

Association of fall risk in older adults between gender, fear of falling and autonomy

T Rios¹, A Simões^{1,2}, S Lopes^{1,3}

1 Escola Superior de Saúde do Vale do Sousa, Portugal

2 Escola Superior de Saúde Santa Maria, Portugal

3 Centro de Investigação e Reabilitação, Escola Superior de Saúde, Instituto Politécnico do Porto

Introduction:

Aging is a natural process of the individual and is associated with a decline in physical and mental function. Given the high prevalence of older adults worldwide, it becomes appropriate to identify the consequences of this reduction. Falls appear as a consequence more common in this specific population, which triggers the need to identify the different risk factors, in order to prevent them and create intervention programs in that way.

Objectives:

Characterize the risk of falling of the older adults and perceive if there is an association between the risk of falls, fear of falling, and anatomy.

Methods:

It was conducted a cross-sectional study on 101 older adults of centres and day cares. A questionnaire was applied for characterisation of the sample. The risk of falling was measured by the instruments 30 seconds Sit to Stand, Timed Up and Go Test, 4 Stage Balance test, Step Test and 10 meters Walking Speed. The data were analysed using software IBM SPSS 24.0, with a significance level of 0.05.

Results:

It was observed that the sample presented a risk of falling in all tests used. It was found that there are statistically significant differences between gender and Step Test ($p = 0,034$). Fear of falling showed association with the Step Test ($p = 0,026$) and with 10 meters Walking

Speed ($p = 0,038$). As for autonomy, it showed association with Timed up and Go Test ($p = 0,033$), Step Test ($p = 0,008$), 10 meters Walking Speed ($p = 0,007$), 30 seconds Sit to Stand ($p = 0,020$), 4 Stage Balance Test on 1st position ($p = 0,001$), 4 Stage Balance Test on 2nd position ($p = 0,002$) and 4 Stage Balance Test on 3rd position ($p = 0,002$).

Conclusions:

Most of the participants present risk of falling. The gender presented association with one of the tests, the Step Test, the fear of falling with two tests, Step Test and 10 meters Walking Speed. Whereas autonomy displayed association with all tests