Comparison of Simulation VS Lecture methods on Knowledge regarding Prehospital Triage Management among 1st Year B.Sc. Nursing Students at Selected Colleges in Puducherry.

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Abstract

Introduction: Stimulation based learning has become a most popular method of corporate training program. It creates a sitting that mimics real world tasks and situation's allowing students to test their knowledge. **Aim:**The aim of study was to assess effectiveness of stimulation based learning vs lecture method on knowledge regarding pre-hospital triage management among 100 students'(50 for lecture method and 50 for stimulation method) B.Sc IST yr nursing student. **Method** : A pre experimental design was used in this study. convenient sampling technique was used to select the sample .**Result**: In stimulation group 46(96%) of them had inadequate knowledge, 4(8%) of them had moderate with mean S.D 8.67, in post-test 29(58%) of them had moderate knowledge 21(42%) with mean S.D 8.67 .In lecture method lecture method group, 48(96%) had inadequate knowledge and 2(4%) had moderately adequate knowledge.29(58%) had moderately knowledge , 21(42%) had adequate knowledge. There was improvement in the level of knowledge regarding Pre-hospital triage management after the administration of simulation group with p value of p<0.001. In demographical gender and family type had showed statistically significant association between pre-test levels of knowledge in stimulation group. **Conclusion:** To enhance the knowledge and interest of student by using various teaching method.

BACKGROUND OF STUDY

Simulation refers to mimicking a real life process to deliver realistic Experience in a controlled setting. This method trial and error provides learners with the information and confidence they need to put their new talents to use in real world. Nurses are the largest groups among the medical staff that offer services in a critical setting and given that today's students are tomorrow nurses, their preaparedness can be crucial in the face of unpredictable events . The triage nurse determines the clinical care priority of the patients. Due to the important role and dynamics of the triage activities, the best and most well trained people should be selected for this task

Nurse's poor knowledge regarding triage can arise from the absence of sufficient training both study and work periods. Most skilled nurses in the daily cares of patients in hospital inpatient wars can make an appropriate decision, but due to unpredictable events, a crisis setting may affect the performance and clinical judgement of nurses.

Statement of the problem

A comparative study to evaluate the effectiveness of Simulation Based Learning VS Lecture Method on knowledge regarding Prehospital triage management among 1st year B.Sc. Nursing students at selected colleges in Puducherry.

Objectives

• To assess the level of Knowledge on Pre-hospital triage management among B.Sc. Nursing students.

• To evaluate the effectiveness of Simulation Based Learning and Lecture Method on Knowledge regarding Pre-hospital triage management among B.Sc. Nursing students.

• To compare the effectiveness of Simulation Based Learning Vs Lecture Method on Knowledge regarding Pre-hospital triage management among B.Sc. Nursing students.

• To associate the level of Knowledge on Pre-hospital triage management with selected demographic variables.

Hypothesis

There is a significant difference in the Simulation Based Learning than the Lecture Method on knowledge regarding Prehospital triage management among 1st year B.Sc. Nursing Students

METHODOLOGY
RESEARCH APPROACH

A Pre experimental design was used in this study. convenient sampling technique was used to select the 100 samples in Nursing College Puducherry.

DESCRPTION OF TOOL

SECTION A- Demographical Variables

The demographic variables include student profile such as name, age, gender, religion, area of living, place of residence, type of family, previous knowledge about triage, and the parent's profile such as father's education, mother's education and parents income

SECTION B- Self Structured Knowledge Questionnaire

Scoring Interpretation

Level of knowledge	Percentage
Adequate knowledge	≥75%
Moderately adequate knowledge	51-75%
Inadequate knowledge	≤50%

Data collection procedure

The study was explained and obtained informed consent from each participant. The participants were selected by convenient sampling technique and establish rapport with them. Data collection was done from 18.10.2023 to 26.10.2023, 100 samples were selected, each group consists of 50 samples in group I from Sri Lakshmi Narayana College of Nursing and group II from RAAK college of nursing were selected based on inclusion criteria.

