

Objectives: To describe the prevalence of depression, depressive symptoms, and use of antidepressant medications in healthcare workers during the COVID-19 pandemic.

Methods: 125 healthcare workers from different occupations who are part of the HEROES cohort were evaluated. Diagnosis of depression and use of antidepressant medication were obtained by self-report. Depression symptoms were assessed using the Beck Depression Inventory (BDI), consisting of 21 items that include symptoms and attitudes. Age, sex, and occupation were extracted from the sociodemographic questionnaire. Data analysis was performed descriptively and using the Chi-square test in the SPSS program with a significance level of 5%.

Results: The sample consisted of women (83%) and hospital workers (49%). About 45% had symptoms of depression on the BDI; 18% use antidepressant medication and 6% reported a medical diagnosis of depression. Among the symptoms of depression, the most prevalent were fatigue (80%), insomnia (68%) and dissatisfaction (66%). The least prevalent symptoms were weight loss (4%), suicidal ideation (9%) and punishment (19%). There was an association between medical diagnosis and the use of medication for depression ($P<0.01$). There was no association between depression symptoms and medical diagnosis ($P=0.19$) and medication use ($P=0.21$).

Conclusion: Many healthcare workers reported depressive symptoms and use of antidepressant medication; however, the proportion of workers with a medical diagnosis was much lower.

Implications: The BDI was sensitive to identifying depressive symptoms and can be used for screening and designing preventive actions. Many healthcare workers use antidepressant medications without a medical diagnosis. Thus, additional investigations are necessary to understand this finding.

Keywords: Health Promotion, Disease Prevention, Occupational Health

Conflict of interest: The authors declare no conflict of interest.

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PREVALENCE OF FALLS IN THE OLDER ADULT: AN INTRINSIC FACTOR OF DIABETES AND ARTERIAL HYPERTENSION

Ângela Medeiros Rodrigues¹, Ludmila Moreira Alves¹,
Huara Viviane Quispe Ajhuacho¹,
Vitoria Antoine Terzian Marcon de Moraes², José Eduardo Pompeu³,
Erika Christina Gouveia da Silva³

¹ University of Guarulhos (UNG), Guarulhos, São Paulo, Brazil

² Hospital das Clínicas (HC), São Paulo, São Paulo, Brasil

³ Department of Physical Therapy, University of São Paulo (USP), São Paulo, São Paulo, Brazil

Background: Falls are the most common cause of injuries in the elderly and have a higher prevalence with advancing age in addition to intrinsic factors such as female gender and comorbidities, extrinsic and behavioral. However, there is a need to understand how much some factors can potentiate these falls.

Objectives: To verify the influence of intrinsic risk factors such as diabetes and high blood pressure on falls in elderly Brazilians.

Methods: A cohort study with retrospective and prospective analysis using an online questionnaire and one of the arms of a larger

study. Individuals aged 60 years or over, of both sexes, who had access to the online questionnaire and agreed to participate in the research, by signing "yes" in the digital Free and Informed Consent Form (ICF) were included. Duplicates in the answers to the online questionnaire were excluded, as well as questions that were not related to intrinsic factors. The elderly were invited through communication applications, social networks, and by e-mail to people known to the researchers, and a link was sent to answer the questionnaire, which took 30 minutes to complete. A Shapiro-Wilk distribution test was performed, which found that the data had a normal distribution. Thus, median, and interquartile ranges were used for continuous variables, and frequency (number and percentage) for nominal variables. The chi-square test was performed to analyze the association between comorbidities (hypertension and diabetes) and falls, using the JASP software, adopting a significance level of $p<0.05$.

