used in the detailed search strategy. Cross-sectional, cohort, longitudinal and all studies that reported the prevalence of sarcopenia in Brazilian elderly individuals aged 60 years or older, whether community-based, institutionalized, clinical, outpatient and/or inpatient, were included in the study. The sub-classifications of Sarcopenia investigated were pre or risk of sarcopenia, confirmed sarcopenia, severe or severe sarcopenia. After evaluating titles and abstracts, potential full texts were assessed for eligibility by two independent reviewers (SPC and LACT). Studies that met the eligibility criteria were included. The search strategy used English descriptors related to "prevalence", "epidemiology", "sarcopenia", "elderly", "Brazil" and their variations<sup>1</sup>. Register PROSPERO 2022 CRD42022355825.

Preliminary results: A total of 4830 studies were found in databases that included MEDLINE, AMED, CINAHL, EMBASE, LILACS, SciELO, Google Scholar hand search. In addition, a manual search of relevant journals and reference lists of eligible studies was performed, and Brazilian experts in the field were consulted to identify any important studies and previous systematic reviews (November 2022). Of these studies, 152 were duplicate articles, 4678 had their titles and abstracts evaluated, 369 articles were selected for reading in full. Of the total number of studies analyzed, 60 were included, with 18,258 participants. The mean prevalence of sarcopenia was 28.59% [0.3% (minimum value) to 63.2% (maximum value)]. Among the likely factors contributing to the variability in the prevalence of sarcopenia in Brazil are the heterogeneity of diagnostic criteria and the changes in muscle mass, muscle strength, and physical function assessed by different instruments ranging from calf measurements to dual-energy x-ray absorptiometry.

Conclusion: Aging-related sarcopenia is an emerging public health problem in Brazil. Updates on the subject show an increase in the prevalence of sarcopenia in the elderly in Brazil. Thus, there is an urgent need for planning health strategies aimed at the prevention of sarcopenia in the elderly population.

*Implications*: Improvement of public health and consequently the functionality of the elderly.

Keywords: Sarcopenia, Elderly, Prevalence

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

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### DO THERAPIST-ORIENTED HOME REHABILITATION IMPROVE HAND FUNCTION AND HANDGRIP IN WOMEN WITH SYSTEMIC SCLEROSIS?

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Background: Systemic Sclerosis (SS) presents peculiar clinical and functional aspects that limit activities of daily living (ADL). The hands are primarily affected, and the functional disability of the hands is one of the main components of their overall disability.

Objectives: To evaluate the impact of a therapist-oriented home rehabilitation (TOHR) on the perception of difficulty in performing manual tasks and on peripheral muscle strength.

Methods: Prospective quasi-experimental, longitudinal study, including women diagnosed with SS based on the criteria of the

American College of Rheumatology and the European League Against Rheumatism, from the outpatient clinic of the Pedro Ernesto University Hospital. The physiotherapist accompanied the rehabilitation of people with SS at a distance, for a period of 12 weeks. The home exercise program consisted of 3 sessions per week, including flexibility training exercises, muscle strengthening, postural control training and aerobic training and relaxation exercise. To measure the difficulty in manual tasks, the Cochin Hand Function Scale (CHFS) was used, it contains 18 items about ADL that require manual skill. There are six possible answers for each item, according to the difficulty of performing the task (0 to 5). The final score is the sum of all items and ranges from 0 to 90, the higher the score, the greater the difficulty in manual function. And to measure handgrip strength, an isometric hydraulic dynamometer (SH5001, Saehan Corporation, Korea) was used in the hand on the dominant side of the body, the highest value recorded among three measurements being considered for analysis, which followed the standardization of American Society of Hand Therapists. For comparison, the methods were applied pre-TOHR and post-TOHR.

Results: From November 2021 to November 2022, 23 women diagnosed with SS were recruited, with 5 patients excluded due to difficulty walking (n = 3) and treatment abandonment during the study protocol (n = 2). Among the 18 patients in the sample, we found a significant drop in the CHFS test score (p = 0.009) between the evaluation [21 (4–38)] and reassessment [13 (5-21)] moments. However, we did not observe significant changes (p = 0.060) in the handgrip measured in the assessment [23 (13–26)] and in the reassessment [24 (15–27)].

Conclusion: Alterations in the hands of people with SS, such as progressive thickening of the skin, tendon fibrosis, muscle fibrosis, stiffening of the palmar aponeurosis, can lead to deformities and limit the range of motion. Physical exercise programs increase the efficiency of the muscles, improve joint articulation, in addition to having benefits in blood circulation, in the local inflammatory reaction and in the reduction of tissue stiffness. In this study, this was reflected in the perception of improvement in performing manual tasks, despite we did not objectively identify an increase in handgrip strength.

