

INPLASY PROTOCOL

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None.

A systematic review of dance movement therapy and rhythmic auditory stimulation for cerebral palsy based on ICF model

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Review question / Objective: Based on the International Classification of Functioning, Disability and Health (ICF) model systematically review and summarize the study of dance movement therapy (DMT) and rhythmic auditory stimulation (RAS) for cerebral palsy (CP), to provide clinical guidance for DMT and RAS in CP.

Condition being studied: Cerebral palsy (CP) is characterized by dyskinesia, a disease caused by non-progressive brain injury before and early postpartum, often accompanied by impairment of cognitive and behavioral functions. In recent years, dance therapy (DMT) has been considered a promising rehabilitation method. Current studies have shown that dance can provide a variety of sensory stimuli, which can improve the body's adaptability, balance, mobility, cognitive ability and mental health of people with disabilities caused by neurological damage. Similar to DMT, Rhythmic auditory stimulation (RAS) is a combination of exercise and rhythm training, which has a significant effect on improving gait of CP. The International Classification of Functioning, Disability and Health-Children and Youth" (ICF) -CY) includes personal, environmental and intervention factors, and can be used as an ideal tool to summarize the application of DMT and RAS in CP.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 December 2020 and was last updated on 31 December 2020 (registration number INPLASY2020120149).

INTRODUCTION

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METHODS

Search strategy: We will search, with no time restrictions, the following databases for relevant English language literature: PubMed (MEDLINE), the Cochrane Central Register of Controlled Trials (CENTRAL), EmBase and Pedro. The search string will be built as follows: (cerebral palsy OR CP) AND (dance therapy OR dancing OR dance* OR rhythmic auditory stimulation). The electronic database search will be supplemented by a manual search of the reference lists of included articles.

Participant or population: Included criteria: all age with definite diagnosis of CP were not limited to their nationality, race and course of disease. Exclusion criteria: the included population had other neurological diseases except CP.

Intervention: Dance therapy (DMT) OR rhythmic auditory stimulation (RAS) was the main intervention.

Comparator: The included population is CP, using conventional physical therapy or other treatments.

Study designs to be included: Clinical studies (randomized controlled studies, non-randomized controlled studies, before and after comparative studies, case reports) will be included.

Eligibility criteria: 1 The document type is clinical research. 2The included population is clearly diagnosed as CP.3 Intervention is dance therapy (DMT) or Rhythmic auditory stimulation (RAS). 4 Description of the results is specific and accurate.

Information sources: Electronic databases include: PubMed (MEDLINE), the Cochrane Central Register of Controlled Trials (CENTRAL), EmBase and Pedro. The electronic database search will be supplemented by a manual search of the reference lists of included articles. Contact the original author by e-mail for documents when literature is not available.

Main outcome(s): Based on ICF model, the main outcomes include physical function, body structure, activity and participation, which involve mental function, respiratory function, neuromusculoskeletal and exercise-related functions), interpersonal relations and communication, activities, self-care and community life.

Quality assessment / Risk of bias analysis: We use modified Critical Appraisal Skills Programme checklists. The resultant Quality Appraisal Scale ensured sufficient representation of items across case control, cohort, and randomized controlled trials, and relevant variations from the Critical Appraisal Skills Programme checklists: theoretical rationale for the study; appropriate methodological design; recruitment information; description and representativeness of participants; robustness of research, including control for bias; sufficiently appropriate and rigorous data analysis (including qualitative analyses where appropriate); control for confounders; and clear discussion of implications of findings.

Strategy of data synthesis: Two authors will independently extract data. Any disagreement will be resolved by discussion until consensus is reached or by consulting a third author. The following data will be extracted: author, year of publication, total number of people included in the study, intervention, frequency of intervention, research results. If the data can be integrated, further quantitative analysis (Meta).

Subgroup analysis: If further Meta analysis, each group include same type of studies (such as controlled studies or before and after comparative studies), same intervention methods (DMT or RAS) and same evaluation indicators.

Sensibility analysis: Test the heterogeneity of the included studies. If there is heterogeneity, gradually eliminate low-quality studies and observe the changes in the combined effect size.

Language: Only English and Chinese.

Country(ies) involved: China.

Keywords: Dance therapy, Rhythmic auditory stimulation, Cerebral palsy, International Classification of Functioning, Disability and Health, ICF, DMT, RAS.

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