

Brazil. Frailty and mortality were the independent and dependent variables, respectively. The former was assessed using the frailty phenotype, considering unintentional weight loss, exhaustion, muscle weakness, slow gait and low physical activity level, and participants were categorized as non-frail, pre-frail or frail. Intra-hospital mortality was collected in the healthcare electronic medical chart system (TrackCare). The older patients were categorized into two groups: those that were discharged and those that died. Data analysis was descriptive and using the chi-squared, Mann-Whitney U and simple and multiple logistic regression tests. Demographic (age and sex) and clinical data (number of medications and body mass index- BMI) were collected to adjust the analyses.

Results: 7.1% of the older adults hospitalized during the study period were non-frail, 34.1% pre-frail and 58.8% frail, and 7.1% died during their hospital stay. The group that died exhibited more frailty criteria ($U=510.500$; $p=0.006$) and more frequent muscle weakness ($X^2(1)=7.412$; $p=0.006$) and slow gait ($X^2(1)=5.636$; $p=0.030$). These individuals showed no differences in age, sex, education level, BMI and medications when compared to their discharged counterparts ($p>0.05$). In simple regression analyses, one more frailty criterion increased the likelihood of intra-hospital death by 110% (OR=2.100 [95% CI 1.201 – 3.673]). Adjusted multiple analyses did not change the simple regression results.

Conclusion: Older adults with more frailty criteria exhibited a greater likelihood of intra-hospital death. The findings reveal the risk of intra-hospital death in hospitalized frail older patients and therefore, the need for multiprofessional monitoring of these individuals from the moment they are admitted.

Implications: Understanding frailty in a hospital setting may contribute to the development of healthcare, screening, health indicator and prevention strategies aimed at improving care and prognosis for these individuals.

Keywords: Hospitalization, Frailty, Mortality

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PREDICTORS OF HOSPITALIZATION AND DEATH IN OLDER ADULTS WITH COGNITIVE IMPAIRMENT

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Background: Cognitive impairment, characterized as a deficit in one or more brain functions, has been associated with greater post-hospitalization functional limitations. Hospitalization is a known risk factor for functional decline in older adults and has been linked to post-discharge disability, rehabilitation difficulties, higher mortality and irreversible, physical, functional and psychosocial consequences. However, few studies have investigated factors related to the hospitalization process in older adults with cognitive impairment.

Objectives: Identify the sociodemographic factors, clinical conditions, and sarcopenia criteria predictive of hospitalization and death in older adults with cognitive impairment.

Methods: A longitudinal observational study was conducted involving 170 older adults with cognitive impairment assessed at a specialized public hospital. The predictive variables were sociodemographic characteristics (age, sex, and education), clinical conditions (engagement in physical exercise and history of hospitalization in the last 6 months) and sarcopenia criteria (muscle strength, muscle mass and physical performance). Muscle strength was evaluated by hand grip dynamometry, muscle mass by measuring calf circumference and physical performance via the Timed Up and Go (TUG) test. The variables predicted were hospitalization and death up to one year after assessment. Analyses were performed using descriptive statistics, the independent Student's t, Mann-Whitney U and chi-squared tests and simple logistic regression.

Results: of the 170 participants, most were sedentary women, with an average age of 77.57 years and low education level, with confirmed sarcopenia in 15.9% and previous history of hospitalization in 13%. During the one-year follow-up, 15.9% (n=27) of the older adults were hospitalized and 7.6% (n=13) died. The Mann-Whitney U test showed that education level had an effect on hospitalization ($U=1423.5$, $p=0.027$) and death ($U=647.0$, $p=0.025$) in the one-year follow-up. The chi-squared test indicated that a history of hospitalization in the last 6 months was associated with hospitalization [$X^2(1)=4.729$; $p=0.030$] and death [$X^2(1)=3.919$; $p=0.048$] in the one-year follow-up period. Simple logistic regression demonstrated an association between history of hospitalization in the last 6 months and readmission during one year of follow-up (OR=2.963; 95%CI 1.076–8.165, $p=0.036$). Associations between education level and the occurrence of hospitalization and death at follow-up and between history of hospitalization and death at follow-up were not significant in simple logistic regression.

Conclusion: This study found that a history of hospitalization in the last 6 months was associated with hospitalization over a one-year period in older adults with cognitive impairment.

Implications: These findings reinforce the importance of recognizing a history of hospital stays as a risk factor for further hospitalization in older adults with cognitive impairment, in order to implement early interventions aimed at preventing readmission and death.

Keywords: Aged, Hospitalization, Mortality

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IMMEDIATE EFFECTS OF FUNCTIONAL ELECTRICAL STIMULATION ON THE GASTROCNEMIUS MUSCLE ON PLANTAR PRESSURES IN CHILDREN WITH CEREBRAL PALSY

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