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"A Study To Assess The Effectiveness Of Structured Teaching Program On Knowledge Regarding Transportation Of Sick Neonates Among B.Sc. [N] 3rd Yr Students Studying In Selected College Of Nursing, Indore (MP) In The Year 2019-2020."

[1]Maushmi Dashhare, [2]Sumit Padihar

[1]M.Sc. Nursing final year students, [2]Research Supervisor

[1]Government College of Nursing, Indore (M.P.), India, [2]Government College of Nursing, Indore (M.P.), India

Abstract

The word 'transportation' gets from the Latin words 'portare' (to convey) and trans-(over). With regards to transportation of clients, the word signifies "to convey the patient to a nursing element". The individual Greek word is discovered in a citation of Phrynichos, dated back to sixth century BC, where it is expressed "the one, who moved Europe". The aim of the study is to assess the effectiveness of structured teaching program on knowledge regarding transportation of sick neonates among B.Sc. [N] 3rd yr students. Pre-experimental one group pre-test post-test research design is adopted in this study. A quantitative evaluative research approach was used to find out the effectiveness of structured teaching programme on transportation of sick neonates. The sample size consisting of 40 B.Sc. [N] 3rd year students who are studying in Government college of nursing, Indore. They were chosen by Non probability convenient sampling techniques. The data was collected prior and after administration of structured teaching programme by self-structured questionnaire. This was noted at post-test stage that the average (Mean ± Standard Deviation) knowledge scoring (15.55 ± 1.98 points) of staff nurses found to be significantly greater and improved after administration of structured teaching program as compared to average pretest knowledge scoring (6.43 ± 1.03 points) at baseline (pre-test) stage. Further, this was noted that knowledge scoring of B.Sc. [N] 3rd year students found to be statistically ($p<0.05$) significant between before and after administration of structured teaching program. Author concluded that there was a statistically significant effectiveness seen in

knowledge regarding transportation of sick neonates thus, the intervention 'structured teaching programme, was effective in improving the knowledge in B.Sc. [N] 3rd year students.

KEYWORDS- Assess, Knowledge, STP and transportation of sick neonates

1. Introduction

A newborn is additionally called an neonate. The neonatal period is the initial a month of a youngster's life. It is when changes are extremely fast. Numerous critical times can happen in this period: Feeding designs are set up, holding among guardians and newborn child start, the danger for diseases that may turn out to be more genuine are higher, numerous birth or innate deformities are first noted. Transportation of neonate is utilized to move untimely and other wiped-out babies starting with one emergency clinic then onto the next, for example, another clinical facility that has a NICU and different administrations. Neonatal vehicle administrations, for example, NETS use mobile ICU incubators fixed with MV [Mechanical ventilators], physiological monitors & infusion pumps capable of being utilized in a mobile environment. These vehicle frameworks try to copy the climate of a neonatal serious consideration and grant continuous consideration to happen in a hospital (referring) & then time of journey by air ambulance or road. Clinical gas supplies & power are conveyed inside the framework just as utilizing outer supplies; as accessible. Baby transport frameworks ordinarily weigh more than 100 kg and present a test to vehicle administrators as far as manual taking care of, weight, power utilization & crashworthiness.

2. Problem statement

"A study to assess the effectiveness of structured teaching program on knowledge regarding transportation of sick neonates among B.Sc. [N] 3rd yr students studying in selected college of nursing, Indore (MP) in the year 2019-2020."

3. Objectives

The objectives of the study are:

1. To assess the pre-existing knowledge regarding transportation of sick neonates among B.Sc. [N] 3rd year students.

2. To evaluate the effectiveness of structured teaching program on knowledge regarding transportation of sick neonates among B.Sc. [N] 3rd year students.

3. To determine association between pre-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students with their selected demographical variables.

4. Hypothesis

H_{01}: There will be no significant difference between mean pre-test knowledge score and post-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students.
RH_1: There will be significant difference between mean pre-test knowledge score and post-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students.
H_{02}: There will be no significant association between mean pre-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students with their selected demographic variables.
RH_2: There will be significant association between mean pre-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students with their selected demographic variables.

