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A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING EXTRA CORPOREAL OXYGENATION THERAPY AMONG NURSING STUDENTS AT SELECTED COLLEGE IN THIRUVALLUR

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ABSTRACT

Introduction: Extra corporeal membrane oxygenation also known as extra corporeal life support, in an extra corporeal technique of providing prolonged cardiac and respiratory support to persons whose heart and lungs are unable to provide an adequate amount of gas (O2, Co2) exchange or perfusion to sustain life. ECMO machine it pumps and oxygenates a patient's blood outside the body, allowing the patient and lungs to rest and promotes healing. Methodology: The research approach used in the study was quantitative approach using pre- experimental one group and post-test research design. Samples were selected based on sample inclusion criteria. 50 samples were selected with purposive sampling technique. The pre-test level of knowledge on toxic shock syndrome among adolescent girls was assessed by structured questionnaire which took 20 minutes. The interventions (teaching) were given through PPT, Flashcards, Charts, Pictures and Videos carried over by lecture cum discussion method on various aspects of toxic shock syndrome for 30 minutes. The post-test data was collected from the students with the same structured questionnaire after 7 days through Google form. Results: The findings revealed that the effectiveness of structured teaching program on level of knowledge regarding the toxic shock syndrome among adolescent girls report and findings revealed that the pre-test mean knowledge score was 16.98 with the standard deviation of 8.6904 and in post-test the mean knowledge score was 34.08 with the standard deviation of 17.26. The calculated paired 't' test value of t = 10.20 showed a high statistically significant difference between pre-test and post-test (p>0.005) which proved that structured teaching program was effective in improving the knowledge regarding the toxic shock syndrome among adolescent girls. Hence the hypothesis stated that "there is no significant association between demographic variables" Conclusion: The investigator concluded that structured teaching program can be used as an intervention in improving the knowledge among nursing students.

Key words: Pre-experimental, Assess, Effectiveness, Structured teaching program, Knowledge, Extra Corporeal Oxygenation Therapy, Nursing Students.

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INTRODUCTION

OBJECTIVES OF THE STUDY

- To assess the pre-test and post-test knowledge regarding Extra Corporeal Oxygenation Therapy in children among nursing students.
- To assess the effectiveness of structured teaching program on knowledge regarding Extra Corporeal Oxygenation Therapy in children among nursing students.
- To associate socio demographic variables with the post level of knowledge regarding Extra Corporeal oxygenation therapy in children among selected nursing students

RESULTS:

The following are the results of the based on the objectives.

The first objective was to assess the pre-test and post-test level of knowledge regarding Extra Corporeal Membrane oxygenation Therapy in children among nursing students.

The findings revealed that in the pre-test, 26(52%) had inadequate knowledge regarding pediatric extra corporeal membrane oxygenation therapy and 24(48%) had moderately adequate knowledge and after the administration of Structured Teaching programme 45(90%) had adequate knowledge and 5(10%) had moderately adequate knowledge regarding pediatric extra corporeal membrane oxygenation therapy among nursing students.

The second objective was to assess effectiveness of Structure Teaching Programme on knowledge regarding Pediatric Extra Corporeal Membrane Oxygenation Therapy among Nursing Students.

The findings revealed that in the pre-test, the mean score of knowledge was 14.72±2.96 and the post-test mean score of knowledge was 28.20±3.14. The mean difference score was 13.48 with mean difference percentage of 44.9%. The calculated paired 't' test value of t=23.322 which was not found to be statistically significant at p<0.001 level. This clearly infers that structured teaching programme on knowledge regarding pediatric extra corporeal membrane oxygenation therapy administered among nursing students was found to be effective in improving the level of knowledge in the post test.

Therefore, the hypothesis H1 stated earlier that "There is a significant difference in the pre-test level of knowledge regarding Pediatric Extra Corporeal Membrane Oxygenation Therapy among Nursing Students" was accepted at p< 0.05 level.

