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A STUDY TO ASSESS THE EFFECT OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EMERGENCY DRUG ADMINISTRATION AMONG B.SC NURSING STUDENTS IN SELECTED NURSING COLLEGE OF GUWAHATI, ASSAM

Nursing

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ABSTRACT

Emergency medicine is the medical speciality concerned with care of illnesses or injuries requiring immediate medical attention. The study is aimed to assess the effect of planned teaching programme on knowledge regarding emergency drug administration among 3rd year B.Sc Nursing students. Pre experimental one group pre-test post-test research design and evaluative research approach was used. The sample consisted of 50 3rd year BSc Nursing students and purposive sampling technique was adopted to select the samples. The tools were demographic proforma and structured knowledge questionnaire on Emergency Drug administration. The results showed that there was marked increase in post-test knowledge. The mean post-test knowledge score (22.58) was higher than the mean pre-test knowledge score (12.94) and mean difference between the pre-test and post-test score is 9.64. The calculated 't' value was found to be 16.45. The planned teaching programme was effective in improving the knowledge of 3rd year BSc Nursing students.

KEYWORDS

Assess, Effect, Planned Teaching Programme, Knowledge, Emergency drugs

INTRODUCTION

Emergency medicine, also known as accident and emergency medicine, is the medical speciality concerned with the care of illnesses or injuries requiring immediate medical attention.[1] Emergency medicine is officially recognized as a speciality in nearly 50 countries around the world including India in 2009.[2,3]

Administration of medication is an important component of skilled nursing practice, and nursing students require personal and supportive supervision from Registered Nurses to enhance learning and promote safety. Before drug administration nursing students should have the knowledge regarding name of drugs, actions, dose range, side effects of the medication, patient drug allergies and any precautions to be taken[4]

The 16 rights of medication administration are:-

1- Right Drug
2- Right Dose
3- Right Patient
4- Right Route
5- Right Preparation
6- Right Time
7- Right Handling
8- Right Storage
9- Right Expiry Date
10- Right Discard
11- Right Administration
12- Right Explanation
13- Right Documentation
14- Right Order
15- Right Pressure Temperature Chart
16- Right Universal Precautions

To reduce the chance of errors, pre-registration nursing students are taught about the requirements of safe practice in the theoretical and practical components relevant to medication administration in their undergraduate programs.[5]

Objectives

- To determine the pre-test knowledge of emergency drugs administration among the B.Sc Nursing students.
- To assess the post-test knowledge regarding emergency drug administration.
- To determine the effect of planned teaching programme on emergency drug administration among B.Sc Nursing students.
- To determine the association of pretest knowledge score with selected demographic variables (ie, age, gender, source of knowledge and exposure in emergency situation).

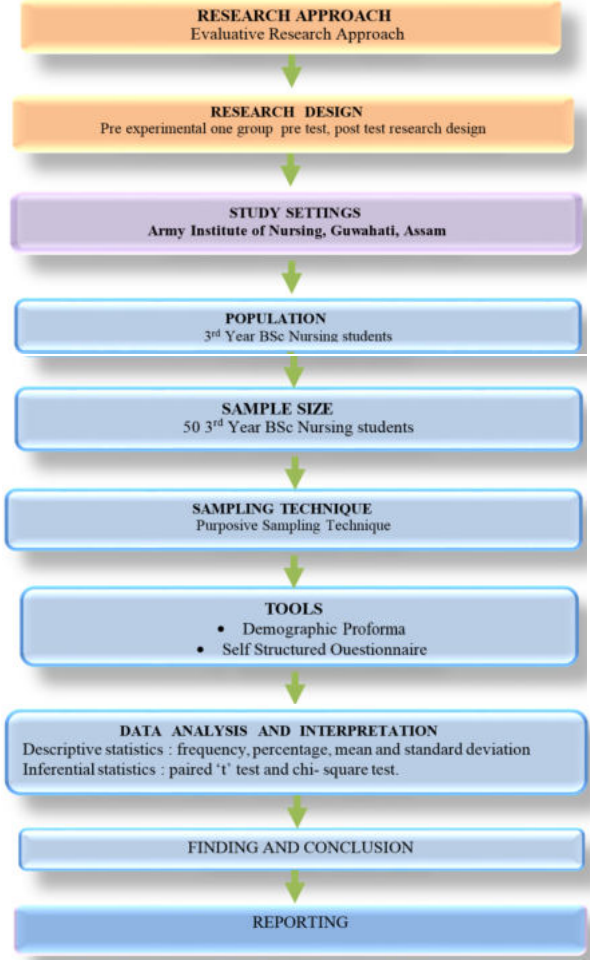

Fig. 3: Schematic diagram of research design

INCLUSIVE CRITERIA

- 3rd year BSc Nursing students, studying in selected Nursing College of Guwahati.

