

Effectiveness Of Fall Prevention Multimedia Program On Fall Risk And Self Efficacy Among Elderly Patients Of Selected Hospitals Of H.P.

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ABSTRACT

Introduction: An incident that causes a person to descend to the floor, ground, or another lower level is referred to as a fall. A patient fall is defined as an unplanned descent to the floor with or without injury to the patient" The aim of study was to reduce the fall-risk and improve the self-efficacy of elderly patients

Methods: Quasi-experimental non- randomized pre-test, post- test control group design) was adopted. Non-probability Purposive sampling technique was used to select 60 elderly patients who were admitted in selected hospitals of H.P. MORSE and Self-efficacy tools were used to assess the fall risk and self-efficacy of the elderly patients. Fall prevention multimedia program intervention was used and post-test was conducted.

Results: Results showed that in experimental group, 96.6% of elderly patients were at high risk of fall who were reduced to 66.6% after post-test, whereas in control group fall risk was reduced from 93.3% to only 86.6% among elderly patients. In experimental group mean value of fall risk decreased from 81 to 55.33. Whereas in control group mean value of fall risk was reduced from 81 to 69.83. In experimental group mean value of self-efficacy was improved from 67.0 to 55.2, whereas in control group mean value of self-efficacy was improved from 62.43 to 59.66. The calculated 't' value, in fall risk assessment for experimental group after post-test was 17.25 and in control group it was 21.05 showing significant association at $p \geq 0.05$. The calculated 't' value, in self-efficacy assessment for experimental group after post-test was 21.05 and in control group it was 31.62 showing significant association at $p \geq 0.05$.

Conclusions: The study's finding stated that the fall prevention multimedia program was effective in reducing fall risk and improving self-efficacy among experimental group of elderly patients.

Keywords: Elderly patients, fall risk, self-efficacy, fall prevention multimedia program.

INTRODUCTION

A key problem that has received substantial attention in both study and practice is falls among elderly hospital patients. An incident that causes a person to descend to the floor, ground, or another lower level is referred to as a fall. According to WHO Patients who are 65 years of age or older are considered elderly. According to the AHRQ, "a patient fall is defined as an unintentional descent to the floor with or without the patient being injured." The total incidence of falls in inpatient settings was 3.28 per 100 person-days. Age was discovered to be one of the major risk factors for falling along with the history of falling, cog dysfunction, and wheelchair usage. However, for the elderly, this number might be substantially higher. Low self-efficacy and fear of falling might cause people to limit their own activities because they lose faith in their capacity to carry out everyday duties safely. Millions of seniors-those 65 and older-fall each year. In fact, more than one in four older persons experience falls annually, however less than half inform their physician. When someone fall, the chances of falling again are doubled. India, a lower-middle-income nation, is the second-most populous country in the world and is expected to have 323 million older adults by 2050 from its current 198 million. The prevalence of falls among older individuals in India has been estimated by prior systematic studies to range between 26% and 37%, with the pooled prevalence estimated to be about 31% (95% confidence interval (CI). In a different systematic review, the risk factors for falls among older individuals in India were discussed, with emphasis on the importance of sociodemographic variables, environmental factors, health problems, and medical treatments. In India, studies have been done on the effects that falls have on older individuals' health. Fall prevention strategies that are multifactorial, multifunctional, and multidisciplinary have been adopted with success to address the issue of falls in hospitalized patients. Studies on older individuals' obstacles to and facilitators of fall prevention continue to demonstrate a lack of knowledge about fall prevention techniques they may use both within hospitals and after release.

OBJECTIVES

- i. To determine the pre-test and post-test fall risk and self-efficacy among elderly patients in experimental and control group.
- ii. To compare pre and post-test fall risk and self-efficacy among elderly patients in experimental and control group.
- iii. To find out the association between pre-test fall risk and self-efficacy with selected socio- demographic variables.