5. Assumption

The study assumes that:

1. The B.Sc. [N] 3rd year students may have deficit knowledge regarding transportation of sick neonates.
2. Structured teaching program may enhance their knowledge of B.Sc. [N] 3rd year students about transportation of sick neonates.

6. Research methodology

A pre-experimental one group pre-test post-test research design is adopted in this study. A quantitative evaluative research approach was used to find out the effectiveness of structured teaching programme on transportation of sick neonates. The sample size consisting of 40 B.Sc. [N] 3rd year students who are studying in Government college of nursing, Indore. They were chosen by Non probability convenient sampling techniques. The data was collected prior and after administration of structured teaching programme by self-structured questionnaire.

7. Data Analysis and interpretation

Raw data of 40 samples was collected and entered in to the computer data base. The response of frequencies were calculated and analyzed by using various statistical tools. The mean and standard deviation of knowledge scores are observed to evaluate significant test score. Paired test for observation was used to compare the mean values of test score. The data was collected from **40** samples on knowledge regarding transportation of sick neonates among B.Sc. Nursing 3rd year students in selected college of nursing at Indore. The collected information was organized, tabulated, analyzed and interpreted using descriptive and inferential statistics.

This analysis is divided as follows:-

Section A: Frequency and percentage distribution of samples according to demographic variables.

Section B: Comparison between the pre test and post test knowledge score among the B.Sc. Nursing 3rd year students.

Section C: Find out the association between the pre-test knowledge score with the selected demographic variable.

Section- A Frequency and percentage distribution of selected samples.

The present section comprises of selected demographic variables with their tabular and graphic representation which involves the interpretation of data in term of frequency and percentage distribution. The present section also concerned with data pertaining to the baseline information such as age in years, number of sibling, exposure to pediatric ward, previous knowledge regarding transportation of sick neonates, source of information.

Table No. 1.
Frequency and percentage distribution of B.Sc. Nursing 3rd year students according to age

S. No.	Demographic Variable	No.	Percentage
1.	**Age**		
	a. Below 20 years	0	0.0
	b. 20-22 years	35	87.5
	c. 23-25 years	5	12.5
	d. Above 25 years	0	0.0

There were 35 (87.5%) B.Sc. Nursing 3rd year students in the age group 20-22 years, 5 (12.5%) B.Sc. Nursing 3rd year students were in the age group 23-25 years, while none of them (0.0%) B.Sc. Nursing 3rd year students were in the age group of below 20 and above 25 years.

Table No. 2
Frequency and percentage distribution of B.Sc. Nursing 3rd year students according to Number of sibling

S. No.	Demographic Variable	No.	Percentage
2.	**Number of Sibling**		
	a. 1	15	37.5
	b. 2	12	30.0
	c. 3	6	15.0
	d. More than 3	7	17.5

In this study found 15 (37.5%) B.Sc. Nursing 3rd year students were have 1 sibling, 12 (30.0%) B.Sc. Nursing 3rd year students were have 2 sibling, 6 (15.0%) B.Sc. Nursing 3rd year students were have 3 sibling, while 7 (17.5%) B.Sc. Nursing 3rd year students were have more than 3 sibling.

Table No. 3
Frequency and percentage distribution of B.Sc. Nursing 3rd year students according to Exposure to pediatric ward

S. No.	Demographic Variable	No.	Percentage
3.	**Exposure to pediatric ward**		
	a. Yes	15	37.5
	b. No	25	62.5

There were 15 (37.5%) B.Sc. Nursing 3rd year students were having exposure to pediatric ward, while 25 (62.5%) B.Sc. Nursing 3rd year students were not having any type of exposure to pediatric ward.

Table No. 4
Frequency and percentage distribution of B.Sc. Nursing 3rd year students according to previous knowledge transportation of sick neonates

S. No.	Demographic Variable	No.	Percentage
4.	**previous knowledge**		
	a. Yes	9	22.5
	b. No	31	77.5

There were 9 (22.5%) B.Sc. Nursing 3rd year students were having previous knowledge regarding transportation of sick neonates, while 31 (77.5%) were not having previous knowledge regarding transportation of sick neonates.

