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ORIGINAL ARTICLE

EVALUATION OF FEAR OF FALLING IN ELDERLY IN AMBULATORY CARE AVALIAÇÃO DO MEDO DE CAIR EM IDOSOS EM ATENDIMENTO AMBULATORIAL EVALUACIÓN DEL TEMOR DE CAER EN ANCIANOS EN AMBULATORIO

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ABSTRACT

Objective: to assess fear of falling in elderly patients in a geriatric outpatient clinic. **Method:** a cross sectional study, comprising 120 subjects aged 60 years, of both sexes. Data collection was conducted through interviews using a structured instrument. Data were analyzed by chi-square tests of association and Equal proportions. The research project was approved by the Ethics Committee with CAAE 0129.0.126.000 - 11. **Results:** Of 120 patients, 97 (80%) reported fear of falling; seniors reported no considerable concern in the activities of daily living (ADLs) and social. However, in involving physical exertion reported much concern. **Conclusion:** no need for special attention to the health of the elderly reporting fear of falling, since this tends to restrict their usual activities, decreases the autonomy and quality of life. **Descriptors:** Elderly Fear; Accidental Falls.

RESUMO

Objetivo: avaliar medo de cair em idosos atendidos num ambulatório de geriatria. **Método:** estudo transversal descritivo, compondo 120 sujeitos acima dos 60 anos, de ambos os sexos. A coleta de dados foi realizada mediante entrevista utilizando-se instrumento estruturado. Os dados foram analisados pelos testes de Qui-quadrado de associação e de Igualdade de proporções. O projeto de pesquisa foi aprovado pelo Comitê de Ética com o CAAE 0129.0.126.000 - 11. **Resultados:** dos 120 idosos, 97 (80%) relataram medo de cair; os idosos não relataram considerável preocupação nas atividades de vida diárias (AVDs) e sociais. Entretanto, nas que envolviam esforço físico relataram muita preocupação. **Conclusão:** há necessidade de atenção especial à saúde do idoso que relata medo de cair, visto que, este tende a restringir suas atividades habituais, causando diminuição da autonomia e da qualidade de vida. **Descritores:** Idoso; Medo; Acidentes por Quedas.

RESUMEN

Objetivo: evaluar el miedo de caer en pacientes de edad avanzada en una clínica geriátrica ambulatoria. **Método:** se realizó un estudio transversal, que incluye 120 sujetos mayores de 60 años, de ambos sexos. La recolección de datos se realizó a través de entrevistas mediante una encuesta estructurada. Los datos se analizaron mediante pruebas de chi cuadrado de asociación y de iguales proporciones. El proyecto de investigación fue aprobado por el Comité de Ética con CAAE 0129.0.126.000 - 11. **Resultados:** de los 120 pacientes, 97 (80%) informaron el miedo de caer, informó que no hubo mayores preocupación considerable en las actividades de la vida diaria (AVD) y social. Sin embargo, la participación en el esfuerzo físico reportado mucha preocupación. **Conclusión:** no hay necesidad de prestar especial atención a la salud de las personas mayores informes miedo de caerse, ya que esto tiende a restringir sus actividades habituales, disminuye la autonomía y calidad de vida. **Descritores:** Miedo ancianos; Accidental Falls.

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INTRODUCTION

In recent decades, Brazil has been going through the transition of impaired young people, for an increase of the elderly, due to increased life expectancy and reduced mortality rates and natalidade.¹ In the early twentieth century the elderly accounted for 3, 2% of the population in 1960 was 4.7% and in 2025 will reach 13.8%, estimating that the country will be the sixth in the world in number of elderly.²

Aging is a continuous process that is characterized by anatomical and functional changes that gradually leave the body more susceptible to aggression intrinsic and extrinsic. Thus, aging brings with it a series of physical and mental problems that favor the occurrence of different problems, such as falls, which are the unintentional movement of the body to a level below the initial position with inability to fix in a timely manner, determined by circumstances multifactorial, compromising stability.³⁻⁵

