



Fear of Falls Among Nursing Homes Residents and Community Dwelling Elderly

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببناك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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List of Abbreviations

ADL	: Activities of daily living
BMI	: Body mass index
CBT	: Cognitive behavior therapy
EDs	: Emergency departments
FESI	: Fall efficacy scale international
FOF	: Fear of falls
GDS	: Geriatric depression scales
IADL	: Instrumental activities of daily living
LTC	: Long-term care
MMSE	: Mini Mental Status Examination
MNA	: Mini Nutritional Assessment
TUGT	: Timed get up and go test

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Introduction

Older people make up a large and increasing percentage of the population of countries worldwide. As people grow older they are increasingly at risk of falling and suffering injury from falling. Falls are also associated with serious social and psychological consequences, as people lose confidence and become isolated and restrict their activity. A fall may be the first indication of undetected illness. Repeated falls often herald a decline in an older person's functional ability (**Rubenstein, 2006**).

Upon aging there is a progressive decrease in functional capacity, verified by reduced strength of lower limbs, impaired balance and agility. Such changes may impact a patient's daily activities such as climbing and descending stairs or sitting and standing up from a chair, besides reducing the ability of the elderly to promptly respond to external disturbances, such as slipping and stumbling, and to restore balance (**Bento, 2010**).

Moreover, osteopenia and mainly osteoporosis are also considered among the factors that increase vulnerability to fractures from falls, especially the fracture of the femur (**Brasil, 2009**).

Every year accidental falls occur in nearly one-third of those aged more than 60 years, with 10% of these falls resulting in serious injury (**Gonçalves, 2009**).

Falling in elderly persons can lead to disability, hospitalizations, and premature death (**Shizuka, 2009**).

It can also lead to reduced levels of independence, poorer quality of life, and high levels of anxiety (**Brasil, 2009**).

Fear of falling (FOF) is a major health problem among the elderly living in communities, present in older people who have fallen but also in older people who have never experienced a fall. An estimated 30–55% of older persons acknowledge being afraid of falling, and approximately one third of them report restricting their activities. FOF has gained recognition as a specific health problem among older adults. The reported prevalence of FOF varied between 3–85% (**Fabrício, 2004**).

However, when FOF results in avoidance of activities and reduction of physical fitness, it is a risk factor for future falls and associated mortality, dysfunctioning, and premature nursing home admissions (**Fabrício, 2004**).

Fear of Falling (FOF) is defined as an exaggerated concern about falling or the belief that one cannot prevent a fall. Intense anxiety about falling can be experienced by older adults who have fallen, as well as those who have not. Although studies have shown that women are at an elevated risk, fear of falling affects both men and women (**The Center for Gerontology at Virginia Tech, Blacksburg, VA October 2013**).

FOF and activity avoidance may result in social isolation and inactivity, and threatens the quality of life if preventive measures are not taken in immediate future, the numbers of injuries caused by falls is projected to be 100% higher in the year 2030 (**Ribeiro, 2008**).

Aim of the Work

The aim of our study is to determine the prevalence of fear of falls in elderly in geriatric homes and in community dwelling elderly.

Chapter (1)

Falls in the Elderly

Fall is a common serious medical condition that affects the health of elderly persons. It is a misdiagnosed problem in primary care with a substantial impact on healthcare costs. It is one of the most common geriatric syndromes threatening the independence of older persons **(Rao, 2005)**

A fall is defined as an event whereby an individual comes to rest on the ground or another lower level with or without loss of consciousness. Because presyncope and syncope can cause ‘unexplained’ falls and because of the frequent overlap of falls and syncope, the presence or absence of loss of consciousness has now been incorporated into the definition **(Oliver et al., 2007)**.

Falls can be classified in patients who are cognitively normal according to their clinical characteristics. If a patient has tripped or slipped, the fall is ‘accidental’. If a patient has fallen and or lost consciousness for no apparent reason, the episode is described as an ‘unexplained’ fall **(Oliver et al., 2007)**.

Although falls are frequent in the elderly and affect mortality, morbidity, loss of functional capacity and institutionalization, they were considered unpredictable events and still many older people do not consult a doctor about them. During the last 20 years there has been instead growing interest in the field of falls in the elderly and several studies have demonstrated the incidence, the consequences, the multifactorial etiology of falls and the possible intervention on risk factors through a multi-disciplinary approach (**Ungar et al., 2013**)

In the older patient the incidence of falls can sometimes be underestimated it increases with the age .The incidence of falls in patients older than 65 in nursing homes and in hospitals is about three times higher compared to falls in community-dwelling persons (on average 1.5 per bed per year), probably due to the inherent fragility of this population and to the better control in such environments. The annual incidence of falls in community-dwelling patients older than 65 is around 28–35% and reaches 40% in ≥ 75 years old (**Malasana et al., 2011**)

Prevalence of fall in Nursing Homes:

Patients often fall more than once—an average is 2.6 falls per person per year. About 35% of fall injuries occur

among residents who cannot walk. About 5% of adults 65 and older live in nursing homes. But people in nursing homes account for about 20% of deaths from falls in this age group **(NCIPC, 2007c)**.

About 1,800 people living in U.S. nursing homes die each year from falls. About 10%-20% of nursing home falls cause serious injuries; 2%-6% cause fractures. Falls can make it hard for a person to get around, cause disability, and reduce quality of life. Fear of falling can cause further loss of function, depression, feelings of helplessness, and social isolation **(NCIPC, 2007c)**.

Risk Factors of falls:

Falls are almost always caused by many interacting factors, usually a combination of intrinsic and extrinsic ones **(Lord et al., 2007)**.

Intrinsic factors are individual-specific and include age, chronic disease, muscle weakness, gait and balance disorder, and cognitive impairment. Also are related to patient's functional and health status, such as status of activity of daily living (ADL) or instrumental activity of daily living (IADL) and perceived general health **(Zijlstra et al., 2007)**.