

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge and Attitude Regarding Patient Safety and Prevention of Fall among the B.Sc Nursing 2nd Semester Students Nurses in Shri Guru Ram Rai College of Nursing, Uttarakhand, Dehradun

Monika Rauthan¹, Julia Massey²

¹MSc Nursing Student, ²Assistant Professor,

^{1,2}SGRRIM & HS College of Nursing, Dehradun, Uttarakhand, India

ABSTRACT

A patient fall is an unplanned descent to the floor or other surface, with or without injury, that occurs while a patient is under the care of a healthcare provider or facility. Slips can cause patient falls, trips, falls from bed or chair, falls during transfer, and falls due to medical conditions. Falls can result in physical injuries, such as fractures, head trauma, soft tissue injury, and lacerations. Patient safety is a critical aspect of healthcare quality and is essential for preventing patient harm, enhancing patient safety and promoting trust in healthcare provider and system care.

Methodology

A quantitative descriptive research design was used in the study. The study was conducted at SGRR College of nursing, Patel Nagar, Dehradun, India. The conceptual framework used in this study was “Ludwig Von Bertalanffy’s general system theory”. A total of 80 samples were selected through the non-probability convenience sampling technique. Data was collected using a socio-demographic profile, a structured knowledge questionnaire, and a Likert attitude scale. The data was analyzed by using inferential and descriptive statistics. Results revealed that the level of knowledge was increased after the structured teaching program, the pretest mean is 22.20 and the posttest mean is 28.14. The attitude level is overall positive towards patient safety and prevention of falls. Knowledge and attitude are weakly correlated. Pearson’s correlation coefficient (r) analysis is 0.21.

Conclusion

Most of the students do not an appropriate knowledge regarding patient safety and the prevention of falls. After the structured teaching programme, the knowledge and attitude regarding patient safety and prevention of falls significantly improved and enhanced.

INTRODUCTION

According to National Health System Resource the quality initiative under the ambit of National Quality Assurance Standards provides a framework through which hospitals can deliver quality & safer patient care services. It assesses hospitals from a patient, caregiver, and staff safety perspective; builds staff capacity in adhering with clinical and evidence-based practices; ensures compliance to infection control

practices; involves patients & relatives in decision-making for their treatment plan; and promotes a culture of patient engagement, learning, and continual improvement. Thereby reducing the “knowing-doing” gap by translating evidence of effectiveness into routine practice.

This research aims to investigate the level of knowledge and practice related to patient safety and

How to cite this paper: Monika Rauthan | Julia Massey "A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge and Attitude Regarding Patient Safety and Prevention of Fall among the B.Sc Nursing 2nd Semester Students Nurses in Shri Guru Ram Rai College of Nursing, Uttarakhand, Dehradun" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-8 | Issue-6, December 2024, pp.1151-1155,

URL: www.ijtsrd.com/papers/ijtsrd73755.pdf

Copyright © 2024 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)

KEYWORDS: *Effectiveness, knowledge, attitude, structured teaching program, nursing students*



IJTSRD73755



fall risk among student nurses in healthcare settings. Student nurses play a crucial role in supporting patient care, and understanding their awareness and adherence to patient safety protocols is essential in preventing falls and ensuring the well-being of patients. The study will assess the current knowledge base, training received, and practical application of fall prevention measures among ward attendants.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured teaching program on knowledge and attitude regarding patient safety and prevention of fall among the B.sc nursing 2nd Semester students nurses in Shri Guru Ram Rai college of nursing, Uttarakhand, Dehradun

OBJECTIVES:

1. To assess the knowledge and attitude of student regarding the patient safety and prevention of fall in selected college of Nursing, Dehradun.
2. To assess the effectiveness of Structured teaching program among student nurses.
3. To find out the association between knowledge and attitude of student with selected demographic variables.
4. To correlation the knowledge and attitude of student regarding patient safety and prevention of fall.

OPERATIONAL DEFINITION-

- **ASSESS-** It is analyzing and evaluates continuous process of collecting the data regarding knowledge and practice on patient safety and prevention of fall among student.
- **FALL-** In this study fall is an incident in which a patient receiving medical care and treatment in a health care setting loses balance, slip unintentionally, resulting in them coming to rest on the floor or ground.
- **SAFETY-** In this study safety refers to condition of being protected from fall or practice to prevent from the fall.
- **PREVENTION-** In this study, it is strategies taken to stop from patient fall or to reduce the likelihood of its occurrence. It proactive measures aimed to avoiding or minimizing the risk from any hazard or damage.
- **STUDENTS-** In this study, students refer to individuals enrolled in Basic B.sc Nursing students who were studying in Shri Guru Ram Rai University, College of Nursing.