Falls are the most common accidents for the elderly and disabled, making it a matter of relevance to public health, because it is growing because of injuries, treatment costs, psychological problems and death. Additionally, an episode of fall can affect the perception of the elderly on their own skills and effectiveness, generating them fear of falling, which can be as frequent as the falls themselves.^{3,5-6}

Fear can be seen as a disturbance resulting sense of real danger, apparent or imaginary, can change the self-esteem and cause major damage such as dependence, increased need for care, in addition to increasing the risk of institutionalization. Facing this reality, the elderly with fear of falling becomes more vulnerable to low self-efficacy to perform the activities of daily living (ADLs).⁶⁻⁷

The self-efficacy is understood as self-confidence, have confidence that the elderly often can face challenging times. However, the evidence that low self-efficacy tends to focus on their limitations, not overcoming obstacles. Those who do not use effective coping mechanisms in the face of difficulties, prevent the development of skills able to overcome such limitations, resulting in growth fear. This fear can achieve psychological and pathological become debilitating because the elderly may feel weakness, demoralization, insecurity, anxiety, loss of control and anxiety regarding illness.⁷

Given the relevance of the topic in question, its importance is due to the

possibility of their results may be useful for planning and implementation of interventions aimed at coping with the fear of falling and its consequences, by the elderly. This study aims to evaluate the fear of falling in elderly patients in a geriatric outpatient clinic.

METHOD

Cross-sectional study conducted among elderly geriatric outpatient clinic of a university hospital located in João Pessoa / PB, part of the research project "Risk of falls, fear of falling, characterization and consequences of falls reported by older adults seen in a geriatric outpatient "developed by members of the Initiation Program for Scientific Research - PIBIC, in the years 2011 and 2012.

The sample design was a simple random and it took 120 elderly aged sixty and over, of both sexes, the spontaneous demand service, which had preserved cognitive conditions (measured from the Mini Mental State Examination), so they were able to answer the research questions, and ambulating independently. Were excluded from the sample elderly who had moderate cognitive impairment / sharp, amputations and / or use of prosthetic limbs; sequelae of stroke, Parkinson's disease, fractures in the lower limbs and / or spine as well as those who were using seat Wheel.

Data collection was conducted from October to December 2011 by scholars undergraduates involved in the project, through interviews using a structured instrument that included questions about the demographic profile of the elderly, the record of the fear of falling and practice physical activity, in addition to psychometric measurements related to fear of falling that were based on the Falls Efficacy Scale-International-Brazil (FES-1-Brazil)¹⁰, in the version adapted and validated in Brazil, which includes certain specific psychometric properties of the population Brazilian.

The FES-1-Brazil¹⁰ assigns values to 16 activities of daily living (ADL) according to the degree of concern in the elderly fall to perform them. As for the score that can be verified by applying the scale, this varies from one to four per item, and can achieve a total score of 16-64 points. It is noteworthy that as the value of the total score increases the degree of concern about falling also rises. The answers to the issues facing the elderly present in the scale are classified as: no worries about falling (NP), little concern about falling (PP), a lot of concern about falling (MP) and extreme concern about falling

(EP).

Data analysis was carried out quantitatively, through exploratory and descriptive statistics of all variables, using the computer system and the Statistical Package for Social Sciences - SPSS, and the chi-square test of association and Equal proportions to be adequate to reach the goal of the study.

Throughout the research process, especially at the stage of collecting empirical data, we observed the ethical aspects that regulate research involving human subjects arranged in Resolution 196/96 of CNS/MS/BRAZIL¹², establishing a relationship in which being researched was respected in their dignity. Study participants was guaranteed consent, drafted in plain language

As for ethical standards, arranged in the aforementioned resolution, we observed the issues related to insertion in the institution, social and physical setting of the study. Regarding the institution was referred a research protocol stating, clearly, the methodological steps and operational structure, to be enjoyed by the Ethics in Research, being filed and approved under No. 240/11 and CAAE 0129.0.126.000 - 11.

