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Background: Low physical activity level is a common risk factor for recurrent stroke. Behavior-changing interventions can increase physical activity participation, but face barriers (e.g., home visits or internet access). Low-cost telehealth approaches, like telephone calls and activity monitors, may offer a feasible solution. However, evidence supporting the efficacy of activity monitors to increase physical activity levels post-stroke remains limited. A previous systematic review suggests that integrating these devices into multifaceted behavior change interventions, such as the 5As (Ask, Advise, Assess, Assist, and Arrange) brief intervention from the HEARTS Technical Package, may enhance their effectiveness.

Objectives: To present preliminary results on the feasibility of implementing the telehealth intervention that combines the 5As brief intervention, as outlined in the HEARTS Technical Package, with the additional use of an activity monitor, compared to a control group receiving only the 5As brief intervention, for increasing physical activity level post-stroke.

Methods: A feasibility randomized controlled trial (RCT) with blinded assessment enrolled 24 individuals' post-stroke (= 6 months), aged = 18 years, inactive, able to walk 10 meters independently, and medically approved for physical activity. Participants were randomized into an experimental group (EG) (n = 12) or a control group (CG) (n = 12). Both groups received the 5As brief intervention outlined in the HEARTS Technical Package (12-weeks), via telephone call, with the EG also using an activity monitor. Outcomes included recruitment feasibility, intervention feasibility (1. retention, 2. attendance, 3. safety, and 4. perceived effectiveness), and physical activity level (assessed with the Human Activity Profile). Descriptive statistics were used for analysis.

Results: The recruitment rate was 38%. For intervention feasibility: 1. retention was 75% in the CG (9/12) and 83% in the EG (10/12); 2. attendance was 97% in the CG and 99% in the EG; 3. no adverse events were reported; 4. perceived effectiveness: in the CG, 55.6% reported feeling "much better" performing routine physical activity, 11.1% "moderately better," and 33.3% "a little better"; in the EG, 30% felt "much better," 20% "moderately better," 40% "a little better," and 10% reported "the same". Physical activity levels (mean $\pm$ SD) increased from 37 ± 12 to 49 ± 16 in the CG and from 42 ± 10 to 57 ± 18 in the EG.

Conclusion: Preliminary findings suggest that the intervention is feasible (high retention and attendance rates and no adverse events). Additionally, the proposed telehealth intervention may positively impact physical activity levels post-stroke.

Implications: To our knowledge, this is the first study investigating the feasibility of implementing a telephone call-based 5As brief intervention, as outlined in the HEARTS Technical Package, combined with an activity monitor compared to the 5As brief intervention alone. These findings will inform a fully powered RCT. The study addresses key gaps in the literature, including: 1. identifying a theoretically-informed intervention to increase physical activity post-stroke while overcoming barriers such as home visits and internet access; 2. addressing the lack of evidence supporting physical activity monitors for stroke survivors; and 3. exploring the additional effects of integrating activity monitors into multifaceted behavior change interventions to enhance physical activity post-stroke.

Keywords: stroke, physical activity, telehealth

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EXPLORING PERCEPTIONS AND EXPERIENCES OF INTERVENTION FOR BALANCE AND GAIT CONCOMITANT TO TDCS IN SPINOCEREBELLAR ATAXIA: A QUALITATIVE STUDY

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Background: Spinocerebellar ataxias (SCA) are a group of autosomal dominant inherited cerebellar disease characterized mainly by imbalance, motor incoordination, and dysarthria because of progressive degeneration of the cerebellum and/or its pathways. SCA type 3 (SCA3), also known as Machado-Joseph disease, is the most common form of SCA and has a high prevalence in Brazil. Patients with SCA face a progressive functional decline that compromises their quality of life. Understanding the factors that influence the adherence of individuals with SCA3 to programs of rehabilitation to improve balance is essential to adapt it to their expectations and needs. However, there is still little investigation on perceptions about both the impact of these interventions and the disease in their lives.

Objectives: To explore the perceptions and experiences of patients who participated in a balance and gait intervention program.

Methods: This is a qualitative study approved by the local Ethics Committee. Initially, a pilot group of 12 participants diagnosed with SCA3 were interviewed using a semi-structured script. These participants completed 20 consecutive sessions of an exercise program for balance and gait exercises concomitant to Transcranial Direct Current Stimulation (tDCS). Based on the initial interviews, the script was improved, resulting in a final version composed of 15 questions organized into four main axes: motivation, difficulties, benefits of treatment, and expectations. Subsequently, an independent researcher conducted semi-structured interviews with 25 additional participants with SCA3 who had completed the same intervention. All interviews were transcribed and analyzed using ATLAS.ti® software.

Results: The analysis revealed five main themes: participation experience, expectations for improvement, motivational factors, challenges faced, and perceptions during the study. Participants reported health benefits, strengthening of interpersonal bonds, and gratitude for the opportunity, despite challenges such as difficulty in performing the exercises and environmental barriers. Expectations ranged from perceived significant improvements to uncertainty about maintaining the improvements achieved. Motivation was reinforced by hope, persistence, and confidence in the treatment. In addition, participants shared perceptions about electrostimulation and suggestions for improving the intervention protocol.

Conclusion: The results provide a broader understanding of the positive, neutral, and negative perceptions and experiences of the participants that undergoing the intervention. Predominantly positive responses were observed regarding the experience in general, indicating that the proposed intervention was favorable in the perception of the participating individuals.