VARIABLES-

Research Variables- knowledge and attitude regarding patient safety and prevention of fall among students.

Demographic Variables- were age, gender, source of information, prior clinical exposure, any educational program attended, maximum area of exposure, previous knowledge of patient safety and prevention of fall, previous experience of patient fall.

HYPOTHESIS

H1- There will be the significant association between demographic variable and level of knowledge regarding patient safety and prevention of fall.

H2- There will be significant association between pre and post test of knowledge regarding patient safety and prevention of fall.

H3- There will be the significant association between demographic variable and level of attitude regarding patient safety and prevention of fall.

H4- There will be significant association between level of knowledge and attitude regarding patient safety and prevention of fall among the student nurses.

ASSUMPTION-

- Samples are true representatives of the population.
- Student may have some knowledge regarding patient safety and prevention of fall.
- Teaching session will be improving knowledge of students.

DELIMITATIONS-

- The study is delimited to a Shri Guru Ram Rai college of Nursing, Dehradun, Uttarakhand.
- The study only includes student nurses at a particular educational background.

Research approach:

The research approach of the study was quantitative research approach and aim of study to assess the effectiveness of structured teaching program on knowledge and attitude regarding patient safety and prevention of fall among the B.sc nursing 2nd Semester students nurses in Shri Guru Ram Rai College Of Nursing, Uttarakhand, Dehradun.

Research design

In this research study the descriptive survey design was selected a study to assess the effectiveness of structured teaching program on knowledge and attitude regarding patient safety and prevention of fall among the B.sc nursing 2nd Semester students nurses in Shri Guru Ram Rai College of nursing, Uttarakhand, Dehradun.

Setting of the study

In this study was conducted at the Shri Guru Ram Rai College Of Nursing, Patel Nagar, Dehradun.

Population

In this study population were Nursing College having B.Sc Nursing, students in Uttarakhand, Dehradun. B.Sc nursing students were selected as the sample in the study.

Sample size

Sample size of the study is 80. In this study sample consist of B.Sc Nursing 2nd semester student of Shri Guru Ram Rai College Of Nursing, Patel Nagar, Dehradun, Uttarakhand were selected.

Sample technique

Simple Convenience non probability sampling technique is used to select the sample in the study.

Selection criteria of sample: -Inclusion criteria

This research study included the following criteria: -

- Students who were willing to participate in study.
- Students pursuing undergraduate in Nursing

Exclusion criteria

- Student nurses who are on leave during the study period.

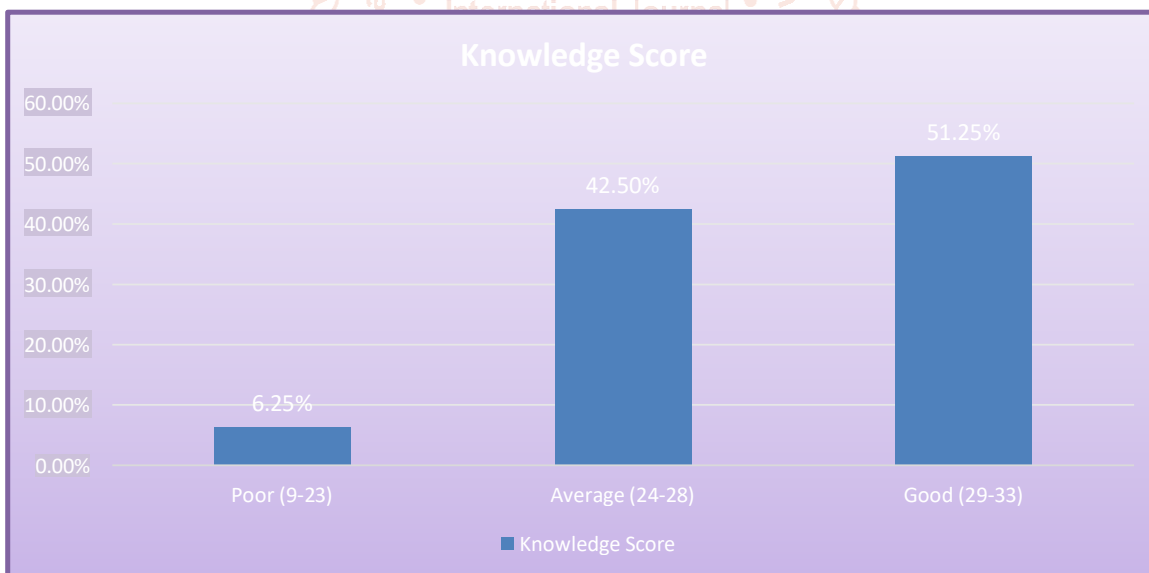
- Student nurses who refuse to participate.