RESULTS

The sample was evaluated 120 patients, with 97 women and 23 men. Of the

respondents, 73 (60.8%) were aged 60-69 years, 36 (30%) were aged 70-79 years and 11 (9%) were 80 years or older. Of the 97 women interviewed, 82 (84.54%) reported fear of falling and the 23 men interviewed 15 (65%) reported fear of falling. Regarding the history of falls of older people surveyed, 101 (84.17%) of them have fallen. Of these individuals, 48 (40%) experienced falls in the last year. It can be seen that among those elderly who possessed a history of falls, 85 (84.16%) showed fear of falling, whereas among the elderly who did not have a history of falls, 12 (63.16%) also stated fear of falling.

With regard to physical activity among the elderly who have suffered falls, 63 (85.14%) did not exercise, since seniors who reported no fear of falling, 26 (56.52%) were physically active.

Table 1 shows that 87 (72.5%) of seniors reported not worry about falling during ADL and 93 (77.5%) somewhat concerned about declines in activities of house cleaning and bathing. Moreover, in other ADLs such as dressing or undressing, meal preparation and service of phones most respondents showed no concern about falling when performing such tasks (76.67%, 90.83 and 68.33 respectively).

Table 1. Distribution of elderly according sense of concern about falling while performing activities of daily living (ADLs). João Pessoa - PB, 2012, n = 120.

AVDS	NP		PP		MP		EP	
	n	%	n	%	n	%	n	%
Cleaning the house	44	36,67	43	35,83	23	19,17	10	8,33
Dressing	92	76,67	14	11,67	11	9,17	3	2,50
Preparing meals	109	90,83	9	7,50	2	1,67	0	0,00
Showering	57	47,50	36	30,00	21	17,50	6	5,00
Answering the phone	82	68,33	24	20,00	13	10,83	1	0,83

With respect to activities involving physical effort, according to the results presented in Table 2, the acts of sitting or rising from chairs not worry 86 (71.67%) of the elderly with regard to the probability of falling, since

the fact rise or downstairs and get something above his head a little more care. However, travel on slippery surface, irregular or inclined generates feeling of much concern (35%, 42.50% and 31.67%, respectively).

Table 2. Distribution of elderly according sense of concern about falling while performing activities that involve physical exertion. João Pessoa - PB, 2012, n = 120.

Physical effort	NP		PP		MP		EP	
	n	%	n	%	n	%	n	%
Sitting in a chair	86	71,67	24	20,00	8	6,67	2	1,67
Going up or down the stairs								
Getting something from the floor	40	33,33	36	30,00	31	25,83	13	10,83
Walking on difficult floor								
Walking on irregular surfaces	69	57,50	33	27,50	17	14,17	1	0,83
Going up or down on other surfaces	18	15,00	34	28,33	42	35,00	26	21,67

Finally, with respect to implementation of social activities such as going shopping, walking in the neighborhood, visit friends, go

places with much crowding or participate in social activities, not worry the elderly as shown in Table 3.

Table 3. Sense of concern about falling of the elderly while conducting social activities.
João Pessoa - PB, 2012, n = 120.

Activities Social	NP		PP		MP		EP	
	n	%	n	%	n	%	n	%
Go shopping	87	72,50	22	18,33	5	4,17	6	5,00
Walking through the neighborhood	89	74,17	22	18,33	7	5,83	2	1,67
Visiting a friend or relative	94	78,33	23	19,17	1	0,83	2	1,67
Walking in crowded places	73	60,83	31	25,83	15	12,50	1	0,83
Going to a social activity	99	82,50	19	15,83	1	0,83	1	0,83

DISCUSSION

The results of this survey reveal that among the elderly who have suffered falls, 86 (84.16%) of them are afraid of falling, whereas among those elderly who do not have a history of falls, 12 (63.16%) are afraid of falling. These data show agreement with study involving 147 elderly, in which it was found that 133 (90.48%) seniors reported fear of falling and of these 54.2% reported a history of falls, showing that regardless of having a history of falls the elderly may present fear of falling.

