

ASSOCIATIVE STUDY BETWEEN RISK OF FALLS AND ANTHROPOMETRICS, PHYSICAL ACTIVITY, DAILY LIFE ACTIVITIES INDEPENDENCY AND MALNUTRITION RISK IN INSTITUTIONALIZED ELDERLY

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Apart of physiologic aging, other alterations occur in the human body over time. Sometimes elderly people live alone, but with a meaningful dependency level which may lead to frequent falls and other incidents. The risk of falls is one of the factors that influence elderly's institutionalization. To better understand the elderly institutionalized profile and how risk of falls might be predicted, a set of anthropometric, physical activity, daily life activities independency, malnutrition and falls risks parameters were evaluated. Thirty-nine elderly with 85.90 (± 7.09) years-old composed the sample of this research. All familiars and evaluated persons agreed with this research. The parameters evaluated were the height, body mass, abdominal perimeter (anthropometrics), physical activity index (PAI), daily life activities independency, malnutrition, and risk of falls. Physical activity was assessed with the sports index calculation of the adapted historical physical activity questionnaire (HPAQ) for the Portuguese population. The daily life activities independency was evaluated based in the Barthel index. Malnutrition and risk of falls were assessed with the Mini Nutritional Assessment (MNA) and Tinnetti scales respectively. To predict the risk of falls the associative study was performed with Spearman's correlation test with a significant level of 5%. Means and one standard deviation were set for the selected parameters. The body mass presented a mean of 66.00 \pm 17.00kg, abdominal perimeter 102 \pm 11cm, height 153 \pm 13cm, body mass index (BMI) 28 \pm 6kg/m², MNA with 2.78 \pm 0.92, Barthel 65.60 \pm 29.25 and Tinnetti with 17.59 \pm 8.79. Significant correlations were found between the MNA and Tinnetti scale ($r_s = 0.37$; $p = 0.020$). PAI presented correlation with the Tinnetti scale ($r_s = 0.85$; $p < 0.001$). Barthel and Tinnetti scales also presented significant correlation ($r_s = 0.72$; $p < 0.001$). Those results seem to appoint that, the MNA status had significant correlation with PAI, Barthel and Tinnetti scale. This work, allowed to concluded that, the risk of falls presented significant correlation with nutritional status. Daily life activities independency and PAI, also seems to predict the risk of falls. Specific training programs intending to prevent risk of falls may also lead to higher independency levels and quality of life and risk of falls reduction.

Keywords: Elderly, Physical activity; Independency.