Reliability

The reliability coefficient was calculated by test-retest method. The duration between the test and retest is one week with same sample. Test-retest formula was used and reliability of the knowledge questionnaire tool was established with **r =0.81** and attitude scale was **r=0.85**. Hence the tool was considered reliable to measure the level of knowledge of nursing students.

Ethical consideration

- To conduct research study in SGRR College Of Nursing, Patel Nagar, Dehradun written permission was obtained from Principal of SGRR college Of Nursing, Dehradun.
- Approval of the students was obtained after explanation of the purpose of the study and assured that data collection will be used for only for the purpose of the study.
- Ethical consent taken from the students.
- Participants willingly to participate in the study.
- An inform consent was taken from the subject before administering research tool to them.



Knowledge percentage of the nursing students of post test

The bar showed that student 6.25% of poor knowledge, 42.50% had average knowledge and 51.25% had good knowledge regarding patient safety and prevention of fall.

Mean, Standard Deviation, and Median of Students regarding patient safety and prevention of fall

S. No	Variable	Range of score	Mean ± S.D	Median	Mean Percentage	T Value	P Value
1.	Pre-Test Score	15-30	22.20±4.52	22	16.17%	18.619	0.001*
2.	Post-Test Score	19-33	28.14±3.16	29	35.17%		

It was found that P value was less than 0.05 which implies statistical improvement in Knowledge. Thus, it says that there is statistical significant difference in Knowledge participants i.e. accepting the alternative hypothesis (H₁) and rejecting the null hypothesis (H₀).

Mean, Standard Deviation, and Mean percentage of Students level of attitude regarding patient safety and prevention of fall

S. No	Variable	Mean \pm S.D	Mean Percentage	T Value	P Value
1.	Pre-Test Score	49.71 \pm 23.27	62.14%	8.277	0.001*
2.	Post-Test Score	54.45 \pm 21.71	68.06%		

Table no.5 shows that mean and standard deviation of Pre-Test score was 49.71 \pm 23.27 (62.14%) increased to 54.45 \pm 21.71(68.06%) in the Post-Test. The T-value of 8.277 and a P-value of 0.001 confirm that this improvement is statistically significant.

Correlate the knowledge and attitude of nurses regarding the patient safety and prevention of fall

S. no	Variable 1	Variable 2	R value	Chi Square test	P value
1.	Knowledge	Attitude	0.26	165.923	0.913#

The correlation between knowledge and attitude of nurses regarding patient safety and fall prevention was analyzed. The results indicate a weak positive correlation (R value = 0.26) between knowledge and attitude. Despite this positive correlation, the chi-square test yielded value of 165.923 with a p-value of 0.913, which is not statistically significant. This suggests that while there is a slight tendency for increased knowledge to be associated with a more positive attitude, the relationship is not strong enough to be considered significant.

DISCUSSION

Objective 1: To assess the knowledge and attitude of student regarding the patient safety and prevention of fall in selected College of Nursing, Dehradun.

The initial assessment of student knowledge and attitudes at Shri Guru Ram Rai College of Nursing revealed that the majority of students had good knowledge of patient safety and fall prevention, with 51.25% demonstrating good knowledge, 42.5% having average knowledge, and only 6.25% showing poor knowledge. Additionally, 97.5% of students had a positive attitude towards patient safety and fall prevention, while only 1.25% had a neutral or negative attitude. The mean attitude score was 93.1 with a standard deviation of 24.1, indicating a generally strong positive disposition towards safety practices among the students.

Objective 2: To assess the effectiveness of Structured teaching program among student nurses.

