

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND SKILL AMONG STUDENT NURSES REGARDING NEBULIZER THERAPY AMONG STUDENT NURSES IN SELECTED NURSING COLLEGES AT RAJNANDGAON (C.G)

Author's name: ¹Dr. Uma Shendey, ²Mrs.Shiny Saju

¹Professor ,Dept.of Child Health Nursing , Govt.college of nursing Rajnandgaon (C.G.)

²Assistant Professor ,Dept.of Child Health Nursing , Govt.college of nursing Rajnandgaon (C.G.)

E-mail:mayabagde82@gmail.com

Abstract	<p><i>“Mindfull breathing brings calm and relief to the body and mind...” - ThichNhatHanh</i></p> <p><i>A nebulizer is an important device used to inhalant the drugs to treat some pulmonary diseases. The examination of student nurse's knowledge and skill regarding the nebulizer therapy has not been conducted before .</i></p> <p><i>Assess the effectiveness of structured teaching programme on knowledge and skill among student nurses regarding nebulizer therapy among student nurses.</i></p> <p><i>A study to assess the effectiveness of structured teaching programme on knowledge and skill among student nurses regarding nebulizer therapy among student nurses in selected nursing colleges at Rajnandgaon (C.G)</i></p>
Keywords	<p><i>ching Programme, Knowledge, Nebulizer, Nursing College</i></p>

OBJECTIVES

1. To assess the pretest and post-test knowledge and skill score of student nurses regarding nebulizer therapy.
2. To assess the effectiveness of structured teaching program regarding nebulizer therapy in terms of gain in knowledge and skill among student nurses.
3. To assess the relationship between post-test knowledge and skill of student nurses regarding nebulizer therapy.
4. To determine the association between pretest knowledge and skill score regarding nebulizer therapy with selected demographic variables.

HYPOTHESIS

H1- There will be significant effectiveness of structured teaching program on posttest knowledge score among student nurses regarding nebulizer therapy.

H2- There will be significant effectiveness structured teaching program on posttest skill score of student nurses regarding nebulizer therapy.

H3- There will be significant relationship between knowledge and skills of student nurses regarding nebulizer therapy.

H4- There will be significant association between pretest knowledge score of student nurses regarding nebulizer therapy with selected socio demographic variables.

H5- There will be significant association between pretest skill score of student nurses regarding nebulizer therapy with selected socio demographic variables.

REVIEW OF LITERATURE

The literature review was based on 3 sections:

Section A: Literature related to bronchial asthma.

Section B: Literature related to aerosol therapy specially nebulizer therapy.

Section C: Literature related to knowledge, skill and effectiveness of structured teaching

program on nebulizer therapy.

METHODOLOGY

Research approach used for the study was Pre-Experimental research approach and research design for this study was one group pre-test and posttest design. Target population were student nurses and accessible population were student nurses of age between 20-25yrs. Setting used for the study was Rastogi College of Nursing, Tedesara and Confluence College of Nursing Parrinala, Rajnandgaon. 60 student nurses sample was selected by purposive sampling technique. Tool used for data collection was self-structured questionnaire for assessing socio-demographic variables and knowledge of student nurses on nebulizer therapy and self-structured rating scale was used to assess the student nurse’s skill on nebulizer therapy. Pilot study was done on 10 subjects in Central College of Nursing Devada Rajnandgaon. The reliability co-efficient of the self-structured knowledge questionnaire was 0.92 and for rating scale to assess skill regarding nebulizer therapy was 0.68.

SAMPLE SELECTION CRITERIA

Inclusion Criteria: Student nurses who are aged between 20-25yrs.

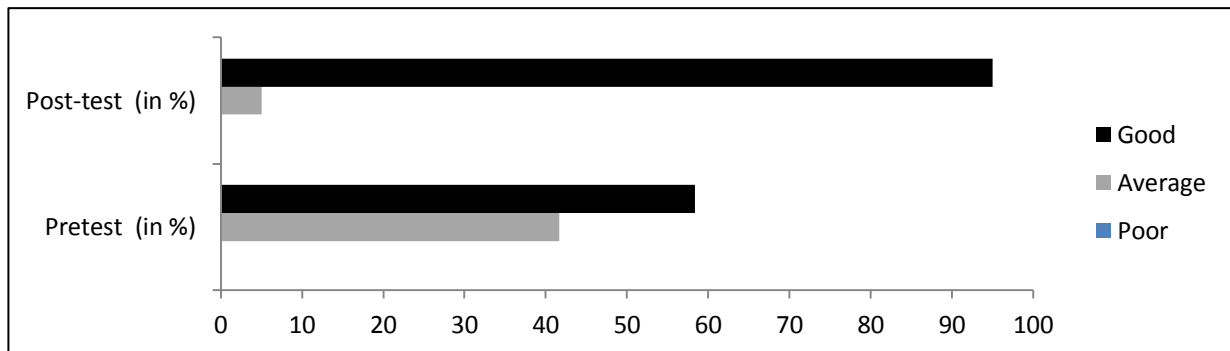
Exclusion Criteria: Student nurses who are absent on the day of data collection.

MAJOR FINDINGS

1. Findings of Objective 1:

a) Assessment of the pretest and posttest knowledge score of student nurses regarding nebulizer therapy.

