INPLASY PROTOCOL

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Support: **No external support.**

Review Stage at time of this submission: **Formal screening of search results against eligibility criteria.**

Conflicts of interest:
None declared.

Considerations for ensuring safety during telerehabilitation of people with stroke. A protocol for a scoping review

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Review question / Objective: **To summarise measures or aspects targeted at reducing the incidence of adverse events during the delivery of exercise interventions through telerehabilitation in patients after stroke.**
Background: **The sequelae in people with stroke are diverse. Regarding physical function post-stroke, functional impairment of the upper and lower extremities is common, which may be due to weakness or paralysis, sensory loss, spasticity, and abnormal motor synergies. In addition, a near 15% prevalence of sarcopenia has been found in people with stroke. Gait impairment has been observed in a high percentage of people with stroke, a dysfunction that may persist despite rehabilitation. More than 50% of people with stroke may experience limitations in activities such as shopping, housework, and difficulty reintegrating into community life within 6 months. These restrictions can result in a diminished health-related quality of life.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 September 2022 and was last updated on 21 September 2022 (registration number INPLASY202290104).

INTRODUCTION

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Rationale: Telerehabilitation has enabled the delivery of exercise interventions replacing the traditional face-to-face approach in patient-rehabilitator interaction. The potential for telerehabilitation to achieve similar clinical outcomes to traditional rehabilitation, and better than no rehabilitation at all, should prompt healthcare facilities to evaluate implementing remote delivery of exercise interventions for people with stroke. For this, in addition to logistics and costs, aspects related to the safety of people with stroke should be considered to avoid adverse events during the delivery of exercise interventions. This information could be reported from studies that have evaluated the feasibility, safety, or effectiveness of telerehabilitation in this population. However, such information is scattered in the literature, and the detail with which measures taken during the implementation of exercise interventions for people with stroke are reported is unknown.

METHODS

Strategy of data synthesis: The MEDLINE (Ovid), Embase (Ovid), CINHAL and CENTRAL databases will be searched. The strategy will consider a sensitive approach and the use of controlled language (MeSH, EMTREE, CINAHL Subject Heading) and natural language. The strategy will include terms for AVC and telerehabilitation. Filters will be applied to the different strategies to exclude systematic reviews, with and without meta-analysis, from the search results. The search was not limited by publication date, publication status, or the language of the studies.

Eligibility criteria: Participants: People with stroke, irrespective of type, cause, the time course of the disease and sequelae caused. Concept: Studies where exercise interventions are delivered through telerehabilitation. Context: Studies in which people with stroke perform the exercises as prescribed outside the hospital setting Study designs: Primary studies. The language as well as the publication date of the studies will not limit their inclusion.

Source of evidence screening and selection: Once the search for studies has been conducted, titles and abstracts will be independently screened by two research team members, who will discard studies irrelevant to this review. Subsequently, the full texts of the potential studies to be included will be analyzed to determine which articles meet all the eligibility criteria. In the first instance, disagreements will be resolved by consensus, and if they persist, a third reviewer will determine the inclusion of the studies.

Data management: Two reviewers will independently extract information from the included studies. An extraction form specifically designed to meet the objectives of this review will be used. The information to be extracted will include aspects related to the characteristics of the publications and studies, as well as the population, interventions delivered, and outcomes assessed. In studies reporting on measures implemented to prevent adverse events during telerehabilitation sessions, detailed information will be extracted, such as the time of delivery of the intervention, the professional involved, the specific measure implemented, among others. In the first instance, disagreements will be resolved by consensus, and if they persist, a third reviewer will determine the inclusion of the studies.

Presentation of the results: The results of the search and selection of studies will be reported through a PRISMA flow chart. The results will be reported in narrative form, and tables and figures will be used to synthesize the information. The frequency of the different measures implemented will be reported in one or more figures.

Language restriction: No language restriction.

Country(ies) involved: Chile.

Keywords: Telerehabilitation; Stroke; Patient Safety.

Dissemination plans: The findings of this review will be presented at conferences and published in peer-reviewed journals.

Contributions of each author:

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