Assess the Knowledge of Staff Nurses on Prevention from Fall

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Abstract: *Falls in hospitals are the most frequently reported incidents among all safety accidents and can lead to significant complications in patient. So the investigator decided to conduct the study in Apollo Rajshree Hospital Indore with a purpose to assess the knowledge of staff nurses on prevention from fall among Registered nurses who is working in Apollo Hospital Indore units. A previous study explored the knowledge of inpatient falls, attitude towards patient falls, and fall prevention activities among nurses in hospitals with more than 150 beds but it was conducted only in geriatric settings However, the perception of patient safety culture among nurses in small - and medium - sized hospitals was low, indicating that there is a difference in the perception of patient safety cultures according to the size of the hospital Clin Med (Lond). 2017 Aug[1] Data was collected with the help of Demographic Variables, structured knowledge questionnaires, with the permission from Nursing Head and Ethical consideration from Apollo Rajshree Hospital Indore In this study pre experimental research design was used, 40 samples who have met the inclusion criteria have been selected as the sample for the study and following were demographic collected. Demographic variables were qualifications, department, age, and experience. Out of the 40 samples 50% were B. S c and 50% were GNM qualified, 75% were between the age group of 21 – 25, 15% were 25 – 30 and 10% 30 years and above, 68% had 0 - 1 - yearexperience, 12 % 1 - 2 year and 20% above 2 years. In the pretest 35%of the samples had excellent knowledge, 33%had very good knowledge and 30% had adequate knowledge and 2% had inadequate knowledge on the other hand in the posttest 76% were excellent and 24%were very good. The Results showcased that there is significant association between the knowledge score of the staff nurses with their qualification as the calculated chisquare11.6 is more than the table value 3.841. There is no significant association between the knowledge score of the staff nurses with their experience, department and age as the calculated chi - square (4.2, 0.22, 0.1418) is less than the table value (5.991, 3.841, 5.991).*

Keywords: Knowledge, Prévention, Fall, Simulation, on - job training

1. Introduction

A fall is defined as an event which results in a person coming to rest inadvertently on the ground or floor or other lower level

Falls and its consequences are major public health problem, making it the second leading cause of accidental deaths worldwide Fall is reported as the most frequent patient safety event occurring in hospitals

Fall occur at a rate of 3–5 per 1, 000 occupied bed - days, and the Agency for Healthcare Research and Quality estimates that each year 700, 000 to 1 million hospitalized patients fall. Nearly one in every three inpatients aged 65 years and older sustains fall. The traumatic complications of fall include physical injury, functional impairment, increased rate of hospitalization and delayed recovery as a result people suffer a lot with a huge burden to the family, health sector, and economy of the country. (ClinGeriatric Med 2020) [2]

A significant proportion of non - traumatic falls, often instill fear of fall - a post fall syndrome which includes dependency, loss of autonomy, confusion, immobilization, and depression, which will lead to a further restriction in daily activities and thus affects Quality of life Despite the continued efforts to decrease falls in the hospital settings, there continues to be an increased incidence of inpatient falls. Nurses are the true backbone for any health facility. They provide constant care to patients and it is important that they are properly trained to identify risk factors and employ strategies to prevent them. Due to demanding working schedule, lack of awareness, complex patient profiles, there are high chances that preventable aspect of these "geriatric giants" are not well addressed and often overlooked. (Alok Kumar, 2013) [3]

Knowledge and attitude of nurse's attribute to disseminate and establish a foundation for fall preventive activities in Tertiary care hospitals. Even though falls among hospitalized patient is a well - recognized topic in both nursing and medical literature, in many developing countries it has not been prioritized for research. Hence, the current study had been devised to find out these lacunae and establish the best care for the patients (. Kavin Mohiz James 2020) [4]

2. Material and Methods

Study Design: Pre Experimental research study was adopted to assess the knowledge of staff nurses on prevention from fall.

Study Location: Department of General ward and private ward, study was taken in Apollo Hospitals Indore, Madhya Pradesh

Study Duration: - May 2021 to July2021

Sample size**:** sample size for the study was 40 staff nurses from Apollo Hospitals Indore.

Inclusion Criteria: -:
Registered who is available during data collection.

Exclusion Criteria: - Those who are working in other units (OT, OPD, DIALYSIS)
Those who are on other roles (Nurse Educator /Supervisors /In charge)

Procedure methodology
Formal permission taken from the concerned authorities from Apollo Rajshree hospital Indore The purpose of the study was explained to them and consent was taken from the Registered Nurses. Pretest was conducted of 40 respondents by using the knowledge questionnaire regarding prevention from fall. After the completion of pretest, the respondents were trained on job about prevention from fall and all the queries that the subject had were clarified. Posttest for knowledge assessment conducted after 1week of the training intervention.

Statistical analysis
The data was analysed using Descriptive [Frequency and percentage], Chi - square was used to find the association between the demographic variables and level of knowledge, the effectiveness of the structured teaching program was assessed using inferential statistics [t test]. The level $P < 0.05$ was considered as the cut - off value or significance.

3. Result

The collected data was analyzed using descriptive and inferential statistics.

1) Frequency Percentages of Demographic Variables

Demographic	Variables	Frequency	Percentage
Qualification	BSc	20	50%
	GNM	20	50%
Department	Private	16	40%
	General Ward	24	60%
Age	21 - 25 years	30	75%
	25 - 30 years	6	15%
	Above 30 years	4	10%
Experience	0 - 1 Year	27	67.50%
	1 - 2 Year	5	12.50%
	Above 2 year	8	20%

Table 1 shows that out of the 40 samples 50% were B. S c and 50% were GNM nurses. Most of the participated staff 60% are form general ward and 40% from private ward. Regarding age, 75% were between the age group of 21 – 25, 15% were 25 – 30 and 10% 30 years. Amount the co staff nurses 68% had 0 - 1 - yearexperience, 12 % had 1 - 2 year and 20% had above 2 years.