EXCLUSIVE CRITERIA

- 3rd year BSc Nursing students who were not available during data collection.

Table 1: Frequency and percentage distribution of knowledge regarding emergency drug administration among 3rd year B.Sc Nursing students according to their age.

N=50

SL. NO	SAMPLE CHARACTERISTICS	FREQUENCY (f)	PERCENTAGE (%)
1	Age (in years)		
	• 18-20	3	6%
	• 21-23	42	84%
	• 24-26	5	10%
	• Above 27	-	-

Table 1 shows that out of 50 (fifty) students, 3 (6%) students were in the age group of 18-20 years, 42 (84%) students were in the age group of 21-23 years, 5 (10%) students were in the age group of 24-26 years.

N=50

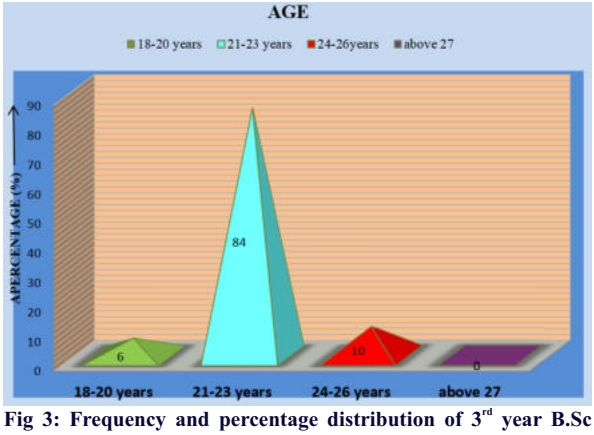

Fig 3: Frequency and percentage distribution of 3rd year B.Sc Nursing students by age.

Table-2: Frequency and percentage distribution of knowledge regarding emergency drug administration among 3rd year B.Sc Nursing students according to their gender.

N=50

SL. NO	SAMPLE CHARACTERISTICS	FREQUENCY (f)	PERCENTAGE (%)
2	Gender		
	• Male	-	-
	• Female	50	100%

Table 2- shows that all (100%) of the samples were female students.

N=50

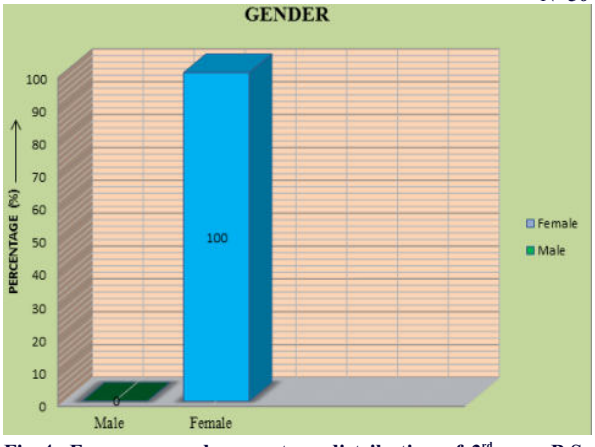

Fig 4: Frequency and percentage distribution of 3rd year B.Sc Nursing students by gender

Table 3: Frequency and percentage distribution of knowledge regarding emergency drug administration among 3rd year B.Sc Nursing students according to their source of knowledge.

N=50

Sl. No	Sample Characteristics	Frequency (f)	Percentage (%)
3	Source of knowledge		
	• Health personnel	44	88%
	(teacher/senior nurses/doctor)		
	• Friends	2	4%
	• Mass media	3	6%
	• Self-experience	1	2%

Table 3 shows that all of the students 50(100%) were having information on the topic, 44 (88%) got knowledge from health personnel (teacher/senior nurses/doctor), 2 (4%) from friends, 3 (6%) from mass media and 1 (2%) from self-experience.