Finding and discussion

Frequency and percentage distribution of demographic variables of 1st year B.Sc. Nursing Students in the Simulation and Lecture method. n = 100(50+50)

Demographic Variables	Simulation Method Group I (n=50)		Lecture Method Group II (n=50)		Chi-Square for homogeneity
	F	%	F	%	
Age in years					χ^2=1.382
17 – 19	45	90.0	48	96.0	
19 – 22	5	10.0	2	4.0	p = 0.240
22 – 24	-	-	-	-	N.S
Gender					χ^2=2.486 p = 0.115
Male	17	34.0	10	20.0	
Female	33	66.0	40	80.0	N.S
Religion					χ^2=0.000
Hindu	47	94.0	47	94.0	
Muslim	2	4.0	2	4.0	p = 1.000
Christian	1	2.0	1	2.0	N.S

Demographic Variables	Simulation Method Group I (n=50)		Lecture Method Group II (n=50)		Chi-Square for homogeneity
	F	%	F	%	
Area of living					χ²=**7.032**
Rural	22	44.0	11	22.0	
Urban	22	44.0	35	70.0	**p = 0.030**
Semi – urban	6	12.0	4	8.0	**S***
Place of residence					χ²=1.054
Hostel	11	22.0	11	22.0	
Staying with parents	38	76.0	36	72.0	p = 0.590
Staying in relatives home	1	2.0	3	6.0	N.S
Types of family					χ²=0.184
Nuclear family	35	70.0	33	66.0	
Joint family	15	30.0	17	34.0	p = 0.668
Extended family	-	-	-	-	N.S
Previous knowledge about Triage					
Yes	-	-	-	-	-
No	50	100.0	50	100.0	
Father's education					χ²=3.353
Illiterate	5	10.0	1	2.0	
Primary education	20	40.0	20	40.0	p = 0.340
Higher secondary education	18	36.0	23	46.0	
Graduate	7	14.0	6	12.0	N.S
Mother's education					χ²=5.644
Illiterate	6	12.0	1	2.0	
Primary education	20	40.0	29	58.0	p = 0.130
Higher secondary education	16	32.0	14	28.0	
Graduate	8	16.0	6	12.0	N.S
Parent's income					χ²=2.954
9,000 – 10,000	22	44.0	25	50.0	
10,000 – 20,000	21	42.0	14	28.0	p = -0.228
Above 20,000	6	12.0	11	22.0	N.S

Table 2: Effectiveness of simulation based learning VS Lecture method on knowledge regarding Pre-hospital triage management among 1st year B.Sc. (Nursing) students.   N = 100(50+50)

Knowledge	Pre test		Post Test		Mean Difference	Paired 't' Test Value
	Mean	S.D	Mean	S.D		
Simulation method Group I	8.67	2.38	17.10	2.96	8.43	t=15.609 p=0.0001, S***
Lecture method Group II	8.16	2.29	15.14	3.73	6.98	t=13.049 p=0.0001, S***
Mean Difference	0.50		1.96			
Student Independent 't' Test Value	t=1.067 p=0.289 N.S		**t=2.906 p=0.005 S****		***p<0.001, **p<0.01 S – Significant N.S – Not Significant	

In lecture group gender (χ^2=**27.436, p=0.0001**) and area of residence (χ^2=**16.541, p=0.002**) showed statistically significant association with Pretest test level of knowledge regarding pre-hospital triage management among 1st year B.Sc. Nursing Students with

value of p<0.001 and p<0.01 level respectively. Other variables had no significant association with demographical variables. Yaesmin Uslu, et al., (2019) the study reveals that simulation based triage training can be used to improve the triage skills of undergraduate students.

Conclusion

The present study concluded that simulation based method was more effective in teaching compared to the usual Lecture method to improve knowledge among Nursing students and it can be considered as a new approach for promoting the various learning skills among the Nursing students.

Recommendations

The study can be replicated with a large samples for better generalization.

- More studies can be conducted on improving the level of knowledge using different teaching methods.
- Studies can be done to assess the knowledge of Nursing students on improving the level of knowledge regarding Pre Hospital Triage Management
- Comparison can be done to evaluate the effectiveness of different teaching methods with other nursing interventions among B.Sc. Nursing I-year students.

References

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