Table No. 5

Frequency and percentage distribution of B.Sc. Nursing 3rd year students according to sources of previous knowledge regarding transportation of sick neonates

S. No.	Demographic Variable	No.	Percentage
5.	**Sources of previous knowledge**		
	a. Seminar	0	0.0
	b. Demonstration	3	7.5
	c. Mass media	5	12.5
	d. None of them	32	80.0

There were 3 (7.5%) B.Sc. Nursing 3rd year students were having knowledge from demonstration, 5 (12.5%) B.Sc. Nursing 3rd year students were having knowledge from mass media, 32 (80.0%) B.Sc. Nursing 3rd year students were not having knowledge from any of them.

Section- B Comparison of pretest and posttest knowledge score among B.Sc. Nursing 3rd year students.

For assessing the effectiveness of planned teaching programme, structured knowledge questionnaire consisting of 20 questions were given to the B.Sc. Nursing 3rd year students for each correct answer the staff nurses was given 1 mark and for every wrong answer was given 0 mark. Only 1 question was correct for every question. Thus, B.Sc. Nursing 3rd year students could obtain a minimum of 0 marks and maxim/um of 20 marks. These marks were score as poor (0-5), average (6-10), good (11-15) and excellent (16-20).

Table No. 6
Comparison of the pre-test and post-test knowledge score

S. No.	Knowledge score		Pretest		Posttest	
			No.	%	No.	%
1.	Poor	(0-5)	7	17.5	0	0.0
2.	Average	(6-10)	33	82.5	1	2.5
3.	Good	(11-15)	0	0.0	15	37.5
4.	Excellent	(16-20)	0	0.0	24	60.0
	Total		40	100.0	40	100.0

The above table shows the pre-test and post-test knowledge score.

The knowledge questionnaire consisted of 20 questions. For each correct answer 1 mark was given, for each wrong answer 0 mark was given. The score was further graded as Poor (0-5), Average (6-10), Good (11-15) and Excellent (16-20).

In the pre-test, 7 (17.5%) B.Sc. Nursing 3rd year students got poor knowledge score, 33 (82.5%) B.Sc. Nursing 3rd year students got average knowledge Grade, none of them B.Sc. Nursing 3rd year students got good knowledge Grade and excellent score.

Then an intervention was given to these B.Sc. Nursing 3rd year students sand the same set of knowledge questionnaire was re-administered.

In the post-test, 1 (2.5%) B.Sc. Nursing 3rd year students got average knowledge score, 15 (17.5%) B.Sc. Nursing 3rd year students got good knowledge score, 24 (60.0%) B.Sc. Nursing 3rd year students got excellent knowledge score, none of them B.Sc. Nursing 3rd year students got poor knowledge score garde.

Thus, the intervention was helpful in improving the post-test knowledge score of the B.Sc. Nursing 3rd year students.