N=50

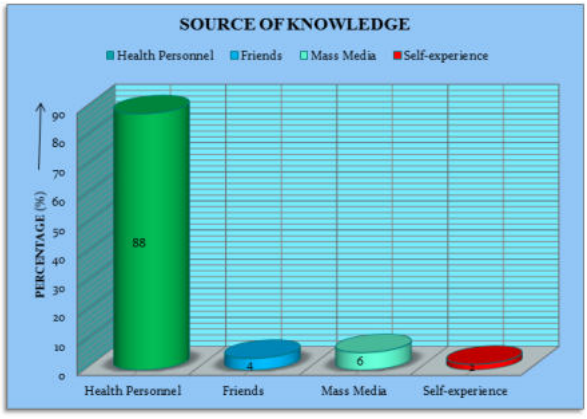

Fig 5: Frequency and percentage distribution of 3rd year B.Sc Nursing students by source of knowledge.

Table-4: Frequency and percentage distribution of knowledge regarding emergency drug administration among 3rd year B.Sc Nursing students according to their expose in emergency situation.

N=50

Sl. No	Sample Characteristics	Frequency (f)	Percentage (%)
4	Do you expose in emergency situation		
	• Yes	30	60%
	• No	20	40%

Table 4 shows that 30 (60%) students were exposed in emergency situation and 20 (40%) students were not exposed in emergency situation.

N=50

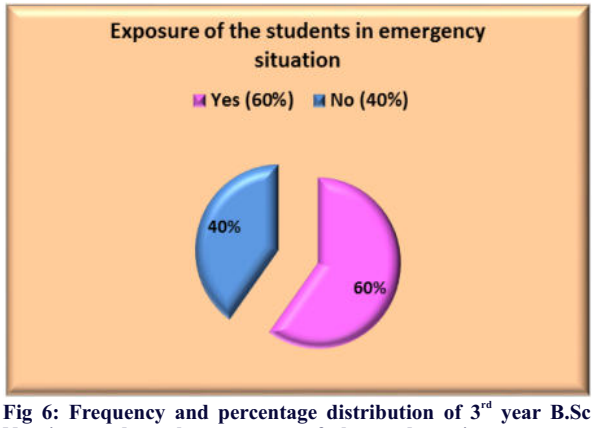

Fig 6: Frequency and percentage distribution of 3rd year B.Sc Nursing students by exposure of the students in emergency situation.

Table 2: Frequency and percentage of pre-test and post-test knowledge score of 3rd year B.Sc Nursing students on emergency drug administration.

N=50

KNOWLEDGE SCORE	PRE-TEST		POST-TEST	
	(f)	(%)	(f)	(%)
Inadequate	7	14%	-	-
(0-10)				
Moderate	42	84%	7	14%
(11-20)				
Adequate	1	2%	43	86%
(21-30)				

The data presented in Table 2 indicates that, in pre-test 7 (14%) students have inadequate knowledge, 42 (84%) students have moderate knowledge and 1 (2%) student have adequate knowledge. Where in the post-test, 7 (14%) students have moderate knowledge and 43 (86%) students have adequate knowledge. So, post-test score remain higher than the pre-test knowledge score.

Table 3: Mean, Standard deviation, Mean difference and t-value of pre-test and post-test knowledge scores.

N=50

Sl No	Knowledge Score	Mean	SD	Mean Difference	Calculated "t" Value	df	Tabulated Value	Inference
1	Pre-test	12.94	2.88	9.64	16.45	49	2.0096	S
2	Post-test	22.58	2.86					

***S= Significant, NS= Not Significant, P<0.05**

The data presented in Table 3 shows that the mean post-test knowledge score (22.58) was higher than the mean pre-test knowledge score (12.94) and difference between the pre-test and post-test score was 9.64. The calculated t-value was 16.45 and the tabulated value of df 49 for 0.05 level of significance was 2.0096. Thus the calculated value is greater than the tabulated value and hence null hypothesis (H_{01}) was rejected and the research hypothesis was accepted i.e, there was a significant between the pre-test and post-test knowledge score on emergency drug administration.

