



PREVALENCE OF FALL AMONG GERIATRIC PATIENTS AROUND BAHUWALA IN DEHRADUN

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ABSTRACT Falls are defined as accidental events in which a person falls when his/her center of gravity is lost and no effort is made to restore balance or when this effort is ineffective. Falls are considered as the most common cause of injuries among the older population. This study aims to find the prevalence of falls among elderly in Bahuwala area of Dehradun. This cross-sectional study was conducted using an anonymous, 20-item questionnaire which was developed in English and Arabic to be delivered as a semi-structured interview. In the present study, the prevalence of falls in older adults was 42.71% in Male and 57.29% in female and with advancing age, the prevalence of falls increases. This is consistent with earlier observations that females and advanced age (age above 75 years) were associated with a greater prevalence of falls

KEYWORDS : Accidental Falls, Geriatric, Risk Factors

INTRODUCTION

Falls are considered as the most common cause of injuries among the older population. Forty percent of traumatic injuries-related hospitalizations are due to falls. The most common fall-related consequences are pain, bruising, lacerations, fractures including upper extremity and hip fractures, and intracranial bleeding in severe cases. Frequent falls in the elderly population can lead to serious health consequences and efforts to reduce their incidence are necessary. Nearly 28-35% of people aged 65 years and above fall each year 3,6,7 and this percentage increases to 32-42% for those over 70 years of age. Moreover, 20% to 39% of people who fall experience fear of falling, which leads to further limiting of activity, independent of injury. Risk factors for falls that have been identified include history of falling, use of assistive devices, environmental hazards such as poor lighting, and various health conditions including muscle weakness, vertigo, gait and balance impairments, visual and hearing disorders, cognitive and sensory impairments, orthostatic hypotension, diabetes mellitus and osteoporosis. Several studies have also associated certain medications with an increased risk of falls among older adults. The most common drugs that increase the risk of falls are different types of psychotropic drugs, such as hypnotics, sedatives, antipsychotics and antidepressants, which can cause sedation, impaired balance and coordination. It has also been stressed by the same authors that polypharmacy and the use of psychotropic drugs, especially when combined with cardiovascular medications increase the risk of falls in the elderly. While some risk factors cannot be changed, many are modifiable. Many falls result from interactions among multiple risk factors, and the risk of falling increases linearly with the number of risk factors. In our study we used questionnaire which consists of 4 sections and 20 questions and was designed by the researchers in both English and Arabic to collect specific Gender data about the problem of falls in the elderly. The aim of this study was to determine, the prevalence of falls and related intrinsic and extrinsic risk factors in an older population around Bahuwala area of Dehradun.

METHODOLOGY

Study Design

The study is a survey study of two months duration to find the prevalence of falls among elderly in Bahuwala area of Dehradun.

Sampling Technique:

Elderly men and women were selected according to the inclusion and exclusion criteria. All subjects signed a consent form and were ready to take part in the study. Subjects were given instructions regarding procedure.

Eligibility

Inclusion criteria

- The inclusion criterion was elderly persons aged 60 years and above.
- A total of 103 families with at least one elderly from Bahuwala, Dehradun were approached to participate in the survey.

- The surveys were distributed by hand and were collected over the survey period of two months (January-February, 2022).

Exclusion Criteria

The exclusion criteria was persons below the age from 60. Patient with major surgery were excluded. Bed ridden patients were excluded. Patients with fractures were excluded. Uncooperative geriatric patients.

Procedure

This cross-sectional survey was conducted using an anonymous questionnaire to be delivered as a semi-structured interview. The questionnaire consists of 4 sections and 15 questions and was designed by the researchers in English to collect specific data about the problem of falls in the elderly. All questions were close-ended questions with Yes and No' as options. The questionnaire was pre-piloted by distributing it to elderly persons who were interviewed face-to-face to check face validity of the questionnaire. The first section of the questionnaire collects the socio-demographic characteristics of the participants. The second section is completed by participants who have experienced a fall in the last one year and assesses the number, consequences and causes of falls and whether the participants visited a hospital for the fall. The third section discusses the health status of the participants, The fourth section includes questions to be answered by all participants concerning preventive strategies.

RESULTS

The data collected in the study were processed in IBM SPSS Statistics 23. The data was analyzed for descriptive and frequency table with percentage were computed. The prevalence of test variables for fallers and non-fallers was calculated in terms of proportions. Chi-square test was applied and statistical significance was set at 0.05 at 95% confidence level and p value <0.05 was considered significant.

DISCUSSION

Falls in older individuals are common and may lead to serious health problems. They can be associated with various risk factors including intrinsic and extrinsic factors. In the present study, the prevalence of falls in older adults was 42.71% in Male and 57.29% in female. Half of our responders visited the hospital after experiencing a fall. 57 participants who reported a fall claimed that their illness was the reason for their fall. Other reasons reported include; experiencing a sense of dizziness when standing up and having balance problems, loose carpets /slippery floors, vision problems, shoes, medications and poor lighting problem. Numerous studies identified environmental hazards like poor lighting, and a variety of health conditions, such as muscle weakness, vertigo or gait and balance impairment, visual and hearing disorders, diabetes, or osteoarthritis as risk factors of falls. A primary finding of this study is that females are more likely to experience falls than males, and with advancing age, the prevalence of falls increases. This is consistent with earlier observations that females and advanced age (age above 75 years) were associated with a greater prevalence of falls. Such a higher prevalence of falls in females may be a consequence of the decline in their bone mass that occurs faster than

that of males especially after menopause. Among other risk factors, sarcopenia defined as loss of skeletal muscle mass that occurs with aging has also been associated with a higher incidence of falls in females. Out of 57 participants there are 75.42% participants had health consequences after fall like pain, bruising, fracture, sprain and intracranial bleeding.

A growing body of literature shows that falling limits an individual's physical activity, social performance and increases the fear of falling and risk of repeated falling that ultimately leads to depression and reduction in quality of life. Walking problems and having poor body With rapid aging of the global population, falls in older ages have become a major public health problem. Such falls among older adults are highly susceptible to injury due to high prevalence of diseases and age-related physiological changes later in life.

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