2) Pre and Post Test Knowledge Scores

	Pretest (f)	Pretest (%)	Posttest (f)	Posttest (%)
Excellent (75% - 100%)	14	35%	31	77.5%
Very good (50 % - 75%)	13	32.5%	9	22.5%
Adequate	12	30%	0	0
Inadequate	1	2.5%	0	0

Table 2 shows that in the pretest 35 % had excellent, 32.5 % had very good, 30% had adequate and 2.5 had inadequate knowledge but in posttest 77.5% had excellent and 22.5% had good knowledge.

3) Association of Demographic Variables

Demographic	Demographic variables	Excellent (75% - 100%)	Very good (50 % - 75%)	Chi square	Df	T test value p<0.05	Remark
Experience	0 - 1year (21)	19	8	4.2	2	5.991	Not significant
	1 - 2 year (5)	5	0				
	More than 2 year (8)	7	1				
Qualification	B. Sc. nursing	20	0	11.6	1	3.841	Significant
	Gnm nursing	11	9				
	Total	31	9				
Department	General ward	18	6	0.22	1	3.841	Not significant
	Private ward	13	3				
	Total	31	9				
Age	21 - 25	23	7	0.1418	2	5.991	Not significant
	25 - 30	5	1				
	And age more than 30.	3	1				

Demographic variables	Chi Square	t test value p<0.05	Remark
Experience	4.2	5.991	Not significant
Qualification	11.6	3.841	Significant
Department	0.22	3.841	Not significant
Age	0.1418	5.991	Not significant

Table 3 shows that there is significant association between the knowledge score of the staff nurses with their qualification as the calculated chisquare11.6 is more than the table value 3.841.

There is no significant association between the knowledge score of the staff nurses with their experience, department and age as the calculated chi - square (4.2, 0.22, 0.1418) is less than the table value (5.991, 3.841, 5.991)

4. Discussion

In this study pre experimental research design was used, 40 samples who have met the inclusion criteria have been selected as the sample for the study and following were demographic collected. Demographic variables were qualifications, department, age, and experience. Out of the 40 samples 50% were B. S c and 50% were GNM qualified, 75% were between the age group of 21 – 25, 15% were 25 – 30 and 10% 30 years and above, 68% had 0 - 1 - yearexperience, 12 % 1 - 2 year and 20% above 2 years.

Pre Experimental research study was adopted to assess the knowledge of staff nurses on prevention from fall.

Department of General ward and private ward, study was taken in Apollo Hospitals Indore, Madhya Pradesh

The questionnaire was included socio - demographic characteristics such as age, department, qualifications and experience. Pretest were done for the nursing staff afterwards trainings were given. then posttest was done

The data was analysed using Descriptive [Frequency and percentage], Chi - square was used to find the association between the demographic variables and level of knowledge, the effectiveness of the structured teaching program was assessed using inferential statistics [t test]. The level $P < 0.05$ was considered as the cut - off value or significance.

In the pretest 35%of the samples had excellent knowledge, 33%had very good knowledge and 30% had adequate knowledge and 2% had inadequate knowledge on the other hand in the posttest 76% were excellent and 24%were very good. The Results showcased that there is significant association between the knowledge score of the staff nurses with their qualification as the calculated chi square 11.6 is more than the table value 3.841. There is no significant association between the knowledge score of the staff nurses with their experience, department and age as the calculated chi - square (4.2, 0.22, 0.1418) is less than the table value (5.991, 3.841, 5.991).

The results of the study clearly indicated that, after on job training of prevention from fall, all the Registered nurses had developed good knowledge. There is significant association between the knowledge score of the staff nurses with their qualification as the calculated chisquare11.6 is more than the table value 3.841. There is no significant association between the knowledge score of the staff nurses with their experience, department and age as the calculated chi square (4.2, 0.22, 0.1418) is less than the table value (5.991, 3.841, 5.991) That shows the prevention from fall training want to be effective increasing the knowledge of the registered nurses.

5. Conclusion

Nursing staffs can be able to follow the assessment of fall which will help to reduce risk and complications of could endanger the patient's life. So, in the clinical area, nurses must be knowledgeable and competent in every aspect of prevention from fall. Conclusion in order to prevent hospital falls, nurses' knowledge towards falls is important. Therefore, there is a need to explore diverse strategies to promote fall prevention activities for the nurses. On job hands on training was given which helps the Register nurses to develop necessary confidence and competencies. so Nursing staff can be able to reduce the fall rate. The trainings had enabled the nurses to enhance their knowledge on prevention from fall.

References

[1] https: //doi. org/10.3390/jcm11195842
[2] https: //doi. org/10.3390/jcm11195842
[3] https: //www.who. int/news - room/fact - sheets/detail/falls
[4] https: //psnet. ahrq. gov/primer/falls
[5] https: //www.ncbi. nlm. nih. gov/books/NBK235613/ 6. https: //www.researchgate. net/publication/282725266
[6] https: //www.ncbi. nlm. nih. gov/pmc/articles/PMC6446937/
[7] https: //assets. researchsquare. com/files/rs - 28988/v1/aaace7ed - b54a - 4738 - a321 -