The structured teaching program significantly improved the students' knowledge, as evidenced by the increase in mean knowledge scores from 22.20 in the pre-test to 28.14 in the post-test. The mean difference of -5.93 and the high t-value of 18.619 (p < 0.001) indicate that the teaching program was effective. Post-test knowledge scores ranged from 19 to 33, with a mean \pm standard deviation of 28.14 \pm 3.16, demonstrating a marked enhancement in knowledge due to the intervention.

Objective 3: To find out the association between knowledge and attitude of student with selected demographic variables.

Table 5 reveals significant associations between demographic variables and the attitudes of nursing

students towards patient safety and fall prevention. Age is a notable factor, with students aged 18-19 demonstrating a significantly more positive attitude (chi-square = 90.16, p < 0.05). The source of information is also influential; students using textbooks, online resources, or engaging in clinical practice exhibit significant differences in their attitudes (chi-square = 25.82, p < 0.05). Prior clinical exposure strongly correlates with a positive attitude (chi-square = 53.33, p < 0.05), and the area of clinical practice significantly impacts attitudes, particularly in medical settings (chi-square = 48.20, p < 0.05).

Objective 4: To correlation the knowledge and attitude of student regarding patient safety and prevention of fall.

Table 6 reveals that the correlation between knowledge and attitude regarding patient safety and fall prevention is weak (R value = 0.26). Although a slight positive correlation exists, the chi-square test results (value = 165.923, p = 0.913) indicate that this relationship is not statistically significant. This finding suggests that while increased knowledge may slightly enhance attitudes, the connection is not strong enough to be deemed significant. Thus, other factors likely influence attitudes towards patient safety and fall prevention more significantly than knowledge alone.

LIMITATION:-

- Knowledge and attitude limited to the questionnaire, which is not standardized.
- Study is limited to 80 samples.
- Study conducted at selected settings.
- Nursing related literature is limited.

CONCLUSION:

The study aimed to assess knowledge and attitudes regarding patient safety and fall prevention among nursing students at Shri Guru Ram Rai University, College of Nursing, Dehradun. Findings indicate that while a majority of students possess good knowledge and a positive attitude toward patient safety and fall prevention, there remains a notable proportion with average or poor knowledge. The structured teaching program was found to be effective, significantly enhancing students' knowledge from a pre-test mean score of 22.20 to a post-test mean score of 28.14, reflecting a substantial improvement in understanding.

REFERENCES

- [1] Bhatia, R. (2019). *Patient safety in healthcare: A practical guide for Indian hospitals*. Jaypee Brothers Medical Publishers.
- [2] Gupta, P., & Verma, R. (2017). *Fall prevention and management in elderly: An Indian perspective*. CBS Publishers & Distributors.
- [3] Chatterjee, P. (2020). *Essentials of patient safety and quality improvement in healthcare*. Elsevier India.
- [4] Sharma, S. K. (2018). *Clinical nursing procedures: The art of nursing practice with patient safety focus*. Jaypee Brothers Medical Publishers.
- [5] Reddy, M. P. (2021). *Healthcare quality and safety in Indian hospitals*. Ahuja Publishing House.
- [6] Rajesh, D. R. (2015). *Patient safety and quality in healthcare: An Indian perspective*. Jaypee Brothers Medical Publishers.
- [7] Sarma, A. K. (2018). *Healthcare safety: Management and guidelines in India*. NBT India.
- [8] Mehta, R. (2016). *Fall prevention and management in healthcare settings: Indian guidelines*. CBS Publishers & Distributors.
- [9] Singh, P., & Sharma, S. (2017). *Elderly care and fall prevention strategies in India*. Global Publications.
- [10] Kumar, M., & Patel, A. (2020). *Best practices in patient safety and fall prevention in Indian hospitals*. Tata McGraw-Hill Education.
- [11] Joshi, A., & Parikh, A. (2014). *Patient Safety: A Clinical Handbook*. Jaypee Brothers Medical Publishers.
- [12] Patel, M. S., & Sharma, A. (2019). *Fall Prevention in Elderly: A Guide for Clinicians and Caregivers*. CBS Publishers & Distributors.
- [13] Rao, S. K., & Gupta, A. (2016). *Essentials of Hospital Infection Control and Patient Safety*. Paras Medical Books Pvt. Ltd.
- [14] Khatri, G. R. (2017). *Hospital Administration and Patient Safety Management*. CBS Publishers & Distributors.