INPLASY PROTOCOL

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Conflicts of interest:
None declared.

Evidence-based guideline recommendations for physiotherapy in Parkinson's disease: a systematic review

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Review question / Objective: The aim of the systematic review is to identify and analyse physiotherapeutic guideline recommendations for people with idiopathic Parkinson's syndrome (IPS). In particular, the quality with which the guidelines were developed and the extent to which the internationally existing recommendations for the physiotherapeutic field of action are consistent with regard to their level as well as the precision of the recommendation are considered.

Eligibility criteria: Restrictions will be applied with regard to language (English, German) and publication Date (prior 5 years).The following documents will be excluded:- Guidelines without recommendations of physiotherapeutic interventions- Guidelines recommending healthy lifestyles or including physical activity in general - Guidelines recommending physiotherapy in general - Recommendations on pharmacological, surgical, complementary interventions or non-invasive brain stimulation.

INTRODUCTION

Review question / Objective: The aim of the systematic review is to identify and analyse physiotherapeutic guideline recommendations for people with idiopathic Parkinson's syndrome (IPS). In particular, the quality with which the guidelines were developed and the extent to which the internationally existing recommendations for the physiotherapeutic field of action are consistent with regard to their level as well as the precision of the recommendation are considered.

Rationale: Parkinson's disease is the second most common neurodegenerative

disease after Alzheimer's disease. Characteristic are the cardinal symptoms tremor, akinesia and rigor. In the further course, postural instability is often mentioned as a fourth symptom. In combination with physiotherapy, drug therapy and other activating measures, a good quality of life can be achieved for those affected. Clear and detailed recommendations from guidelines are essential to support the adaptation of evidence-based knowledge into therapeutic practice and to reduce barriers that inhibit its implementation.

Condition being studied: A systematic review was developed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement to identify and analyse the physiotherapy guideline recommendations available globally for people with IPS.

METHODS

Search strategy: The search strategy to be used combines Medical Subject Headings (MeSH) and key words describing the concepts "Parkinson's' disease", "guideline/ recommendation" and "physiotherapy". The search string will be modified for each database accordingly. Search string for MEDLINE (via PubMed): ("Parkinson Disease"[Mesh] OR "Parkinson* disease*"[Title/Abstract] OR IPD[Title/Abstract]) AND ("Practice Guideline" [Publication Type] OR guideline*[Title/Abstract] OR recommendation*[Title/Abstract] OR CPG[Title/Abstract]) AND ("Physical Therapy Modalities"[Mesh] OR "Exercise"[Mesh] OR "Rehabilitation"[Mesh] OR "physical therap*"[Title/Abstract] OR physiotherapy*[Title/Abstract] OR exercise*[Title/Abstract] OR rehabilitation[Title/Abstract] OR "physical* activit*"[Title/Abstract]).

Participant or population: People with idiopathic Parkinson's syndrome (IPS).

Intervention: Recommendations about physical therapy exercise treatments (e.g.,

transfer activities, posture, upper and lower extremity function, balance (and falls), gait, physical performance, cueing and cognitive strategies).

Comparator: Not applicable.

Study designs to be included: Guidelines, defined as: "document containing "systematically developed evidence-based statements that assist providers, patients, policy makers and other stakeholders to make informed decisions on health care and public health policy" (1).

Eligibility criteria: Restrictions will be applied with regard to language (English, German) and publication Date (prior 5 years).The following documents will be excluded:- Guidelines without recommendations of physiotherapeutic interventions- Guidelines recommending healthy lifestyles or including physical activity in general - Guidelines recommending physiotherapy in general - Recommendations on pharmacological, surgical, complementary interventions or non-invasive brain stimulation.

Information sources: A systematic literature search will be conducted in the following electronic databases: MEDLINE (via PubMed), PEDro and Embase. Additionally websites of relevant organisations (e.g. GIN, AWMF, KNGF, …) will be searched.

Main outcome(s): Recommendations on physiotherapy interventions.

Data management: All identified references will be imported into a citation management programme (e.g. Endnote) and duplicates will be removed automatically and manually. The remaining articles will be screened for eligibility by two reviewers independently in a stepwise process (title/abstract and full text screening) based on the predefined inclusion/exclusion criteria. Any disagreement will be resolved through discussion or, if necessary, by consulting a third reviewer. For excluded full text

reports, the reason for exclusion will be recorded.

Relevant information of the included articles (e.g. first author, title of the paper, year of publication, country of publication, validity of the guideline, publishing organization, publication status, methodological approach (including year of literature search, if applicable), number and subject of recommendations relevant to physical therapy.) will be entered into a predefined data chart. Regarding physiotherapy guideline recommendations, details are extracted according to the Consensus Exercise Reporting Template (CERT) (e.g., materials, provider qualification and responsibility, setting, dosage, adjustment, ...) and coded dichotomously (0 = not reported, 1 = reported) (2). In addition, recommendation strength and direction as well as the quality level of the underlying evidence are extracted.

Quality assessment / Risk of bias analysis: All included guidelines are evaluated using the Appraisal of Guidelines for Research and Evaluation (AGREE II) checklist (3).

Strategy of data synthesis: The results of the selection process are presented in a PRISMA flowchart and reported descriptively. The results of the quality assessment as well as data extraction are synthesized narratively and in tabular form. The homogeneity or heterogeneity of the identified guidelines is highlighted to allow comparison in terms of consistency or variation in recommendations.

Subgroup analysis: None.

Sensitivity analysis: None.

Language restriction: Restricted inclusion to English and German.

Country(ies) involved: Germany.

References:
1) World Health O. WHO handbook for guideline development. 2nd ed ed. Geneva: World Health Organization; 2014 2014.

2) Slade SC, Dionne CE, Underwood M, Buchbinder R. Consensus on exercise reporting template (CERT): explanation and elaboration statement. British journal of sports medicine. 2016;50(23):1428-37.
3) Brouwers MC, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, et al. AGREE II: advancing guideline development, reporting and evaluation in health care. Cmaj. 2010;182(18):E839-E42.

Keywords: "Physiotherapy", "Systematic Review", "Parkinson's disease", "Guideline".

Dissemination plans: The systematic review will be published in an international peer-reviewed journal. In addition, the results will be presented at national and international congresses.

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