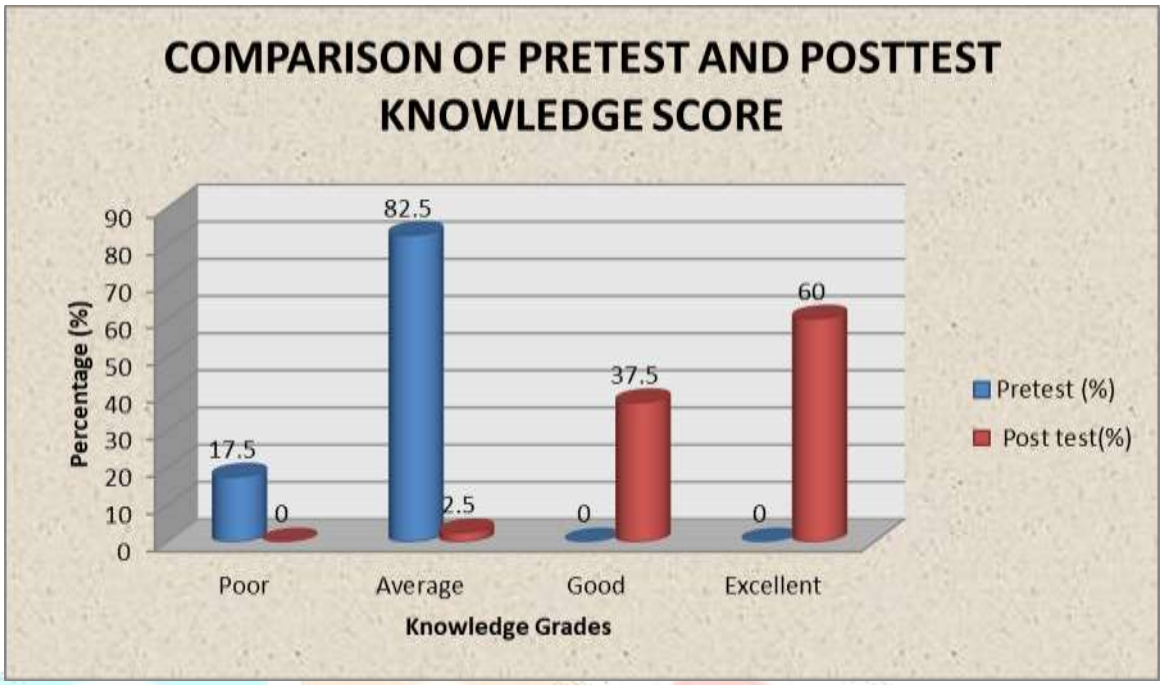

Fig. 1: Bar diagram showing comparison of pre-test and post-test knowledge score.

Table No. 7

Measurement of change in the pre-test and post-test knowledge

S. No.	Knowledge Score	Mean ± SD	't' value	p value
1.	Pretest	6.43 ± 1.03	-27.29, df=39	P<0.05
2.	Posttest	15.55 ± 1.98		

Paired 't' test applied p value <0.05, Significant

The above table shows the measurement of change in the pre-test and post-test knowledge score.

The pre-test knowledge score was 6.43 ± 1.03, while the post-test knowledge score was 15.55 ± 1.98. The difference was found to be statistically significant ('t' value = -27.29, df=39, p value <0.05, Significant), showing a higher post-test knowledge score.

