



“TO ASSESS THE EFFECTIVENESS OF INFORMATION EDUCATION AND COMMUNICATION ON KNOWLEDGE, ATTITUDE AND PRACTICE OF CARE GIVERS ON PATIENT FALL PREVENTION AT SRM GENERAL HOSPITAL, KATTANKULATHUR.”

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Article History: Received: 25.02.2023

Revised: 14.04.2023

Accepted: 01.06.2023

Abstract

INTRODUCTION: Fall is considered to be a major public health problem handling of fall was challenging and currently many older adults face one of the most common and significant problem.

OBJECTIVES: 1. To assess the level of knowledge, attitude and practice of care givers on patient fall prevention. 2. To determine the effectiveness of information education and communication on level of knowledge, attitude and practice of care givers on patient fall prevention. 3. To correlate post-test level of the knowledge, attitude and practice of information education and communication (IEC) of care givers on patient fall prevention. 4. To associate the post-test level of knowledge, attitude and practice on patient fall prevention with their selected demographic variables of the care givers.

METHODS: The research approach was quantitative and design was one group pre and post-test design. sample size was 70 care givers of patient were selected who fulfilled with purposive sampling technique, used semi structured questionnaires for assessing the demographic variables, knowledge, attitude and attitude and practice regarding fall prevention, Following to the pre- test, intervention of education (IEC package) information and booklet distributed and carried out on 7th day post- test was assessed by using the same questionnaire knowledge assessed by using self-structure questionnaires and level of attitude five point likers scale, practice was assessed by observational check list.

RESULTS: The result revealed that during post-test of patient care givers knowledge on fall prevention was adequate with a mean score of 12.7 it was significant at $p < 0.05$. patient care givers attitude were improved about mean 66.97 which was significant at $p < 0.05$. Regarding practice on fall prevention of care givers showed improvement posttest practice level mean 12.09 at $p < 0.05$.

CONCLUSION: The study concludes that the IEC package was effective to improve the knowledge, attitude and practice on fall prevention among patient care giver.

KEYWORDS: Fall prevention, Patient care givers, Effectiveness, Knowledge, Attitude, Practice, Information, Communication.

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DOI: 10.31838/ecb/2023.12.s2.338

1. INTRODUCTION:

Fall and fall-related injuries continue to be challenging to health care organization causing physical and psychological harm to the patients and increased length of hospitalization. Fall is considered to be a major public health problem handling of fall was challenging and currently many older adults face one of the most common and significant problem. It is the second leading threat to older adult life often causing fall, unintentionally injury and physically disability in worldwide.

BACKGROUND OF THE STUDY: Falls are a common and an increasing health problem, About 4,24,000 falls happen every year in which among 2,50,000 falls are from the hospital, fall are widespread concern in inpatient and home while the patient is under professional care. Globally there are 727 million persons aged 65years over in 2020. ⁽⁸⁾The national statistical office 2021 reported India’s elderly population aged 65 and above will be 138 million to194 million in 2021-2031. Tamil Nadu has the current highest elderly population (35.8%) followed by Kerala (20.9%). In Chennai 8% of the population is the age of 60 years around 6,500 senior citizens live alone in the city 2022 in future it will grow faster. India is moving from a young nation to a greying nation. This phenomenon of growing population of senior citizens has been the result of recent successes in the achievement of better health standards and longer span of life. ⁽⁹⁾

NEED FOR THE STUDY: The fall incidence and the consequences of falls have been higher in lower-income and middle-income countries as compared with high-income countries mainly because of fall preventing interventions are not that freely available in many parts of these countries. Falls are one of the most serious safety problems in healthcare facilities worldwide, and are associated with marked

morbidity, mortality, increased length of stay and re-admissions. Inpatient falls and fall-related injuries continue to be a heavy burden in terms of social, medical and financial outcomes. Falls are a common and an increasing health problem, causing physical, psychological and social problems for the individual older person increasing costs for treatment of medical expenses for tests, surgery, rehabilitation and hospitalization. Despite extensive research on interventions designed to reduce the incidence of falls in hospitals. ^{(11).}

2. METHODOLOGY:

The research approach was quantitative and design was one group pre and post-test design. Sample size was 70 care givers of patient were selected who fulfilled with purposive sampling technique used for assessing the knowledge, attitude and practice regarding on fall prevention among patient care givers who meet the inclusion criteria of during period data collection that admitted in male and female medical ward, orthopedic ward at SRM General Hospital.

DEVELOPMENT AND DESCRIPTION OF THE TOOL: The tool comprised of 4 sections

SECTION A

It consists of demographic variables such as caregiver’s age, gender, education status, religion, monthly income, marital status, experience about taking care of sick patient, patient history of fall, patient age, and diagnosis of patient and duration of illness of patient.

