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A quasi experimental study to assess the effectiveness of planned teaching programme on knowledge regarding management of bronchial asthma among staff nurses at selected hospitals of district kangra (H.P).

Author -I
Heena Begum
Netaji Subhash College of Nursing, Palampur, Kangra H.P.
M.Sc. in Medical Surgical Nursing (Cardio vascular and Thoracic Nursing).

Author -II
Diksha Sharma
Nursing Tutor, Netaji Subhash College of Nursing, Palampur, Kangra H.P.
M.Sc. in Medical Surgical Nursing (Oncology).

ABSTRACT

Asthma is a chronic, inflammatory disease of the airways ,and large burden of illness among patients, families,and the health-care system. The challenge is to bridge the gap between excessive asthma morbidity and the science that holds the promise of reducing it; The objective of this study was to assess the effectiveness of planned teaching programmes on knowledge regarding management of patients with bronchial asthma among staff nurses at selected hospitals of district Kangra(H.P).

A quantitative research approach and Quasi experimental research design, with one group pre-test and post-test design was chosen for the study, conducted at selected hospitals of district Kangra(H.P).The samples consisted 60 nurses by using non-probability purposive sampling technique .The pre and post-test knowledge score on bronchial asthma management was assessed using self-structured knowledge questionaire. The statistical analysis was to compare the pre and post-test knowledge score on management of bronchial asthma patients among staff nurses shows that planned teaching programme is effective in improving the knowledge level of staff nurses i.e. from a mean pre-test score (16.25) to mean post test knowledge score (24.83).These findings were consistent with the findings of t" value obtained was (19.267) at P <0.05 level of significance) which was highly significant.The post test score was high as compare to pre-test score,which shows the effectiveness of planned teaching programme. The present study concluded that the planned teaching programme on bronchial asthma management among staff nurses proved to be an effective.

Keywords : Bronchial asthma; staff nurses; Nursing management

Chapter-I

BACKGROUND OF THE STUDY

"***Breath is the finest gift of nature. Be grateful for this wonderful gift."***

— Amit Ray

Asthma is a chronic inflammatory disease of the air way resulting in air way hyper responsiveness mucosal oedema, and mucus productive symptoms are cough, wheeze chest tightness and shortness of breath often worse at night these may occurs a few times a day or a few times per week depending on the person. The incidence of asthma is increasing among population and poor knowledge contributes to increase in morbidity and mortality.Globally, asthma is ranked 16th among the leading causes of years lived with disability and 28th among the leading causes of burden of disease, as measured by disability-adjusted life years. Around 300 million people have asthma worldwide, and it is likely that by 2025 a further 100 million may be affected.[8]

The prevalence of bronchial asthma in Himachal Pradesh was found to be 2.3% in School Children of 6-13 Years of Age in Shimla City (Himachal Pradesh). The prevalence of asthma has been increasing across all age, gender, and racial groups and is found to be higher among children than adults. **"According to World Health Organization (WHO) 2017"** stated the fundamental causes of asthma are uncertain, but there are various risk factors could trigger asthma attack. The risk factors are included genetic susceptibility, air pollution, exposure to occupational chemical stimuli, cold air, extreme emotional arousal, physical exercise, certain medications

It is internationally recommended that the management of asthma should follow a step-wise standardized approach and dose/type of medication is adjusted accordingly to achieve complete symptom control and normal lung function. The goals of asthma management include relief of patient's current symptoms and prevention of further disease progression. The patient should be able to carry out all his/her routine activities without any functional impairment.[12] To improve asthma care, implementation of asthma guidelines should be strengthened. Policies are needed to enable access to affordable, good quality medical care and quality-assured asthma medicines for all people with asthma worldwide.

The emphasis on controlling asthma with preventive medicine and using rescue medicine only to treat acute asthma symptoms. Although there is no permanent cure for Asthma, the disorder can be managed in many ways. In asthma management, complementary and alternative medicine is enjoying a growing popularity worldwide. The health care provider is responsible to educate both patients and family of patient regarding the effects of asthma, as well as current treatment options, tips for early recognition, and preventative measures. For the health care provider to intervene, it is important that they first become educated to recognize causes of asthma, current treatment protocols, symptom management, and proper medication administration.

By understanding and mastering the education associated with bronchial asthma and its proper management, nurses and other health care providers can effectively treat bronchial asthma and can educate the asthmatics patients and families of patients. on the best ways to recognize and treat this chronic problem. As professional health care providers, nurses completely understand the respiratory symptoms of asthma linked to high morbidity and risk of death.

