

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

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Abstract	<p>The objective of the study was to evaluate the effectiveness of structured teaching program on knowledge and practice regarding health hazards of junk foods among high school students. To assess the pre -test and post- test knowledge of students regarding health hazards of junk foods in selected high schools of Rajnandgaon. This research approach used for the study was true experimental approach. The sample size consists of 300 students. 150 students were selected for experimental group & and 150 students were selected for control group. The schools were randomly assign to both experimental and control group, Both experimental and control group the students were selected for the study by simple random sampling technique. A self-administered questionnaire for the assessment of knowledge and practice regarding health hazard of junk foods among high school children. The data analysis was planned according to the study by using descriptive statistics and inferential statistics. The experimental group while doing pre- test knowledge were 72% students had moderate knowledge. During post- test knowledge were 73% had moderate knowledge. The control group while doing pre - test knowledge 69.33% had moderate knowledge, post- test of control group knowledge 68.67% students had moderate knowledge. The mean score of post- test knowledge 9.22 > 8.78 of pre - test knowledge score on experimental group and control group. There was a statically significant difference between control group and experimental group. The variables age, standard, gender, education, occupation and income of parents, family type and source of information are in no relation with knowledge score of students regarding health hazards of junk foods. And it is clear from the table that the variables type of food pattern, and religion where highly significantly associated with knowledge score.</p>
Keywords	Structured Teaching, Health Hazards, High School, Junk Food, Knowledge

“Mindfull breathing brings calm and relief to the body and mind...”

- ThichNhatHanh

BACKGROUND

A nebulizer is an important device used to inhale 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.

AIM OF STUDY

Assess the effectiveness of structured teaching programme on knowledge and skill of student nurses regarding nebulizer therapy.

PROBLEM STATEMENT

A study to assess the effectiveness of structured teaching programme on knowledge and skill of student nurses regarding nebulizer therapy in selected nursing colleges at Rajnandgaon (C.G)

OBJECTIVES

1. To assess the pretest and posttest 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 posttest 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 post test knowledge score among student nurses regarding nebulizer therapy.

H2- There will be significant effectiveness structured teaching program on post test 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 programme 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 DevadaRajnandgaon. 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
Pretest (in %)	0	41.66	58.34
Post-test (in %)	0	5	95

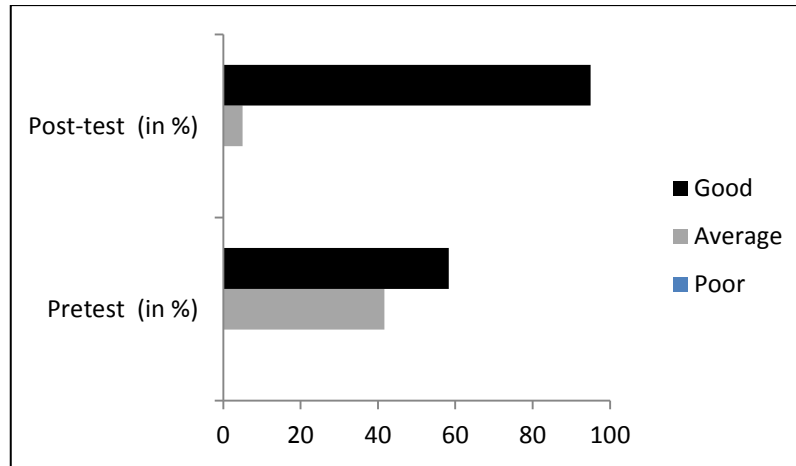


Fig 1(a) Bar diagram showing the pretest and post-test knowledge score of student nurses regarding nebulizer therapy.

b) Assessment of the pretest and post-test 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

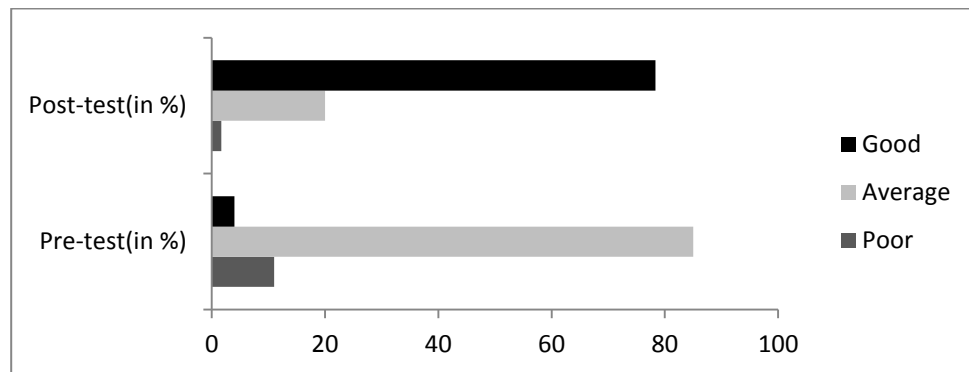


Fig 1(b) Bar diagram showing the pretest and post-test skill score of student nurses regarding nebulizer therapy.

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.

Knowledge Score		Mean	Mean Difference	Standard Deviation	'T' Value	Level of Significance at 0.05
Pre-Experimental Group	Pre-Test	20.8	3.76	2.05	14.16	Significant
	Post-Test	23.98				

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 0.05
Pre-Experimental Group N=60	Pre-Test	37.85	31.98	15.19	16.25	Significant
	Post-Test	67.33				

2. 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	23.98	67.33	0.60	Significant

4. Findings of objective 4:

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

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

(b) Association between pretest skill score regarding nebulizer therapy with selected demographic variables

Skill category → Age (in yrs) ↓	Good	Average	Poor	Chi-Square value	P value	Level of significance At p>0.05
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 Terlineetal 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.

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