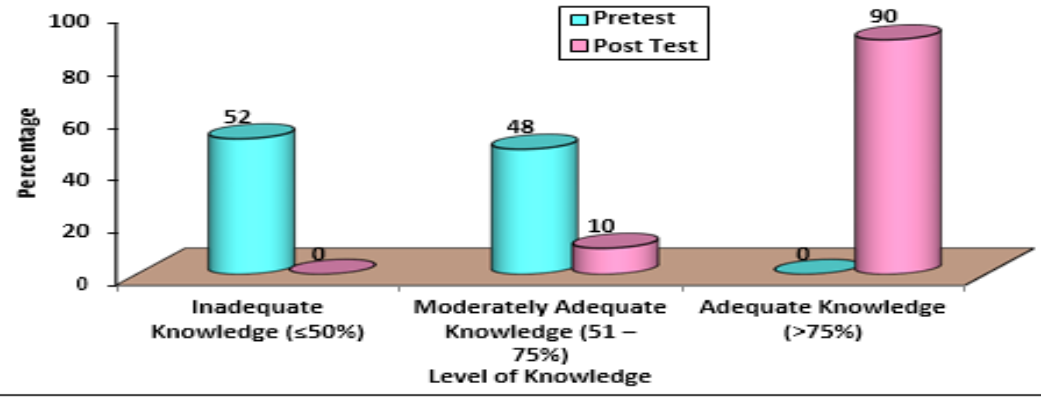
The third objective is to associate the associate the socio demographic variables with the post-test level of knowledge regarding Extra Corporeal Membrane Oxygenation Therapy in children among nursing students.

The findings revealed that the demographic variable place of residence (F=3.974, p=0.025) had shown statistically significant association with post-test knowledge scores regarding pediatric extra corporeal membrane oxygenation therapy among nursing students at p<0.05 level. The other demographic variables did not show statistically significant association with post-test knowledge scores regarding pediatric extra corporeal membrane oxygenation therapy among nursing students.

Hence the hypothesis H2 stated earlier "There is a significant association of post-test knowledge scores regarding Pediatric Extra Corporeal Membrane Oxygenation Therapy among Nursing Students with their selected demographic variables" was accepted for place of residence and not accepted for the remaining variables.

Table 1:

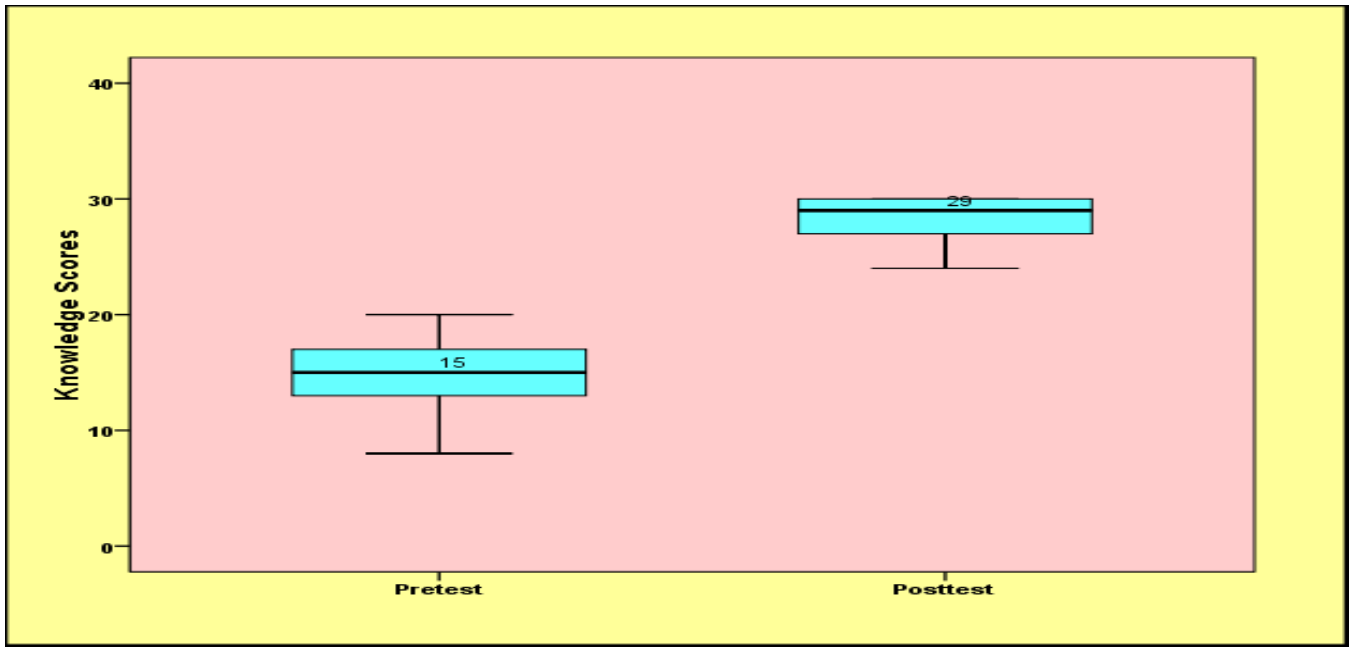
	PRETEST		POST TEST	
	F	%	F	%
INADEQUATE KNOWLEDGE (≤50%)	26	52.0	0	0
MODERATELY ADEQUATE KNOWLEDGE (51 – 75%)	24	48.0	5	10.0
ADEQUATE KNOWLEDGE (>75%)	0	0	45	90.0