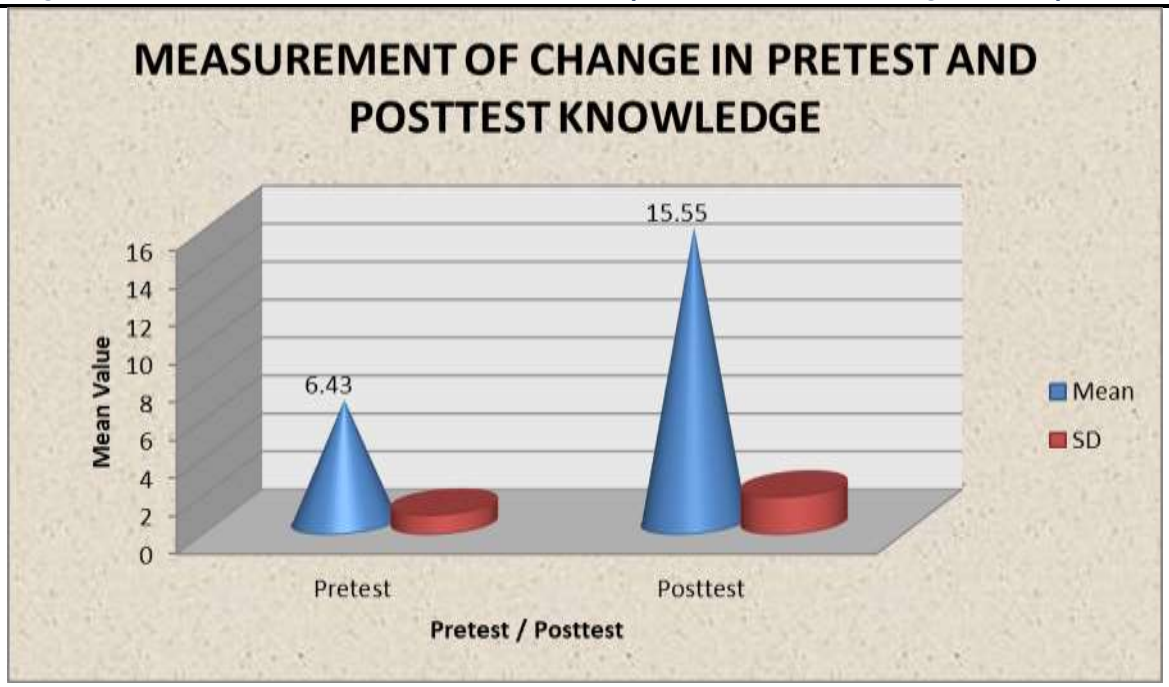

Fig.2: Bar diagram showing measurement of change in pre-test and post-test knowledge score

Section- C Association between pretest knowledge score with selected demographic variables.

- There is a statistically no significant association seen between pre-test knowledge grade and the age of B.Sc. Nursing 3rd year students ($\chi 2$= 0.02, df=1, p value = >0.05, Not Significant), showing that pre-test knowledge score is independent of the age of the B.Sc. Nursing 3rd year students
- There is a statistically no significant association seen between pre-test knowledge grade and number of siblings of B.Sc. Nursing 3rd year students ($\chi 2$= 5.83, df=3, P value = >0.05, Not Significant), showing that pre-test knowledge score is independent of number of siblings of the B.Sc. Nursing 3rd year students
- There is a statistically no significant association seen between pre-test knowledge score and exposure to paediatric ward of B.Sc. Nursing 3rd year students ($\chi 2$=1.39, df=1, P value = >0.05), showing that pre-test knowledge score is independent of the exposure to paediatric ward of B.Sc. Nursing 3rd year students
- There is a statistically no significant association seen between pre-test knowledge score and previous knowledge of B.Sc. Nursing 3rd year students ($\chi 2$=0.17, df=1, pvalue = >0.05), showing that pre-test knowledge grade is independent of the previous knowledge of B.Sc. Nursing 3rd year students
- There is a statistically no significant association seen between pre-test knowledge score and the Sources of previous knowledge ($\chi 2$=0.62, df=3, p value = >0.05, Not Significant), showing that pre-test knowledge grade is independent of the Sources of previous knowledge.

8. Result

This was noted at post-test stage that the average (Mean ± Standard Deviation) knowledge scoring (15.55 ± 1.98 points) of staff nurses found to be significantly greater and improved after administration of structured teaching program as compared to average pretest knowledge scoring (6.43 ± 1.03 points) at baseline (pre-test) stage. Further, this was noted that knowledge scoring of B.Sc. [N] 3rd year students found to be statistically ($p<0.05$) significant between before and after administration of structured teaching program.

9. Conclusion

Thus, after the analysis and interpretation of data, we can conclude that the hypothesis **H_0** that, there will be no significant difference between mean pre-test knowledge score and post-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students **is rejected.**

And the hypothesis **H_1:** - it was found there will be significant difference between mean pre-test knowledge score and post-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students **is accepted**.

Thus, **null hypothesis H_{02}** there will be significant association between mean pre-test knowledge score regarding transportation of sick neonates among B.Sc. [N] 3rd year students with their selected demographic variables **being accepted and H_2 is rejected.**

From the above results, we can conclude that there was a statistically significant effectiveness seen in knowledge regarding transportation of sick neonates thus, the intervention 'structured teaching programme, was effective in improving the knowledge in B.Sc. [N] 3rd year students.

10. Limitations

The limitations of the present study include:

1. Assessment of knowledge is limited to written response given to structured knowledge questionnaires.
2. The study is also limited with available data collection period.
3. The study is limited to 40 B.Sc. [N] 3rd year students from selected nursing college at Indore

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