Results: A total of 402 elderly participants in the research with an average age of (69.7 ± 9.8) were collected, 71.15% female and 28.85% male. Related to intrinsic factors, 20.4% reported having diabetes, with 41.5% having fallen in the last 12 months, and 13.4% having fallen due to dizziness, with a prevalence of falls in the afternoon. As for arterial hypertension, we had a sample of 42.8% of the elderly, with 41.8% falling in the last year, and 7.5% falling due to dizziness, with the highest rate of falls occurring in the afternoon. When we relate diabetes and hypertension, we had a sample of 14.9%: 46.7% had a fall in the last 12 months, and 11.7% fell due to dizziness, with a prevalence of falls in the afternoon.

Conclusion: According to the results, diabetes and hypertension had the greatest significance when related only to falls. Regarding the symptoms dizziness was not significant between diabetes and hypertension. The afternoon period was found for the occurrence of falls.

Implications: With the results of this study, we can better identify where the greatest risk of falls is for the elderly, improving guidance and increasing the conditions to prevent and try to inhibit these falls as much as possible.

Keywords: Falls, Arterial hypertension, Diabetes

Conflict of interest: The authors declare no conflict of interest.

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STUDY PROTOCOL: EVALUATING THE EFFECTIVENESS OF CEREBELLO-SPINAL STIMULATION IN INDIVIDUALS WITH ACS

A.F. Baptista¹, Laura Alice Santos de Oliveira¹

¹ Postgraduate Program in Rehabilitation Sciences, Centro Universitário Augusto Motta (UNISUAM), Rio de Janeiro, Rio de Janeiro, Brazil

Background: Spinocerebellar ataxias (SCA) comprise a set of progressive degenerative diseases, still without available pharmacological treatment, that cause gait and balance disorders. Two recent clinical trials demonstrated that the use of transcranial direct current stimulation (tDCS) cerebellar spinal cord improved performance on tests of upper limb coordination, severity of ataxia and gait (2 weeks of stimulation), and motor scores (including balance), cognitive and quality of life scores (4 non-consecutive weeks) in subjects with degenerative ataxias, including ACS.

Objectives: The primary aim of this study is to evaluate how many sessions of cerebellar spinal tDCS associated with a gait training protocol a sample of individuals with ACS should receive until they stop showing improvements in the time, they can remain standing on one limb bottom. The impact of this intervention on measures of balance and gait performance will also be evaluated.

Methods: This is a pragmatic clinical trial protocol, in which 20 patients with different types of ACS will receive tDCS sessions associated with a gait training protocol with progressively greater difficulty. The tDCS will be applied for 20 min and intensity of 2mA, with the anode electrode positioned on the cerebellar region and the cathode on the thoracic region of the medulla (approximately T8). At each session, the time individuals manage to remain in unipodal support will be computed (less than three attempts). When the time in unipodal support is like that of age- and sex-matched healthy individuals, the protocol will be discontinued. Patients will also be evaluated before and after the end of the intervention using the Scale for the Assessment and Rating of Ataxia (SARA), dynamDynamic Gait Index (DGI), Minibest.

Results: It is expected that multiple sessions of cerebellar-spinal tDCS associated with gait training promote an increase in the time that each participant is able to remain standing on one leg independently, resulting in a more stable gait and better balance.

Conclusion: The study is under development. The project will be defended this semester and after approval by the institution's research ethics committee, the volunteer recruitment phase will begin.

Implications: This study will help physiotherapists who use tDCS in patients with SCA3 in choosing the number of sessions that should be used to obtain satisfactory results regarding balance and gait in this population.

Keywords: tDCS, Spinocerebellar ataxia, Balance

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Acknowledgment: Not applicable.

Ethics committee approval: Not applicable.

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BLADDER TRAINING IN THE IMPROVEMENT OF OVERACTIVE BLADDER SYMPTOMS: A SYSTEMATIC REVIEW OF RANDOMIZED CONTROLLED TRIALS

Anna Karoline Lopes Rocha¹, Liana Barbaresco Gomide²,
Silvia Elizate Monteiro³, Ingrid Campos¹, Cássio Riccetto³,
Simone Botelho¹

¹ Postgraduate Program in Rehabilitation Sciences, Motor Science Institute of the Federal University of Alfenas (UNIFAL-MG), Alfenas, Minas Gerais, Brazil

² University of Brasília (UnB), Brasília, Federal District, Brazil

³ Postgraduate Program in Surgical Science, School of Medical Sciences of the State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil

Background: Bladder training (BT) is characterized by a programmed voiding regimen with gradually adjusted voiding intervals and is commonly used in the conservative treatment of individuals with overactive bladder (OAB).