REVIEW OF LITERATURE

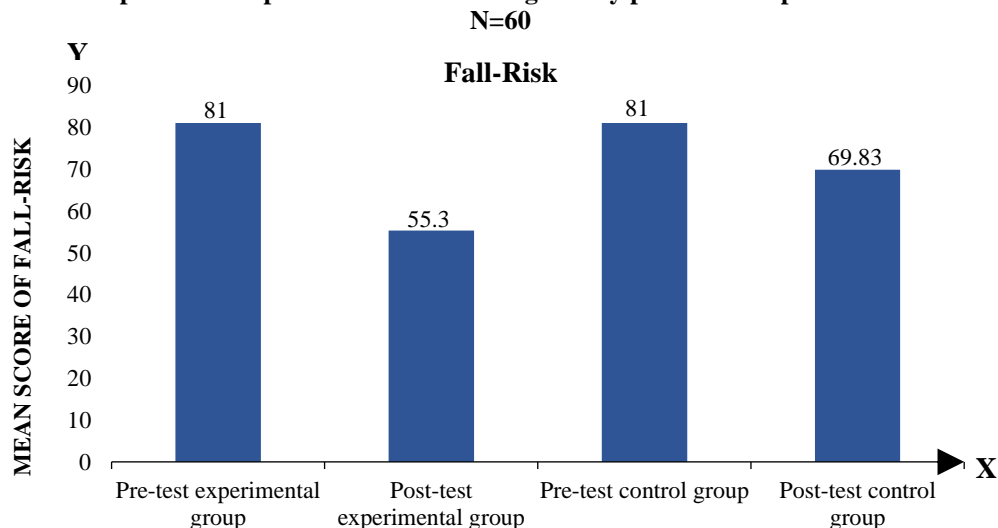
The 2017 article by Chakraborty et al. in the Journal of Clinical and Diagnostic Research offers another potential investigation. This study involved the retrospective investigation of 100 individuals who had fallen while receiving treatment at a tertiary care facility in Kolkata. According to the survey, there were 0.6% hospital falls and 18% of people had falls in the previous year. The survey also discovered that wards (68%), critical care units (18%), and emergency departments (14%) were the locations where falls happened most frequently. Slips or stumbles (42%), loss of balance (28%), and syncope (12%), were the most typical fall causes. Fractures (36%), head injuries (24%), and soft tissue injuries (20%) were the most frequent injuries. The research recommended that fall prevention programmes, including fall risk assessment, fall prevention In 2019, Natthawadee Maneeprom et al. conducted quasi-experimental research to evaluate the efficacy of a robotics fall prevention programme among older residents of senior housing in Bangkok, Thailand. Sixty-four elderly people in two senior housing facilities in Bangkok were chosen, and they were purposefully divided into two groups: the intervention group (received a small robot installed with fall prevention software, personal coaching, and a handbook, n=32) and the control group (received only a handbook, n=32). The intervention group received a small robot installed with fall prevention software, personal coaching, and a handbook. At the third month, the intervention group's mean knowledge score increased more quickly than the control group's (P0.01). In comparison to the control group, the intervention group displayed a statistically significant increase in the number of workouts at 3rd and 6th month (P<0.05).

RESEARCH METHODOLOGY:

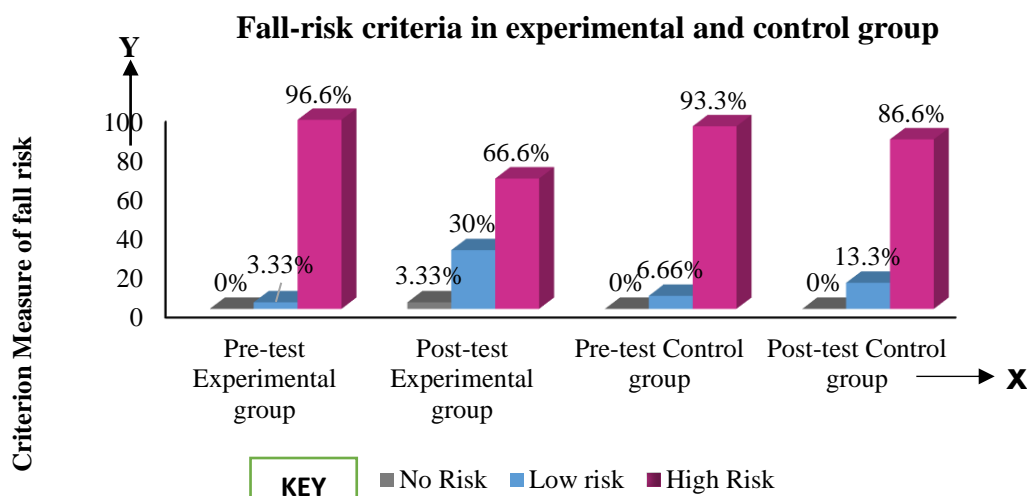
A quantitative research approach and Quasi- experimental (Non randomized Pre-test post-test Design) was adopted for study. The study took place in the "Indira Gandhi Medical College and hospital, Shimla, Civil Hospital Ghumarvin, Distt-Bilaspur, and Civil hospital Bhoranj, Distt Hamirpur. The sample selection was done through Purposive sampling technique and Equal number of participants i.e 30 each were allotted under control group and experimental group. Informed consent was taken from the participants and Confidentiality of the obtained information was maintained. The demographic data was collected from elderly people by using sociodemographic data sheet. Investigator spent 15-20 minutes with each patient to collect the data. Fall prevention multimedia program was conducted for the experimental group on same day. After 3rd and 4th day post-test was taken. Overall, data collection was done in 30 days. Booklets were given to each sample after data collection, which helped to enhance the knowledge of respondents. Post -test was conducted for both, the experimental and the control group patients.

