinson's disease. Early stage of Parkinson's disease.

Introduction

Parkinson's disease is a disease affecting a person's entire life. In addition to cognitive, speech and motor deficits, a person's daily life, close and wider relationships, work area and perception of experiencing one's own quality of life in a subjective evaluation are also affected. Considering the nature of this progressive disease, it is necessary for a person suffering from this disease to focus not only on standard procedures and options, but also on interventions with expressive potential.

It is a disease etiology of which has not yet been fully investigated, the prevalence of which is increasing within our society. "*The prevalence in the world population is around 84-187 and the incidence of 5-24 newly diagnosed diseases per 100 thousand inhabitants per year*" (Gmitterová, 2010, p. 8). The disease is progressive and the treatment is symptomatic. The assumption is that the prevalence of Parkinson's disease will increase with the aging of the population (Barnish, Barran, 2020). In addition to pharmacological approaches, non-pharmacological approaches in treatment are increasingly coming to the fore, which are aimed at supporting and maintaining the various areas in which the difficulties caused by the disease most often appear.

Movement as an intervention

Movement is a natural part of a person's life, from early to senior age. The theory of the connection between the concepts of movement - motor skills - psychomotor skills is a prerequisite for the implementation of psychomotor therapy despite physical or cognitive limitations (Szabová, 2017). Movement and motor skills are related to what together represents the individual psychomotor skills of an individual, with his specific signs and manifestations. Such individual psychomotor skills are a unique manifestation, and their diagnostic investigation is a prerequisite for planning targeted intervention.

The goal of psychomotor therapy is to help a person become aware of his own bodily perception, restore integrity, creativity, bodily symbolism and the ability to communicate (Hátlová, 2003). Dancing is also a suitable physical activity for this target group, since dancing affects all muscle groups (Suchá, Holmerová, 2016). The possibility of expressing one's emotions through artistic means can be a suitable way to overcome the difficulties associated with diseases in a person's older age (Kováčová, Hudecová, 2023). Dance-movement therapy is an intervention strategy that uses the artistic and expressive potential of a person, taking into account their particularities or preference in an area of interest. It can be defined as the psychotherapeutic use of movement and dance, based on the principle of movement and emotions, which are inextricably linked (Payne, 2018). In our conditions, it is part of psychomotor therapy as a concept, but it also uses musical potential and the connection between expressive therapeutic concepts.

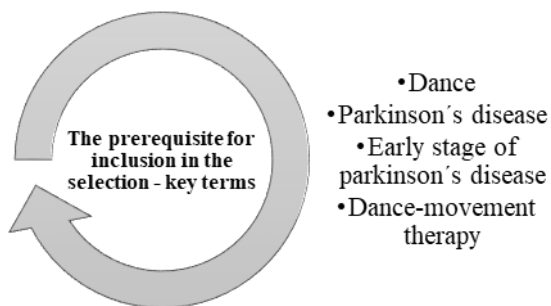
Dance as a non-pharmacological treatment - review of international research

Dance and movement interventions are shown in international research to be an effective form of supportive treatment for Parkinson's disease. In the following text, we present a selection of relevant studies focused on the use of dance as a therapeutic medium in the early stages of Parkinson's disease. In addition to focusing on the benefits in terms of improving the external manifestations of the disease, the common feature of the studies below is evidence of increasing the subjective perception of one's own quality of life in terms of social inclusion in society. In all the studies below, quality of life was addressed by the PDQ-39 questionnaire. It is a questionnaire with 39 items, which is one of the most frequently used questionnaires. It focuses on perceptions of difficulties in eight dimensions of life, including relationships, social situations and communication. It also assesses the impact of Parkinson's disease on specific dimensions of functioning. In the questionnaire, the respondent answers questions regarding a specific time period - the period of the last month and chooses the frequency

of occurrence on the scale of never - exceptionally - sometimes - often - always. In each of the 39 items, one of the options is selected. Studies for the initial review article were retrieved by searching the Web of Sciences, Scopus, Science Direct and PubMed databases.

The prerequisite for inclusion in the selection of studies was the use of the key terms "dance", "dance-movement therapy", "Parkinson's disease", "early stage of Parkinson's disease" (Graph 1).

Graph 1: Key terms



author's processing

Alves da Rocha et al. (2015) in a systematic study compared the results of 20 randomized controlled trials, two non-randomized controlled trials and 13 series of case studies with a total number of 1,210 participants with Parkinson's disease. According to the key parameters set as part of the inclusion criteria, most of the above had a medium-level methodological quality, and all of them used dance as a supportive form of treatment. In the conclusions, they stated that the use of dance contributes not only to increased mobility in relation to everyday activities, but also had an impact on the subjective experience of the quality of life of a person.

Michels et al. (2018) in a psychotherapeutically oriented study focused on the use of movement to improve physical, emotional, cognitive and social functioning in a person's life and the experience of subjective quality of life. As part of the research, they conducted a systematic review of 6 randomized control trials, including a total of 254 participants, which demonstrated improvements in walking and balance. The results showed that in addition to the objective improvement of motor manifestations, the use of dance as a therapeutic medium also showed an increase in the subjective evaluation of the quality of life of a person. In their comparative study, Pereira et al. (2018) focused on the effectiveness of music and dance in alleviating symptoms in Parkinson's disease. In addition to the motor and cognitive benefits, a direct link with an increase in the subjective assessment of a person's own quality of life after the end of the therapeutic program was also demonstrated. Kalyani et al. (2019) in their study focused mainly on the

factor of improving cognitive functions, psychological symptoms and quality of life. As part of the study, a program using dance was implemented for participants in the early stages of Parkinson's disease. After completing the program, the scores of the participants significantly improved not only in selected cognitive abilities, but also in a questionnaire focused on the perception of quality of life.

The use of dance in the sense of movement intervention and activation has been evidenced in studies internationally. However, in our conditions, there is no research that would focus on the aforementioned key areas and at the same time take into account the specifics of the environment and the provision of care for people with Parkinson's disease. In the Slovak context, an analysis of research studies was carried out in 2022 in relation to the use of music therapy in support of speech, focused on specific parameters and specification of the protocol of therapeutic work using the voice as a means of intervention (Habalová et al. 2022). Currently, this project is in the early stages of implementation and the preparation of the pilot verification of the specified protocol is underway.

Conclusion

Movement activation is an important prerequisite for the support of conservative pharmacological treatment. As we stated in the article, this form of supportive intervention is a common part of comprehensive care for a person with Parkinson's disease abroad. In our conditions, this issue is still relatively poorly elaborated, with a tendency to lean towards conservative options. Pilot projects for the implementation of movement and also musical forms of intervention strategies and the verification of their effectiveness in relation to partial functions are good prerequisites for influencing the subjective experience of the disease and its consequences in the daily life of a person with Parkinson's disease.

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