Implications: This study has the potential to help refine future programs and identify ways to reduce barriers that may lead to dropout from similar programs. It also has important application in providing valuable information about the perceptions of individuals with SCA3.

Keywords: SCA 3, Machado-Joseph disease, Perceptions and experiences, Semi-structured interview

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USE OF LIMOS-BR IN FUNCTIONALITY ASSESSMENT: STANDARDIZED MEASUREMENT FOR THE PRODUCTION OF HEALTH INDICATORS

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Background: LIMOS-Br was developed for clinical use, guiding decision-making in rehabilitation and encompassing a significant portion of the core set of rehabilitation information. It is a 45-item instrument that measures the activity component, covering broad aspects of communication, mobility, self-care, cognition, and domestic tasks. The instrument is already utilized in Switzerland and has been validated in Brazil in the form of a questionnaire, facilitating the coding of the International Classification of Functioning, Disability and Health (ICF) and the production of essential health indicators for member countries of the World Health Organization (WHO).

Objectives: To explore the potential of LIMOS-Br to simultaneously provide relevant information for rehabilitation and for the production of health indicators.

Methods: The cross-sectional study was approved by the Ethics Committee and included 100 adult individuals post-stroke with varying levels of impairment and disability. Functionality was measured through patient self-reports using LIMOS-Br, based on interviews conducted by a rehabilitation professional and guided questions specific to the instrument. In cases of moderate to severe aphasia, assistance from proxies was provided. The data were analyzed descriptively.

Results: The information generated by the instrument follows the exact description of the ICF categories and does not require linkage processes. Despite communication and cognitive impairments, the greatest difficulties were related to mobility, particularly dependency and limitations in climbing (d451), changing basic body position (d410), moving around (d455), and walking (d450). For self-care, the activities with the highest difficulty were eating (d550), caring for body parts (d520), dressing (d540), and washing oneself (d510).

Conclusion: The information obtained from LIMOS-Br was easily coded using the categories and the five proposed levels of functionality by the ICF, and was consistent with findings from previous studies on functionality in post-stroke individuals, reinforcing that mobility is a significant restriction in these cases. These findings suggest the need for support and adaptation of the environment to facilitate the participation of these individuals, often involving the necessity of a caregiver. The use of LIMOS-Br should be expanded to other populations to enhance understanding of functionality in different contexts.

Implications: LIMOS-Br demonstrates potential to provide essential data for both rehabilitation planning and the generation of health indicators. Identifying difficulties in performing functional activities can support the development of public policies and strategies focused on rehabilitation and accessibility.

Keywords: International Classification of Functioning, Disability and Health, Health Status Indicators, Rehabilitation

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FEASIBILITY OF A TASK-SPECIFIC TRAINING PROTOCOL IN AN AUGMENTED REALITY CONTEXT (INTERACT PROTOCOL) FOR CHILDREN WITH CEREBRAL PALSY

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Background: Task-specific training is recommended for motor improvements in children with cerebral palsy (CP), as well as its association with other approaches, such as augmented reality (AR). To ensure the effectiveness of these interventions, assessing their feasibility is essential.

Objectives: To evaluate the feasibility of implementing the INTERACT protocol (IN - individualized; T - task-specific; E - environment; R - real and augmented realities; ACT - active training) in children with CP.

Methods: A randomized clinical trial (RCT) was conducted with five children with spastic CP: INTERACT group (IG) (3) and control group (CG) (2), with a mean age of 10.6 years (SD = 1.82), GMFCS levels I and II, and MACS levels I, II, and III. Feasibility was assessed using a Google Form, considering the perspectives of caregivers and children during recruitment (adherence), evaluation, and intervention (adherence, adverse events, duration, comprehension, and execution). Satisfaction was measured using a visual scale. Recruitment feasibility was determined by the percentage of families who agreed to participate relative to the total number of families contacted. Adherence was assessed by the percentage of scheduled sessions attended. Adverse events were recorded based on the percentage of sessions in which undesirable reactions occurred. In the questionnaires, items related to children's and caregivers' perceptions, such as duration, were rated from 1 ("Very inadequate") to 5 ("Very adequate"). Comprehension and execution were scored from 1 ("Very difficult") to 5 ("Very easy"). The INTERACT protocol included: a) Initial assessment: manual reach kinematics, sit-to-stand kinetic movement, functional reach, upper limb activities, goal setting and quantification, and the Challenge test, with an average duration of 6 hours. b) Intervention: 16 hours of training over four weeks, conducted three times a week in 1h20min sessions, using motor learning principles, active and individualized exercises based on child-selected tasks, enriched environments, and AR context. The CG underwent physiotherapy without AR, with the same training volume as the IG.

Results: Among 12 contacted families, 7 agreed to participate (recruitment rate: 58%). Five children were included and attended all assessments (adherence rate: 100%). Evaluation: a) Duration: 60% of children considered it adequate, and 40% as very adequate. Among caregivers, 20% rated it as adequate and 80% as very adequate. b) Comprehension: 20% rated it as moderate, 40% as easy, and 40% as very easy. c) Execution: 20% of children rated it as very easy, 40% as easy, and 40% as neutral. One adverse event was recorded, achieving a feasibility rate of 92%. Intervention: a) Adherence: 88%. Four adverse events were recorded, resulting in 90% feasibility. b) Duration: 66.7% of children and caregivers rated it as adequate, while 33.3% of both rated it as very adequate. c) Execution: 33.3% rated it as easy, 33.3% as moderate, and 33.34% as