SECTION –B: It consists of structured 15 multiple choice questionnaire on knowledge regarding fall prevention among patient care givers It has four options among which one is the correct response. Each correct answer will give a score of “one mark” and wrong answer “zero” score.

Level of knowledge	Scores	Percentage
Adequate knowledge	11 to 15	66 – 100 %
Moderately adequate knowledge	6 to 10	35 - 65 %
Inadequate knowledge	1 to 5	0-34 %

SECTION C: It consists of modified attitude scale on patient fall prevention which were measured by 5-point Likers scale. This tool is used to evaluate the attitude of the study participants there are positive and negative questions. Each positive correct answer will carry five

points. Strongly agree = 5 and negative correct answer will carry five points strongly disagree = 5. Where are totally 15 questionnaires were 1,4,5,7,10,12,14,15 is a positive statement and 2,3,6,8,9,11,14 is negative statement.

5-POINT LIKERT SCALE

For Positive statement	For Negative statement
Strongly agree = 5	strongly disagree = 5
Agree = 4	Disagree = 4
Not agree = 3	Not agree = 3
Disagree = 2	Agree = 2
strongly disagree = 1	Strongly agree = 1

Level of attitude	Scores	Percentage
Favourable attitude	11 to 15	66 – 100 %
Moderately favourable attitude	6 to 10	35 - 65 %
Unfavourable attitude	1 to 5	0-34 %

SECTION D: It consists of modified structured check list to assess the fall prevention practice among patient care givers. Total score 15, statements each

correct practice score (Yes) was given (1) one, wrong practice score (No) was given (0) zero.

Level of practice	Scores	Percentage
Adequate practice	11 to 15	66 – 100 %
Moderately adequate practice	6 to 10	35 - 65 %
Inadequate practice	1 to 5	0-34 %

CONTENT VALIDITY: The validity obtained from five experts 2 medical experts and 3 nursing experts from other nursing college. Their valuable opinions and based on the suggestions given by experts, the content and tool was modified appropriateness, accuracy and finalized.

ETHICAL CONSIDERATIONS: The formal approval was obtained on 28/05/2021 (IEC: 2832) from the

institutional ethical committee of SRM medical and health sciences, SRM IST and Dean, SRM college of nursing, Kattankulathur, Chengalpattu District.

DATA COLLECTION PROCEDURE: Formal written permission to conduct the study will be obtained from Permission was obtained from SRM IST research ethical committee. Formal permission was taken from Dean, SRM College of Nursing and

Prior approval was got from the medical superintendent of SRM general hospital. A brief self-introduction and explained regarding the fall prevention. Patient care givers who met the inclusion criteria and they were selected by non-probability purposive sampling technique. The informed written consent was obtained from the participants after explaining the purpose of the study. A pilot study was conducted to be used in the large study. To find out the feasibility of the study. Pre-test was done such as demographic variables, level of knowledge and practice and attitude regarding on fall prevention.

Approximately 30 minutes were spent to collect data from the participants on for pre-test. Followed by information on education communication (IEC) was given through PowerPoint presentation on fall prevention followed by booklet was distributed to the further reference demonstration done for practice. On 7th day post test was conducted with same questionnaire knowledge assessed by using self-structure questionnaires and level of attitude five point likers scale, practice was assessed by observational check list.

3. RESULTS:

Table 4.1.1 Frequency and percentage distribution of demographic variable among patient caregivers and patient. n=70

S. No.	Demographic variable Care givers and patient	Class	No. of workers	Percentage
1	Age in years	20-30	14	20.0
		31-40	25	35.7
		41-50	25	35.7
		>51	6	8.6
2	Gender	Male	25	35.7
		Female	44	62.9
		Transgender	1	1.4
3	Education status	No formal education	19	27.1
		primary/secondary	29	41.4
		diploma/ graduate	13	18.6
		Post graduate	9	12.9
4	Religion	Hindu	41	58.6
		Christian	10	14.3
		Muslim	15	21.4
		Buddhism	4	5.7
5	Monthly income(Rs)	8000	27	38.6

		10000	13	18.6
		15000	19	27.1
		20000 & above	11	15.7
6	Marital status	Unmarried	11	15.7
		Married	44	62.9
		Separate	6	8.6
		Widower	9	12.9
7	Experience about taking care of sick patient	I committed myself to extend my support for recovery	11	15.7
		It is my responsibility to take care of my loved one.	32	45.7
		It is my fate and I am doing it	7	10.0
		I am forced to give care because of societal norms.	20	28.6
8	Patient history of fall	Once	16	22.9
		Twice	16	22.9
		More than twice	8	11.4
		No history	30	42.9
9	Patient age(years)	40-50	7	10.0
		51-60	16	22.9
		61-70	30	42.9
		71-80	17	24.3
10	Diagnosis of patient	CVA	22	31.4
		Hypertension	22	31.4
		Joint deformity	12	17.1
		Epilepsy	14	20.0
11	Duration of patient illness (months)	1-6	15	21.4
		7-12	24	34.3
		13-34	20	28.6
		>24	11	15.7