Hospital admission for asthma are often used as a target indicator of improvement in asthma care, but with the poor understanding of the factors underlying variations in hospital admission rates. Admission to hospital during an asthma attack may indicate the first asthma episode or a failure of preventive care for asthma. Hospital care of the patient with bronchial asthma is important to prevent a fatal outcome in severe or troublesome asthma. Practice nurses play an important role in evaluating and systematically reviewing how well patients manage their condition.[14]

Standard practices that have been used to address this gap in practice include interventions targeting asthma aimed at prevention; however, practices should also focus on symptom recognition and prompt treatment of emergent consequences of asthma. Early intervention seems to be the critical factor that determines the severity of outcome of asthma-related complications and successful treatment for patients. Knowledge assessment, evaluation, observation of the staff nurses and health care workers regarding prevention and management of bronchial asthma, and provision of planned teaching programmes ,educational awareness are some important factors in the management of bronchial asthma. Nurse will be able to provide effective care when they are knowledgeable about the concept of bronchial asthma, and able to identify the symptoms and the needs of the patients with bronchial asthma.

"The Global Initiative for Asthma" (GINA) strives to increase the awareness of asthma among health professionals, health authorities, and the general public. Goals include improving diagnosis, management and prevention of asthma by stimulating research, and providing evidenced based educational resources for worldwide use.[15]

Guidelines for asthma management have proposed that evaluation of disease severity is necessary to initialize therapy and maintain treatment through a step-wise process. Misclassification of the levels of severity may contribute to the underuse or overuse of anti-inflammatory medications, resulting in either poor asthma control or adverse side-effects associated with overtreatment. With the advent of biological therapies, recognition of the level of asthma severity is imperative to facilitate treatment interventions to the right patients. Overcoming these barriers is necessary in order to facilitate effective assessment and accelerate appropriate treatment for severe asthma patients.[16]

NEED FOR THE STUDY

Asthma affects the lives of hundred million people around the world. Despite notable progress in disease management, asthma control remains largely insufficient worldwide, influencing patients wellbeing and quality of life. Asthma may also lead to a medical emergency. Therefore, it is important to know the signs of an asthma attack .

Asthma impairs patients well-being and can significantly interfere with the ability to undertake normal daily activities. The burden of asthma affects the patients, their families, and society in terms of lost work and school, lessened quality of life, and avoidable emergency department visits, hospitalizations, and deaths.

The prevalence of asthma is predicted to increase rapidly the coming year. The increase is likely to be particularly dramatic in India, which is projected to become the world's most population's nation by 2050. In absolute 2% increase in the prevalence of asthma has increased markedly in recent years, with up three folds increases seen among people in southern Asia over last two decades about 10 out of every 100 people in India have asthma (world asthma day report 2008).

"Asthma and Quality of Life According to the Scullion (2018)"- "nurses play a vital role in helping patients to decide and learn how to take the many specific actions needed to control asthma". Asthma is one of the common noncommunicable diseases. Asthma affects around 339 million people in all regions of the world. Asthma causes a high global burden of death 8 and disability, with around 1,000 people dying each day from asthma, and is in the top 20 causes of years of life lived with disability.[19]

Social stigma, ignorance and superstition associated with asthma and its management in India can only be countered by constant discussion encouragement and consistent educational programmers. Due to misconceptions and erroneous assumption of facts people are not readily accepting the inhalers thinking that it is very costly and it will lead to addiction. In our country ignorance, superstitions and social stigma associated with asthma and its management can only be countered by constant Discussions encouragement and consistent educational programmes.

Through education of staff nurses and creation of a strong network of asthma educated providers, the patient population at risk may begin to receive the care they need. An education

program on asthma may have a major effect on care by expressing the importance of early symptom recognition and proper management of care.

The education program may also improve the long-term health of asthmatic patients. Staff education has the potential to assist nursing staff to recognize symptoms earlier and allow for intervention. Education and improved understanding of associated risk factors for asthma may assist health care providers in educating parents of asthmatic patient in the clinic regarding the best ways to fight this disease using evidence-based practice guidelines.[20]

An education program for nursing staff had the potential to benefit patient with asthma, thereby promoting social change for patients, their families, and nursing staff. The benefits of an education program may include earlier symptom recognition and treatment, better symptom management, and a decrease in asthma exacerbations. The education program may also improve the long-term health of asthmatic patient. Overall, an education program had the potential to improve the skills, confidence, and knowledge for all participants and lead to an improvement in asthma outcomes.[21]