Table 4: Chi-square values computed between pre-test knowledge score and selected demographic variables.

N=50

Demographic Variables	Knowledge Score			Chi Square (2)	df	Tabulated Value	Inference
	Inadequate	Moderate	Adequate				
1. Age (In Year)							NS
• 18-20	1	2	-	1.95	6	12.59	
• 21-23	6	35	1				
• 24-26	-	5	-				
• Above 27	-	-	-				
2. Gender						5.99	NS
• Male	-				2	-	
• Female	7	42	1				
3. Source of knowledge							NS
• Health (Teachers/Senior Nurses/Doctors)	5	38	1	3.55	6	12.59	
• Friends	1	1	-				
• Mass Media	1	2	-				
• Self-Experience	-	1	-				
4. Do you expose in Emergency situation							NS
• Yes	2	27	1	3.84	2	5.99	
• No	5	15	-				

S= Significant, NS= Not Significant, P<0.05

The findings presented in Table 4 shows that there was no significant association between pre-test knowledge with selected demographic variables. Thus research hypothesis is rejected and null hypothesis is accepted. The data also shows that the chi square value computed in pre-test knowledge with selected demographic variables were found to be not significant at <0.05.

DISCUSSION

The findings of the present study reveals that in pre-test seven (14%) students had inadequate knowledge, forty-two (84%) students had moderate knowledge and one (2%) student had adequate knowledge. Where in the post-test, seven (14%) students had moderate knowledge and forty-three (86%) students had adequate knowledge. So, post-test score remain higher than the pre-test knowledge score.

The present study was supported by an experimental study conducted by Kanakalakshmi R, Latha P, Indira A et al. (2019) regarding the emergency drugs among nurses in Narayana medical college hospital, Nellore. The sample for the present selected from 100 nurses in NMCH, Nellore. Regarding the level of knowledge on emergency drugs among nurses, 1(1%) had inadequate knowledge, 25(25%) had average knowledge and 74(74%) had adequate knowledge. The mean knowledge score of nurses was 9.71 and standard deviation was 3.516.[6]

The findings of the present study revealed that the mean post-test knowledge score (22.58) was higher than the mean pre-test knowledge score (12.94) and difference between the pre-test and post-test score is 9.64. The calculated t-value was 16.45 and the tabulated value of df 49 for 0.05 level of significance was 2.0096. Thus the calculated value was greater than the tabulated value and hence null hypothesis (H_{01}) was rejected and the research hypothesis was accepted i.e, there was a significant difference between the pre-test and post-test knowledge score on emergency drug administration.

The present finding is supported by a study conducted by Mr. Rajendra D. Lamkhede (2014). The study is to assess the effectiveness of planned teaching programme (PTP) on knowledge of emergency drugs among staff nurses working in critical care units in selected hospitals at Mangalore. One group pre-test post-test research design was used and out of 30 staff nurses were selected by convenient sampling method. The result of the study reveals that knowledge score of staff nurses on emergency drugs in post-test score found higher 87.73%(43.67) and SD of 4.13, when compared with pre-test mean knowledge score value which was 52%(26) with SD of 6.98. The mean effectiveness score was 35.73% with SD of 2.80 and paired 't' test value was 16.38. Thus this test was found to be effective.[7]

The findings of the present study revealed that there was no significant association between pre-test knowledge with selected demographic variables. Thus research hypothesis is rejected and null hypothesis is accepted.

Therefore the present study was supported by the study of Vinil U, Sweta, Ujjwal P (2018). The study is to assess the effectiveness of Structured Teaching Programme on knowledge regarding selected Emergency Medications among 3rd year B.Sc Nursing Students of Rama college of Nursing at Kanpur". Among 30 students, Chi-square test was computed to determine the association between the pre-test knowledge score with the selected demographic variables. It was proved that there was no association of knowledge score with selected variables like age, sex, family history of cardiac problem and type of family.[8]

CONCLUSION

The result of the study highlights the effect of a structured teaching programme on emergency drug administration among 3rd year BSc Nursing students, therefore the nursing students can understand the

importance of having good knowledge regarding the emergency drug administration.

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