Results: The assessment on fall prevention out of 70 sample of care givers in pre-test level of knowledge result reveals that in the pre-test majority of the care givers 57 (81.4%) had inadequate knowledge, 62 (88.6%) of them had unfavorable attitude level, majority of the care givers 67 (95.7%) of them had inadequate level of practice. Determine the effectiveness of

information education and communication (IEC) on Knowledge of care givers on patient fall prevention. the posttest level of knowledge mean score 12.7 ± 1.88 from pre- test mean score 3.87 ± 1.47 has increased, attitude mean score 66.97 ± 9.13 has increased from pre- test mean score 21.77 ± 4.00 , level of attitude mean score 66.97 ± 9.13 has increased from pre- test

mean score 21.77 ± 4.00 . The mean difference between pre and post-test level of knowledge, attitude and practice was improved $p < 0.05$. Correlation between post-test score in the level of knowledge, attitude and practice of care givers on patient fall prevention reveals that post-test level of knowledge, attitude and practice shows that there is no statistically significant $p > 0.05$, correlation between knowledge, attitude and practice. Associate between the demographic variables and the level by knowledge of care givers on patient fall prevention.

4. DISCUSSION:

Considering the pretest level of knowledge, attitude and practice had moderately inadequate after the effectiveness of IEC package determine the effectiveness of information education and communication on knowledge, attitude and practice of care givers on patient fall prevention. The assessment revealed that whereas the post-test mean score was (12.9) and was statistically significant at ($P < 0.01$). Therefore the study concludes that knowledge attitude and practice after information education and communication (IEC) package education among care givers with regard to patient improved fall prevention.

5. CONCLUSION:

The present study assessed the effectiveness of IEC package on knowledge, attitude and practice on fall prevention among care givers. They were found to possess high adequate knowledge, attitude and practice after the IEC teaching and distribution of booklet on fall prevention after education by the investigator was more effective on fall prevention. Since many patients are discharging to home this knowledge among patient care givers will help to prevent further complication.

6. REFERENCE

1. The global health <https://www.who.int/news-room/factsheets/detail/falls>
2. MK, Bodoni B. Falls and Fall Prevention in the Elderly. Stat Pearls Publishing; 2022 Jan-Available from <https://www.ncbi.nlm.nih.gov/books/NBK560761/>
3. Abdalla S, Apramian SS, Cantley LF, et al. Occupation and Risk for Injuries. In: Mock CN, Nugent R, Kobusingye editors. Injury Prevention and Environmental Health. 3rd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 Oct 27. <https://www.ncbi.nlm.nih.gov/books/NBK525209/>.
4. Alhassan A M, Aldawsari MA, Bazuhair F and Alobaibi FK, Aldakhi AA, Abdultatah FW. Falls among elderly and its relation with their health problems and surrounding environmental factors in Riyadh. Journal of Family and Community Medicine. 2018 January
5. Marmamula, Srinivas et al. “Falls and visual impairment among elderly residents in 'homes for the aged' in India.” Scientific reports vol. 10,1 13389. 7 Aug. 2020, doi:10.1038/s41598-020-70066-210
6. Urrie L. Fall and Injury Prevention. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD):
7. Hoffman, Geoffrey J et al. Posthospital Fall Injuries and 30-Day Readmissions in Adults 65 Years and Older.” JAMA network open vol. 2,5 e194276. 3 May. 2019,
8. Kim, Myeongkyu et al. “Fall characteristics among elderly populations in urban and rural areas in Korea.” Medicine vol. 99,46 (2020): e23106. doi:10.1097/MD.00000000000023106
9. Bruce, Julie et al. “Fall prevention

interventions in primary care to reduce fractures and falls in people aged 70 years and over: the Pre-FIT three-arm cluster RCT.” *Health technology assessment* (Winchester, England) vol. 25,34 (2021): 1-114. doi:10.3310/hta25340

10. Institute of Medicine (US) Division of Health Promotion and Disease Prevention; Berg RL, Cassells JS, editors. *The Second Fifty Years: Promoting Health and Preventing Disability*. Washington (DC): National Academies Press (US) 2019 fall in Older Persons: Risk Factors and Prevention.