Implications: A therapist-oriented home rehabilitation (TOHR) have a powerful effect on the performance of manual tasks. Thus, they should be recommended as an adjunct to the drug treatment of patients with SS, as they increase physical and functional capacity. Keywords: Hand function, Rehabilitation, Systemic sclerosis

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

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Ethics committee approval: Pedro Ernesto University Hospital of the State University of Rio de Janeiro - CAAE: 52759521.2.0000.5259

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# DEPRESSIVE SYMPTOMATOLOGY WITH DISABILITY IN OLDER ADULTS DURING THE COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY

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Background: Depressive symptoms are manifested by depressed mood and lack of interest in carrying out activities of daily living. Disability is the term used to explain the negative aspects of the interaction between the individual and their contextual factors,

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which include disabilities, activity limitations and restrictions on social participation. Some evidence, prior to the pandemic, showed the association of depressive symptoms with negative outcomes related to body functions in the older adults. However, we did not observe studies in the literature that explore the relationships of this variable with the disability of community-dwelling older adults, in the context of the COVID-19 pandemic.

*Objectives*: To investigate whether there is an association between depressive symptoms and disability in community-dwelling older adults during the COVID-19 pandemic.

Methods: Cross-sectional study (Survey) with Brazilian community-dwelling older adults, with a mean age of 68.2 ( $\pm$ 6.8) years. Validated instruments were used to assess depressive symptoms (Center for Epidemiological Studies Depression Scale - CES-D) and disability (World Health Disability Assessment Schedule - WHODAS 2.0 - 12-item version). Sociodemographic issues, internet use, number of comorbidities, perceived social isolation, physical activity and type of health care were evaluated. Multiple linear regression model was used to investigate the association between depressive symptoms and disability (5% significance level).

Results: The sample consisted of 167 elderly people, of whom 67.5% were female. The average score of the CES-D was 16.3 ( $\pm$ 7.2) points, with 80 (47.9%) older adults considered to have depressive symptoms; and the mean WHODAS 2.0 score was 19.6 ( $\pm$ 7.8) points. In the multiple linear regression model, adjusted for covariates, older adults with depressive symptoms ( $\beta$  = 5.69; 95% CI 7.78; 3.59, p < 0.001) showed higher levels of disability.

Conclusion: There was an association between the presence of depressive symptoms and disability in the older adults in the community, in the context of the pandemic. It is necessary to monitor older adults with this condition to prevent complications and reduce disabilities.

Implications: These results reinforce the importance of health professionals tracking this condition to promote the functionality of the elderly. In addition, they indicate that functionality is also shaped by psychological factors and that these should be considered in the development of clinical and surveillance strategies.

Keywords: COVID-19, Depressive symptoms, International Classification of Functioning, Disability and Health

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

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### 397

# PERFORMANCE IN THE WALKING SPEED TEST IN ELDERLY PEOPLE AND CROSSING TIME ON ROADS WITH TRAFFIC LIGHTS

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Background: Elderly pedestrians often report difficulty completing crossings in the time estimated by traffic lights, and reduced walking speed while commuting may be associated with negative health outcomes. It is also worth highlighting the scarcity of Brazilian

studies, which reinforces the need for investigations aimed at this topic of interest.

*Objectives*: To analyze the gait speed of community-dwelling elderly; to verify the association of socioeconomic, clinical and health factors, considering the regulated crossing time on roads with pedestrian traffic lights and alternative cutoff points for walking speed.

Methods: A cross-sectional study was conducted with 411 elderly people ( $70.15\pm7.25$  years old) from Macapá, Amapá. Socioeconomic, clinical and health variables were collected using a structured form. Walking speed was assessed using the usual walking speed test, which is among the Short Physical Performance Battery (SPPB) tests (time to walk 4 meters). For the analysis of the established time (<1.2 m/s) for crossing roads with traffic lights for pedestrians, data consulted from the city's traffic departments and alternative cutoff points (<1.1 m/s; <1.0 m/s and 0.9 m/s). Data were analyzed using descriptive and inferential statistics from the binary logistic regression model (p<0.05 and 95%CI).

Results: The mean walking speed time was  $0.99\pm0.29$  m/s. A total of 123 traffic lights were recorded in the city of Macapá, of which (56.1%) are pedestrian traffic lights; most roads (87.8%) do not have indications for crossing; 52% do not have a crosswalk demarcated on the road; and 80.5% do not have lowering or adaptation of the track at the crossing point. Most of the elderly (76.4%) presented a walking speed lower than the crossing time established by the regulation of roads with traffic lights for pedestrians (<1.2 m/s); and when considering alternative cutoff points, it remained unfavorable for most elderly people, except for the <0.9m/s classification. The logistic regression model indicated that elderly women, those of advanced age, with dependence for instrumental activities of daily living and with reduced muscle strength probably walk for less time than established by the traffic department (<1.2 m/s) and at alternative cutoff points.

Conclusion: The current weather pattern does not promote safety and exposes the elderly population to risks when crossing roads with traffic lights. The implementation of a time standard that considers the specificities of the elderly population in this city becomes fundamental.

*Implications:* Through the data obtained from this study, it will be possible to suggest a revision of the standards established for carrying out crossings in order to consider the specificities of the elderly population, as well as to favor their insertion safely in the place where they live, providing conditions that allow their autonomy and integration into society.

Keywords: Elderly, Walking speed, Pedestrian

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Ethics committee approval: Federal University of Amapá, opinion  $n^{\circ}$  1,738,671

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# DISSEMINATION OF KNOWLEDGE ON WORKER'S HEALTH FROM INSTAGRAM PROFILES

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Background: The dissemination of knowledge is defined as an active process, which aims to deliver information from clear, simple,