

repetitions, a fourth repetition was performed. The isometric force data were expressed in kilogram-force (Kg/f) and converted to newton (N) for the calculation of torque (N.m). The normality of the data was verified using the Shapiro-Wilk test. The mean and standard deviation were calculated, followed by and by independent samples t-test. A significance level of ($p > 0.05$) was adopted.

Results: Thirteen female athletes (22 ± 2.19 years; 1.63 ± 0.06 m and 63.5 ± 16.9 kg) and 14 male athletes (23.85 ± 6.97 years; 1.75 ± 0.06 m and 72.8 ± 8.6 kg) participated in the study, totaling 27 college athletes. The athletes were classified according to the International Physical Activity Questionnaire (IPAQ) as Very Active (29.62%), Active (55.55%) and Irregularly Active (14.81%). Male athletes produced significantly more torque (109.36 ± 43.70 N.m; CI 84.12 - 134.59 N.m) when compared to female athletes (73.05 ± 14.26 N.m; CI 64.43 - 81.67 N.m).

Conclusion: This study provides a normative database on isometric hip flexor strength measured with a hand-held dynamometer. In general, differences in strength were present between the sexes, with men showing higher torque values compared to women.

Implications: The isokinetic dynamometer is the gold standard instrument for quantifying muscle strength. However, it is not accessible to all athletes. Therefore, we sought an alternative for the quantification of muscle strength in an affordable way. These data provide a description of hip flexor muscle strength in college athletes in order to assist professionals in post-injury rehabilitation, and to be a discharge criterion for sports return.

Keywords: Muscle Contraction, Rehabilitation, Lower Extremity

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

Acknowledgment: The authors would like to thank the Coordination for the Improvement of Higher Education Personnel (CAPES) and the National Council for Scientific and Technological Development (CNPQ) for the scholarships.

Ethics committee approval: Federal University of Santa Catarina, 5.566.069.

<https://doi.org/10.1016/j.bjpt.2024.100679>

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BARRIERS AND FACILITATORS TO ACCESS TO REHABILITATION SERVICES IN BRAZIL FOR POST-STROKE INDIVIDUALS IN THE FIRST SIX MONTHS OF RECOVERY

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Background: Post-stroke individuals should have immediate and full access to rehabilitation services after hospital discharge. This access must be obtained in the first six months of the event, a period where the chances of recovery are greater. Thus, it becomes relevant to know the barriers and facilitators of this access. However, studies on this topic were not found in developing countries such as Brazil.

Objectives: To identify barriers and facilitators to access to rehabilitation services for post-stroke individuals discharged from a stroke unit of a public hospital in Brazil in the first six months of recovery.

Methods: A cross-sectional and descriptive study was developed. Sociodemographic and clinical-functional data were collected in the hospital during the acute phase. Six months after discharge, data on barriers and facilitators to access to rehabilitation services were collected, considering 20 aspects related to the economic conditions and displacement to rehabilitation services, quality, and organization of rehabilitation services, as well as individual's personal conditions.

Results: 174 individuals (62 ± 21 years old) were included. Among the 20 aspects analyzed, 17 (85%) were most frequently pointed out as facilitators. The main facilitators pointed out was the patient's expectation of the treatment and the quality of care offered, identified by the vast majority ($>79\%$) of the individuals. In addition, all aspects related to the quality of rehabilitation services were pointed out as facilitators by the majority of the subjects. Three (15%) aspects were most frequently pointed out as barriers: income available for health care (49.4%), waiting time to make an appointment and be attended (47.2%), and scheduling process (45.4%).

Conclusion: More facilitators than barriers were pointed out. That is, in the first six months of recovery, aspects related to economic conditions and displacement to rehabilitation services, organization of rehabilitation services, quality of rehabilitation services and personal conditions of the individual, have, for the most part, positively influenced the access to rehabilitation services for post-stroke individuals.

Implications: Considering the identified barriers, public policies to subsidize health costs and optimize the waiting time and scheduling process in rehabilitation services should be considered relevant tools to facilitate access to rehabilitation services for post-stroke individuals. Likewise, human, and financial resources must be directed towards promoting the enabling factors.

Keywords: Stroke, Access to rehabilitation services, Barriers and facilitators

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

Acknowledgment: We appreciate the funding agencies: CAPES, CNPq, FAPEMIG, and PRPq/UFMG. We also appreciated the collaboration of the professionals from Hospital Risoleta Tolentino Neves.

Ethics committee approval: Research Ethics Committee of the Federal University of Minas Gerais (CAAE:26431319.6.0000.5149).

<https://doi.org/10.1016/j.bjpt.2024.100680>

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SHORT PHYSICAL PERFORMANCE BATTERY AS A PREDICTOR OF MORTALITY AMONG OLDER ADULTS: SYSTEMATIC REVIEW WITH META-ANALYSIS

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Background: Physical performance is an essential component in the clinical assessment among older adults, and its decline as assessed by the Short Physical Performance Battery (SPPB) is associated with increased risk for hospitalization, institutionalization, falls, and disability. Although a SPPB score <10 seems to be predictive of mortality, according to previous studies, the cutoff values are heterogeneous, which makes it difficult to really know the predictive

power of SPPB for mortality and the magnitude of the increase in the probability of death as the score decreases.