Test	Mean	S.D	Mean Difference & %	Paired 't' testvalue
Pretest	14.72	2.96	13.48 (44.9%)	**t=23.322 p=0.0001, S*****
Post Test	28.20	3.14		

Demographic Variables	F	Mean	S.D	One way ANOVA "F" / Unpaired 't' test value
Place of residence				**F=3.974p=0.025 S***
Rural	35	28.94	2.41	
Urban	5	25.60	4.39	
Suburban	10	26.90	3.93	
Slum	-	-	-	

Figure 01:



CONCLUSION

This study was done to determine the effectiveness of Structure Teaching Programme on knowledge regarding Pediatric Extra Corporeal Membrane Oxygenation Therapy among Nursing Students at selected college in Thiruvallur. The findings verified that the structured teaching programme administered among the nursing students was found to be effective in improving the level of knowledge regarding pediatric extra corporeal membrane oxygenation therapy. The investigator concluded that STP can be used as an intervention in improving the knowledge among nursing students.

NURSING IMPLICATION

The findings of the study have certain important implication for the nursing services, education, administration and nursing research.

Nursing Practice

- Education on pediatric extra corporeal membrane oxygenation therapy will enlighten the nursing practice to design and formulate mass health education programme among the student nurses.
- Education regarding pediatric extra corporeal membrane oxygenation therapy has to be given to the nursing students during the course of study and should be provided with self-learning educative materials on pediatric extra corporeal membrane oxygenation therapy.

Nursing Education

- The result of the study emphasizes the need for correlating the concepts in order to understand and advice on paediatric extra corporeal membrane oxygenation therapy.
- Student nurses should be motivated in participating and organizing structured teaching programme on

various aspects of paediatric extra corporeal membrane oxygenation therapy.
- Initiative has to be taken to publish books and articles in journals about paediatric extra corporeal membrane oxygenation therapy.

Nursing Administration
- Nurse administrator plays a vital role in hospital area which is useful to concentrate on student nurses. The health services should include both individual and group health education regarding the importance of paediatric extra corporeal membrane oxygenation therapy.
- Nurse administrator should ensure that student nurses who avail the practice from the hospital must be provided with the self-administrative material on paediatric extra corporeal membrane oxygenation therapy.

Nursing Research
- It is important to identify the level of knowledge regarding paediatric extra corporeal membrane oxygenation therapy among nursing students. This study provides baseline data for conducting further research studies.
- It is necessary to provide health communication to improve the knowledge about paediatric extra corporeal membrane oxygenation therapy.
- Researches can be conducted on practicing the latest method of teaching.

RECOMMENDATIONS
- Similar studies can be replicated on a larger sample
- This study can be done in urban area and rural area as a comparative study Skill and practices can be assessed along with knowledge

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