RESULTS

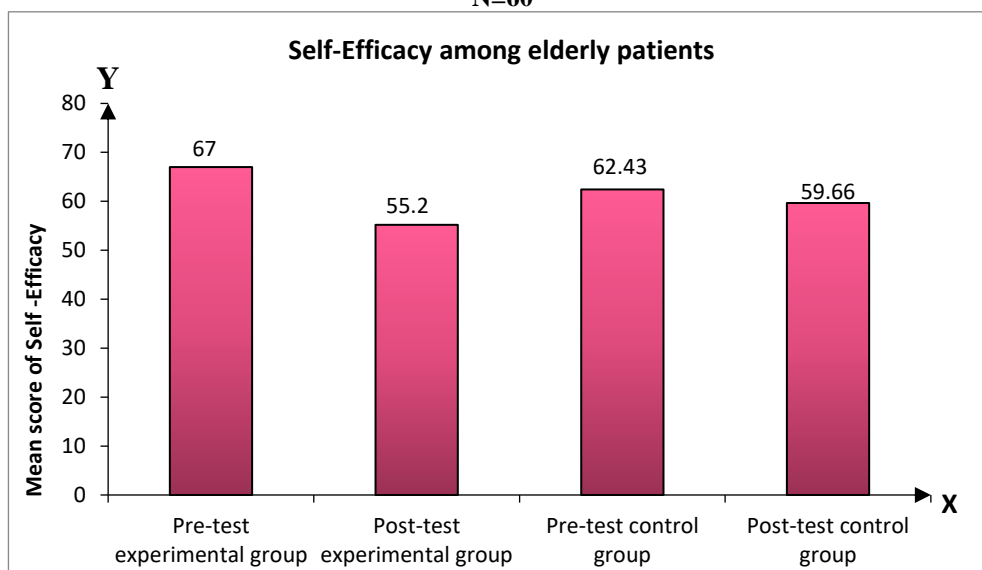
Determination of the pre-test and post-test fall risk among elderly patients in experimental and control group.



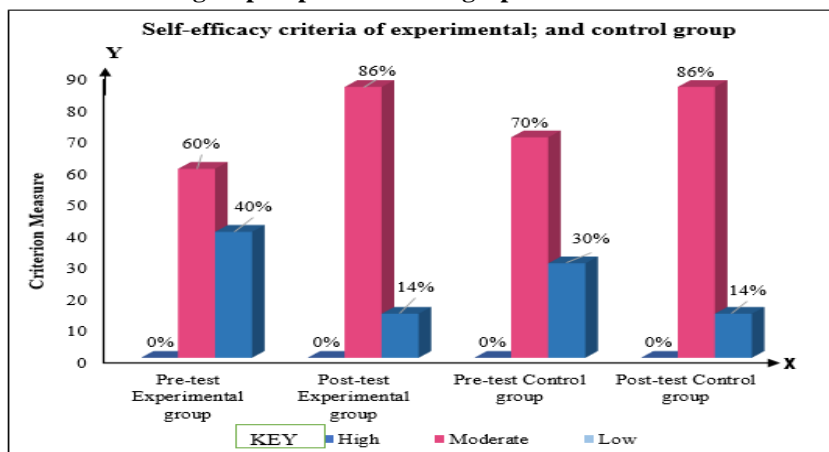
Criterion measure related to pre-test and post-test fall risk among elderly patients in experimental and control group as per sociodemographic variables. N=60



Determination the pre-test and post-test self-efficacy among elderly patients in experimental and control group. N=60



Criterion measure related to pre-test and post-test Self- efficacy among elderly patients in experimental and control group as per sociodemographic variables. N=60



Comparison of pre-test and post-test fall-risk and self-efficacy among elderly patients in experimental group and control group.

N=60

	Pretest Fall risk	Posttest-Fall risk	't' / p	Pre-SE	Post SE	't'/p
	Mean±SD	Mean±SD		Mean±SD	Mean±SD	
Experimental Group	81±15.94	55.33±17.	7.92 0.00**	67.0±16.0	55.2±14.3	12.1 0.00**
Control Group	81±15.94	69.83±18.4	6.13 0.00**	62.43±11.5	59.66±10.3	4.40 0.00**
't' / p	0.00	3.25		1.41	1.40	
(a+b)	1.0	0.00**		0.16	1.16	

Significant ** p<0.01* p<0.05

Association between pre-test fall risk and self-efficacy with selected socio- demographic variables.

Present study reveals that there is significant association was found significant between habitat and fall risk similarly gender and type of family was found to be significant with self-efficacy.

CONCLUSION

The present study was related to assessment of the effectiveness of fall prevention multimedia program on fall risk and self-efficacy among elderly patients of selected hospitals of H.P. The elderly patients were equally divided into two groups' i.e. Experimental group and control group. Pre-test was conducted in both groups while intervention was given to experimental group only. After 3-4 days of intervention post-test was conducted of both the groups. The study findings revealed that there was significant reduction in fall-risk as well as improvement in self-efficacy. Educating elderly patients regarding falls, how to prevent fall helped in creating awareness among them and improving their self-efficacy. Ultimate outcome of the study was to reduce falls, fall related complications and mortality rate of the elderly patients.

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