Fear of falling and rising preceptors are elements together, since, when a person has these factors are at high risk to develop other. Thus, seniors who limit their activities for fear of falling are at high risk to become fallers. In this context, the fear of falling can be a constant feeling independent and if the elderly have suffered falls or not, leading to a negative impact on the lives of the elderly, as increased dependency and decreased ability to perform ADLs, which results in increased inactivity in this population.¹³⁻¹⁵

Of the 97 women interviewed, 82 (84.54%) reported fear of falling; while the 23 men interviewed 15 (65%) reported fear of falling. These findings are in accordance with the literature, which emphasizes that the elderly woman reported more fear of falling than men idoso.¹⁶ Study finds that older individuals with more than 60% of them were afraid of falling, most and sedentary women. The lower story of this fear displayed by males can is connected to the cultural issue of men that leads them to not take fright, to avoid the potential stigma of weakness. Allied to this, the woman is more fragile in their musculoskeletal system which generates greater postural instability and increases the fear of falling.

Among those seniors who have suffered falls, 63 (85.14%) did not practice physical activity. The elderly who had no fear of falling, 26 (56.52%) physical activity. A study conducted with 56 elderly, verified the existence of a positive and statistically significant association ($r = 0.47$, $p < 0.01$)

between the variables fear of falling and physical activity.

A sedentary lifestyle can lead to muscle atrophy, balance deficits and greater reliance to perform ADLs, moreover, the risk of recurrence is higher for falls in older adults with fear of falling when they restrict their atividades.⁸ Occurs a vicious cycle in which the sedentary lifestyle increases the functional loss decisively to maintain balance, and this balance results in loss of fear of falling which restricts daily activities of the elderly. In this context the practice of physical activity causes muscle strength and balance which reduces the fear of falling, breaking this cycle by increasing functionality, autonomy and improved quality of life of the elderly.

When evaluated data obtained by FES-1-Brazil, concern about falling when performing specific activities was not heavily reported, except when performing activities of house cleaning and bathing, in which individuals claimed little or no worry, guard line with that finding study involving 60 elderly patients with history of falls. In carrying out activities involving physical effort, respondents showed much concern in acts of walking on slippery surfaces, uneven or sloping. A similar study involving 147 elderly, as verified activities that generated most concern among them walking on such surfaces, climb stairs, up and down hill and bathing.

Already in the social activities the elderly showed no concern about falling, which differs from other studies that link social and external activities as those seniors find most difficult to perform them, being the first to be abandoned. Considering this, studies using the same questionnaire found great concern of the elderly in conducting social activities. One must consider that the population of this research predominates participation among individuals 60 to 69 years, whereas the studies referred to herein the age of the elderly is 68 to 88 years, noting that the higher the age of the elderly over this avoids situations outside the home and challenging, limited to the home environment.

CONCLUSION

The study looked at the proposed objective, allowing evaluating the fear of falling in elderly patients in a geriatric outpatient clinic. Of the seniors who participated in this study, 101 (84.17%) had a history of falls. Of these, 48 (40%) experienced falls in the last year and 85 (84.16%) of them are afraid of falling. Among those seniors who have not yet experienced falls, 12 (63.16%) of them also have a fear of falling. Of individuals who have suffered falls, 63 (85.14%) did not practice physical activity and older who is not afraid of falling, 26 (56.52%) perform physical activity. Over 70% of seniors said they worry little or worry about falling while performing ADLs. With respect to activities involving physical exertion, acts of walk on slippery surfaces, uneven or sloping generate feelings of much concern (35%, 42.50%, 31.67%, respectively). With regard to the implementation of social activities seniors reported no concern. The results presented here should be considered in light of its limitations, the example of a possible bias of the interviewee self-reference from fear and worries about falling. To avoid such bias would be interesting to analyze the fear of falling from other perspectives, such as the observation of the safety of the elderly to perform certain activities. Nevertheless, it is noteworthy that the study was developed by a team of well trained and used field data collection instruments previously validated in the Brazilian context what are the strengths of this research. Finally, we emphasize the importance of the results for the feasibility of planning actions that establish future interventions to cope with the fear of falling and its consequences in the elderly. The results also point to the need for greater attention from health services to the elderly with a history of falls and fear of falling, in order to detect the fear of falling as a factor that restricts daily activities of the elderly, causing dependence, reduced autonomy, increased risk of falls and decreased quality of life of the elderly.

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