Objectives: To analyze the predictive power of SPPB for mortality among older adults due to a systematic review with meta-analysis.

Methods: Systematic review with meta-analysis, prepared according to the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA-P) recommendation, registered in the International Prospective Register of Systematic Reviews - Prospero (CRD42021256040). Prospective and retrospective longitudinal studies conducted with individuals aged 60 years or older were included, considering publications in full text, abstracts, and any identified unpublished data. The search was performed in the following databases with no language or date restrictions: MEDLINE via PubMed, Embase, Latin American and Caribbean Literature on Health Sciences (LILACS), Physiotand herapy Evidence Database (PEDro). The risk of bias was analyzed using the Quality in Prognosis (QUIPS) tool. For the meta-analysis, R software with the "meta" package (version 4.9-6), the "metaprop" function for proportion data and the "meta-mean" function for continuous data was used. Pooled results of proportion and means (continuous data) with their respective 95% confidence intervals (CI) were obtained using the inverse variance method with a random effects model. Heterogeneity was assessed by calculating i^2 . Values greater than 50% were considered substantial heterogeneity.

Results: Meta-analysis including 13 studies with 6.390 participants suggest that elderly with SPPB between 0-3 are more likely to die compared with those with SPPB between 4-12 [Odds Ratio (OR) 2.58; 95% CI (1.93-3.44); moderate certainty of evidence]; elderly with SPPB between 0-6 are more likely to die compared with those with SPPB between 7-12 [Odds Ratio (OR) 2.30; 95% CI (1.94-2.73); moderate certainty of evidence]; and elderly with SPPB between 0-9 are more likely to die compared with those with SPPB between 10-12 [Odds Ratio (OR) 2.17; 95% CI (1.75-2.68); high certainty of evidence].

Conclusion: The chance of death increases as the SPPB score decreases, which reinforces the predictive capacity of this variable. It is suggested the development of further studies with comparative analyses to establish a cutoff point from which SPPB score there is a higher risk of death compared to the general population, especially comparative analyses of interventions to improve the physical performance of older adults and prevent death.

Implications: The results may subsidize the development of clinical protocols aimed at improving physical performance, to be used in public health regarding the health management of the elderly population.

Keywords: Aged, Mortality, Physical Functional Performance

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

Acknowledgment: Not applicable.

Ethics committee approval: Not applicable.

<https://doi.org/10.1016/j.bjpt.2024.100681>

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PREVALENCE AND FACTORS ASSOCIATED WITH JOINT PAIN IN INDIVIDUALS WITH CHIKUNGUNYA IN AN AMAZONIAN STATE: A CROSS-SECTIONAL STUDY

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Background: Chikungunya fever is a disease caused by the virus Chikungunya (VCHIK), and joint pain is considered the classic symptom. This viral infection tends to present with arthralgia and musculoskeletal dysfunction (MSD), which are associated with the progression of other clinical symptoms and sometimes disabling MSD manifestations. Since 2014, records of VCHIK have been identified in Brazil, with high rates of infection, thus raising concerns regarding states with favorable climates for the proliferation of the virus-transmitting mosquito. In the state of Amapá, there is a shortage of studies that reveal the profile of the infected population and their clinical and musculoskeletal manifestations, making it difficult to plan and execute preventive and disease management actions in the infected population.

Objectives: To identify the prevalence of musculoskeletal manifestations and analyze the association between joint pain and other MSD manifestations in individuals with Chikungunya fever in the state of Amapá, Brazil, between 2016 and 2021.

Methods: This is an observational, cross-sectional, and retrospective study which used data from the SINAN NET system of the Ministério da Saúde (MS) of Brazil. Sociodemographic and clinical data of diagnosed individuals were used. Data that were correctly filled out according to the identification and notification form of the MS were included in the study, while individuals with incomplete data were excluded. Descriptive and inferential statistical analyses were performed using the Chi-square test and linear regression to analyze possible associations.

Results: Data from 869 individuals were analyzed. The prevalence of arthralgia was 50.3%. The majority of cases were female (55.8%), with an average age of 31.9 ± 19.4 years, self-declared brown (77.5%), with incomplete elementary education (16.8%), and living in the urban area (82.8%). The results indicate a positive association between joint pain and Arthritis (OR=2.56; CI=1.90-3.46); Fever (OR=2.42; CI=1.27-4.60); Back pain (OR=4.34; CI=3.26-5.80); Myalgias (OR=4.89; CI=3.43-6.98); and Headache (OR=3.69; CI=2.45-5.55).

Conclusion and Implications: This study indicates that the post-infection scenario of Chikungunya is broader and more complex than just joint pain symptoms. These data can help in planning quick and efficient strategies to address the physical dysfunctions arising from Chikungunya in a region of Brazil with favorable climatic conditions for this type of infection vector and deficient health infrastructure.

Keywords: Chikungunya fever, Joints, Musculoskeletal pain

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

Acknowledgment: I thank the researchers involved in this project for their commitment and hard dedication.

Ethics committee approval: Federal University of Amapá, CEP (3.390.405)

<https://doi.org/10.1016/j.bjpt.2024.100682>

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BIOPSYCHOSOCIAL EFFECTS AFTER PHOTOBIOMODULATION FOR GLYCEMIC CONTROL IN INDIVIDUALS WITH TYPE 2 DIABETES MELLITUS

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