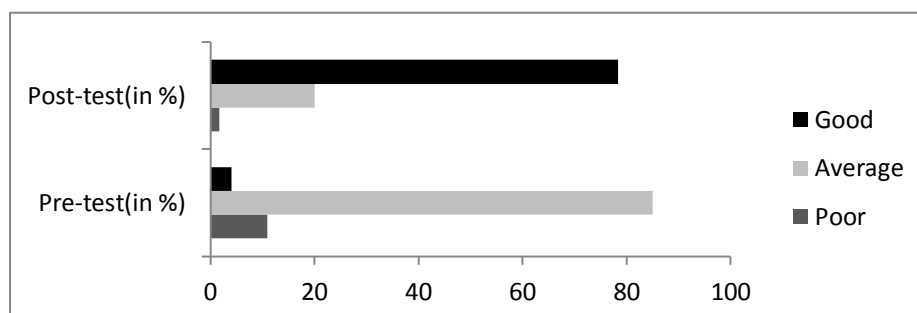
Knowledge Score	Poor	Average	Good
Pre-test (in %)	0	41.66	58.34
Post-test (in %)	0	5	95



a) Bar diagram showing the pretest and posttest knowledge score of student nurses regarding nebulizer therapy.

b) Assessment of the pretest and posttest skill score of student nurses regarding nebulizer therapy.

Skill Score	Poor	Average	Good
Pretest (in %)	11	85	4
Post-test (in %)	1.66	20	78.34



1(b) Bar diagram showing the pretest and posttest skill score of student nurses

regarding nebulizer therapy.

2. Findings of Objective 2:

- A) Assessment of the effectiveness of structured teaching program regarding nebulizer therapy in terms of gain in knowledge among student nurses.
- B) Assessment of the effectiveness of structured teaching program regarding nebulizer therapy in terms of gain in skill among student nurses.

Knowledge Score		Mean	Mean Difference	Standard Deviation	T-value	Level of Significance at 0.5
Pre-Experimental Group (N=60)	pre-test	83	3.76	2.05	14.16	significant
	post-test	89				

3. Findings of Objective 3: Relationship between post-test knowledge and skill score of pre-experimental group (N=60)

Variable	Knowledge Mean score	Skill mean score	't' value	Level of significance at 0.05
post test score	98	83	0.60	not significant

4. Findings of objective 4:

Knowledge category →	Good	Average	Poor	Chi-Square value	P value	Level of significance At p>0.05
Age (in yrs) ↓						
20-21	30	15	0	11.57710	0.020789	significant
22-23	4	9	0			
24-25	1	1	0			

- a) Association between pretest knowledge score regarding nebulizer therapy with selected demographic variables
- b) Association between pretest skill score regarding nebulizer therapy with selected demographic variables

Skill category	Good	Average	Poor	Chi-Square value	P value	Level of significance At p>0.05
Age (in yrs)						
20-21	1	40	4	8.6048	0.071775	Not significant
22-23	1	10	2			
24-25	0	1	1			

RESULTS

H1- H1 hypothesis is accepted in the study as there is significant effectiveness of structured teaching program on post-test knowledge score among student nurses regarding nebulizer therapy at 0.05 level of significance with t value 14.16.

H2- H2 hypothesis is accepted in the study as there is significant effectiveness of structured teaching program on post-test skill score of student nurses regarding nebulizer therapy at 0.05 level of significance with t value 16.25

H3- H3 hypothesis is accepted in the study as there will be significant relationship between knowledge and skills of student nurses regarding nebulizer therapy at 0.05 level of significance with t value 0.60.

H4- H4 hypothesis is accepted in the study as there is significant association between pretest knowledge score of student nurses regarding nebulizer therapy with selected socio demographic variable i.e. age of student nurses with chi-square value 11.577 and p value 0.0207 which is p>0.05 level of significance.

H5- H5 hypothesis is rejected in the study as there is no significant association between pretest skill score of student nurses regarding nebulizer therapy with selected socio

demographic variable i.e. Age of student nurses with chi-square value 8.604 and p value 0.071 which is $p < 0.05$ level of significance.

DISCUSSION

A study cited in National Library of Medicine on the topic of Assessment of Physicians' and Nurses' Knowledge and Practices of Aerosol Therapy by N Eychenne, A Jaouadi, D Macquart de Terline et al in 2016 states a total of 481 physicians and nurses completed the questionnaires (33 % of physicians and 67 % of nurses). Only 241/480 physicians and nurses (50 %) knew that several intravenous drugs cannot be nebulized. Ninety-four of 422 (22 %) of them always choose oxygen as the driving gas and 239/311 nurses (77 %) think that single use nebulizers can be re-used for the same patient. The authors further concluded based on those results, a booklet has to be designed by the working team. This booklet should help health professionals to harmonize practices across hospitals and to follow the guidelines correctly.

IMPLICATIONS

1. Continuous follow up of student nurses and staff nurses knowledge and skill related to nebulizer therapy should be done to increase their proficiency.
2. Appraisal of students can be done to increase quality patient care.

RECOMMENDATIONS

1. A time series study with regular teaching and correction of procedure can be done.
2. A replication of study can be done on staff nurses.

BIBLIOGRAPHY

1. Current best practice for nebulizer treatment. The Nebulizer Project Group of the British Thoracic Society Standards of Care Committee. Thorax. 1997; 52(Suppl 2):S1-3. [PubMed] [Google Scholar]
2. O.P.Ghai. Textbook of Essential Pediatrics, 14th edition. Pg.no.283-284