Objectives: To investigate and update the literature on the effectiveness of BT treatment alone and/or combined with other therapeutic strategies that can promote improvement in OAB symptoms and quality of life and report adverse events.

Methods: The systematic review was performed in eight databases, including PubMed, PEDro, SciELO, LILACS, Cochrane Library, Web

of Science, EMBASE and CINAHL. After selecting the titles, abstracts and full texts retrieved. To assess the risk of bias of the studies, the Cochrane RoB 2 tool and the GRADE system were used to determine all the evidence of the studies analyzed. The protocol of this study is available in the PROSPERO systematic review protocol registry database with the registration number (PROSPERO CRD42022301522).

Results: The search generated a total of fourteen randomized controlled trials (RCTs) included in the review. The total participants were 2,319 (men and women) from 9 countries. The minimum age of the sample was 18 and the maximum age was 80 years. RCTs featured BT isolated (n=12), BT + intravaginal electrical stimulation (IVES) (n=2), BT + DT (drug treatment) (n=5), DT (n=7), BT + Biofeedback (BF) + IVES (n=1), PFMT + BF (n=1), BT + PFMT + behavioral education/therapy (n=2), BT + PTNS (percutaneous tibial nerve stimulation) or BT + TTNS (transcutaneous tibial nerve stimulation) (n=1). To the meta-analyses BT combined with IVES in the short-term follow-up period promoted improvement in nocturia (DM: 0.89, 95% CI: 0.59-1.20), urinary incontinence (DM: 1.93, 95% CI: 1.32-2.55) and quality of life (DM: 4.87, 95% CI: 2.24-7.50). Three RCTs were considered with a "High" risk of bias, nine studies with "Some concerns," and two with a "Low" risk. In the GRADE system, the RCTs showed very low, of evidence to the GRADE system.

Conclusion: BT combined with IVES showed favorable results for treating OAB in the short-term follow-up period. Thus, the use engaged with IVES is recommended for treating individuals with OAB.

Implications: For individuals with OAB treated with BT + IVES there is a report of reduced episodes of nocturia, urinary incontinence and improved quality of life in the short-term follow-up period. The methodological quality of the studies was the best possible for the moment; aspects of the currently available RCTs were analyzed to update the current literature. Most of the data in this review comes from moderate-sized RCTs of very low to moderate methodological quality, verified by GRADE, in addition to heterogeneous risk of bias across RCTs. The findings corroborate the recommendations of the societies guiding conservative treatment for OAB. BT should be offered in combination with IVES as supplemental therapy in conservative treatment to increase treatment efficacy in the short-term follow-up period.

Keywords: Bladder training, Rehabilitation, Overactive bladder

Conflict of interest: The authors declare no conflict of interest.

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AUTOMATIC ROTATIONAL THERAPY IN MECHANICALLY VENTILATED INDIVIDUALS AND LONG STAY IN AN INTENSIVE CARE UNIT: SYSTEMATIC REVIEW AND META-ANALYSIS

Anna Luísa Araújo Brito¹, Amanda Caroline de Andrade Ferreira¹,
Jakson Henrique Silva¹, Juliana Fernandes de Souza Barbosa¹,
Shirley Lima Campos¹

¹ Department of Physical Therapy, Federal University of Pernambuco (UFPE), Recife, Pernambuco, Brazil

Background: Invasive ventilatory support and prolonged immobility in bed are predictive factors for the development of respiratory and musculoskeletal complications in critically ill patients, favoring