

Fear of falling in elderly people living in a nursing home — perspective from Manisa

Nurgul Gungor Tavsanlı, Sevgi Nehir Turkmen

Abstract

Our study aimed to determine the level of fear of falling in elderly nursing home residents. The research population consisted of all the elderly residents of Manisa Municipal Nursing Home between November 2011 and February 2012. The 76 elderly people who agreed to participate were included in the study. A demographics form and the Tinetti Falls Efficacy Scale were used in data collection. The statistical analysis of the data was performed using SPSS 15.0, using percentage calculations, the t-test and Cronbach's alpha. The mean score on the Tinetti Falls Efficacy Scale for elderly individuals was found to be 4.57 ± 3.80 . 57.9% of the old people feared falling while taking a bath, 59.2% while going to bed or getting up, and 53.6% while sitting down or getting up from a chair. It was found that mean fear of falling scores were significantly higher in elderly individuals with chronic diseases, sleep problems and urinary incontinence.

Keywords: Elderly people, Nursing homes, Fear of falling, Evidence-Based Measures.

Introduction

In old age, morphological, physiological and pathological changes combine with the effects of various illnesses, resulting in a deterioration of physical and mental skills and abilities.¹ According to a World Health Organization report, the population of over-65s was 390 million in 1998, and will reach 800 million or 10% of the world's population by 2025.² In Turkey, people aged 65 and over formed 5.7% of the population in 2005, and this figure is expected to reach 17.6% by 2050.³

Falling means coming from the level where an individual was to a lower level and an immobile state as a result of carelessness without any compelling force, fainting or stroke.^{4,5}

It has been pointed out that more than a quarter of falls result in physical injury such as contusions, cuts or breakages.⁵ The result of a fall can be a small injury or a

serious one. Small injuries include bruises, damage to soft tissue, or injuries which do not require sutures, while serious injuries can be breakages of the hip, pelvis, or radius, injuries which require sutures, or haematoma, and can result in death.⁵

Fear of falling or of the injuries that can result from it can seriously affect the functioning of old people and can greatly lower their quality of life. A third of those who had not had a fall and half of those who had fallen were found to limit their daily activities because of a fear of falling.⁶

Most falls happen indoors, and most falls by old people occur during habitual activities such as walking. Indoor falls most often happen in the bathroom, on the stairs, in the bedroom or in the kitchen. Outdoor falls happen at street obstacles or on steps. Falls in communal living centers such as nursing homes most often happen when moving from bed to another location, when getting up, or in the bathroom.⁶⁻⁸

Determining old people's fear of falling by the use of a scoring system when they are accepted into a nursing home can enable the necessary care approaches to be taken and evidence-based protective measures to be taken in time and will at the same time protect old people from injury.⁹

The aim of the present study was to determine the level of fear of falling of old people residing in a nursing home.

Methods and Results

The study was planned as a cross-sectional descriptive study to determine the fear of falling in old people living in a nursing home. The population of the study was formed from all of the old people residing in Manisa Municipal Nursing Home between November 2011 and February 2012 (n= 85). As all of the individuals in the population were included in the sampling, no separate sampling procedure was used. The 76 old people who were resident in the home at the time of the study and who accepted to take part were included in the research. Ethical approval for the research was obtained from the Ethics Committee of Celal Bayar University Medical Faculty, and the necessary legal permission was obtained from Manisa Municipality. Informed consent was

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Celal Bayar University, School of Health, Sehitler Mah. Istasyon Mevkii PK. 45020 Centrum, Manisa, Turkey.

Correspondence: Nurgul Gungor Tavsanlı. Email: nurgul.gungor@hotmail.com

Table-1: Identifying characteristics of the elderly nursing home residents.

Characteristic	n	%
Age (years)		
64 and below	6	7.9
65-74	35	46.1
75-84	28	36.8
85 and over	7	9.2
Gender		
Female	17	22.4
Male	59	77.6
Marital status		
Single, widowed or separated	74	97.4
Married	2	2.6
Educational level		
Illiterate	19	25
Literate but did not finish primary school	13	17.1
Primary school	34	44.7
Finished middle or high school	10	13.2
Number of children		
None	23	30.3
1 or 2 children	27	35.5
3 or more children	26	34.2
Chronic illnesses		
Yes	57	75
No	19	25
Total	76	100

obtained in writing from the old people who accepted to take part in the study.

A demographics form (form consisted of 18 questions) and Tinetti's Falls Efficacy Scale (FES) (form consisted of 10 questions and Likert type, between 0 and 1 scores) were used in the collection of data.¹⁰ Statistical analysis of data was performed by means of the Statistical Package for Social Science (SPSS) version 15.0, using numerical, mean and standard deviation values and t-test.

Table-1 shows the identifying characteristics of the old

people residing in the nursing home. It was found that 46% of them were in the 65-74 year age group and 36.8% were aged 75-84; 22.4% were female and 77.6% were male; 97.4% were single, widowed or separated; 25% were illiterate and 44.7% had primary-level education; 35.5% had one or more children, and 75% had a chronic illness (Table-1).

Responses given by the old people residing in the nursing home on the Tinetti Falling Efficacy Scale are examined in Table-2. In all, 57.9% of the old people feared falling while taking a bath, 42.1% while taking things from a cupboard, 28.9% while meeting their need for food in the institution, 47.4% while walking in the garden, 59.2% (45) while going to bed or getting up, 31.6% while answering the door or the telephone, 53.6% while sitting down or getting up from a chair, 44.7% while getting dressed or undressed, 48.7% while working in their rooms, and 43.4% while shopping (Table-2).

The mean score of the residents of the nursing home on the Tinetti FES was found to be 4.57 ± 3.80 (min=0 max=10).

Of the total study population 56.6% had hypertension, 17.1% had diabetes mellitus, 18.4% had cardiovascular disease, 26.3% had vision problems, 31.6% had hearing difficulties, 21.1% had sleeping problems, 10.5% had COPD, 5.3% had urinary incontinence, 1.3% suffered from depression, and 2.6% had arthritis. The relationship between chronic illnesses in the subjects and their mean fear of falling score was examined and it was found that those with a chronic illness, sleep problems or urinary incontinence had significantly higher scores ($p \leq 0.01$).

No significant relationship was found between the identifying characteristics of the subjects such as age, sex or education level and mean fear of falling scores ($p > 0.05$).

Table-2: Responses given on the Tinetti Falling Efficacy Scale by the old people residing in the nursing home.

Tinetti Falls Efficacy Scale	No fear of falling		Have fear of falling	
	n	%	n	%
Taking a bath or shower	32	42.1	44	57.9
Reaching into cabinets or closets	44	57.9	32	42.1
Preparing meals not requiring carrying heavy or hot objects	54	71.1	22	28.9
Walking around the nursing home	40	52.6	36	47.4
Getting in and out of bed	31	40.8	45	59.2
Answering the door or telephone	52	68.4	24	31.6
Getting into and out of a chair	35	46.1	41	53.6
Getting dressed and undressed	42	55.3	34	44.7
Personal grooming (i.e. washing your face)	39	51.3	37	48.7
Getting on and off of the toilet	43	56.6	33	43.4

Conclusion and Discussion

Old people residing in nursing homes have a fear of falling. Our study revealed that chronic diseases, sleeping problems or urinary incontinence were the highly feared factors.

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