Good education has long been considered pivotal to effective self-management. The challenge for the asthma nurse is to deliver an up-to-date, well-structured program and to allow time to address any concerns or apprehensions which may affect overall long-term compliance. Moreover, the patient needs to be motivated enough to continue appropriate management behavior. Education is not a stationary process that begins and ends with an initial program around the time of diagnosis. Knowledge must be reinforced and specific problems addressed as they occur. The asthma nurse has to determine the amount of information appropriate to each individual patient. This may mean that for some patients, a a basic understanding of symptom recognition, use of inhalers and emergency action may be as much as they are ever able to cope with, whilst others may wish to take greater control of their asthma. Moreover, education and advice will only result in improved health outcomes if the advice given is correct and has proven clinical effectiveness.[22]

The main aim to raise nursing staff awareness of the symptom recognition, treatment protocols, preventative measures, and detrimental effects of asthma. Staff education has the potential to assist nursing staff to recognize symptoms earlier and allow for intervention. Education and improved understanding of associated risk factors for asthma may assist health care providers in educating he families of asthmatic patients in the hospital regarding the best ways to fight this disease using evidence-based practice guidelines

There is a significant need for regular education and support of people with asthma within an effective partnership with health professionals. Patient involvement should be encouraged in all areas of asthma treatment and management. The major challenge for health professionals is to learn how to tailor asthma management to accommodate individual lifestyles and work patterns, among other aspects, and to become more adept at elucidating individual patient beliefs, expectations, preferences and needs, in order to provide high-quality, proactive care.[23]

Deaths due to asthma are uncommon but are of serious concern because many of them are preventable. Each country needs a coordinated national strategy towards better measurement of the true burden of asthma, improving access to care and improving adherence to asthma management strategies.This study aimed to improve knowledge regarding prevention and management of asthma among staff nurses.[24]

OBJECTIVES: -

1. To assess the pre-test knowledge scores of staff nurses regarding the management of bronchial asthma in selected hospitals of district kangra(H.P)
2. To assess the effectiveness of the planned teaching programme regarding the management of bronchial asthma among staff nurses in selected hospitals of district kangra(H.P) in terms of post test knowledge scores.
3. To compare the pre-test and post-test knowledge scores of staff nurses regarding management of bronchial asthma in selected hospitals of district kangra (H.P)
4. To find out the association of post-test knowledge scores with selected demographic variables among staff nurses regarding the management of bronchial asthma in selected hospitals of district kangra(H.P).

OPERATIONAL DEFINITIONS

Knowledge: The facts, skills and understanding that have gained through learning and experience.

Assess: Assess is to valuing the quality of knowledge and is the action or an instance of making a judgment about something ,the act of assessing something.

Effectiveness: the ability to produce desired output.or the degree to which something is successful in producing a desired result .

Planned teaching programme: It is planned instruction designed to instruct and illustrate to acquire knowledge and information provided to increase their knowledge.

Bronchial Asthma: It is the recurrent attacks of dyspnea with wheezing due to spasmodic contraction of the bronchi and bronchospasm resulting in intermittent airway obstruction,causing difficulty in breathing.

Staff nurse: - The health personnel who works in a hospital taking care of the ill and injured patients.

HYPOTHESES

H_1: There will be significant difference between mean pretest and post test knowledge score regarding management of bronchial asthma, among staff nurses.

Ho_1: There will be no significant difference between mean pretest and post test knowledge score regarding management of bronchial asthma, among Nurses.

H_2: There will be significant association of mean post-test knowledge management of bronchial asthma, among nurses with selected demographic variables.

H_{02}: There will be no significant association of mean post-test knowledge regarding management of bronchial asthma, among nurses with selected demographic variables

DELIMITATION

The study was delimited to:-

- Samples were limited to 60 individuals.
- The study is delimited to all the staff nurses in selected hospitals of district kangra(H.P).

-Inclusion criteria: -

1. Staff nurses
2. Age limitation: 18 years to 50 years
3. Experience: 1 year or more than one year
4. Nurses who will voluntarily participate and give consent

-Exclusion criteria: -

1. Student nurses.
2. Nurses who will refuse to participate in the study.

CONCEPTUAL FRAMEWORK

The conceptual frame work is a set of defined concepts and relational statements to provide a systematic view of phenomena under study.

CONTEXT EVALUATION

Review of literature

Selection of a Research problem

Objectives formulation, hypothesis formulation

Less knowledge of staff nurses regarding asthma management

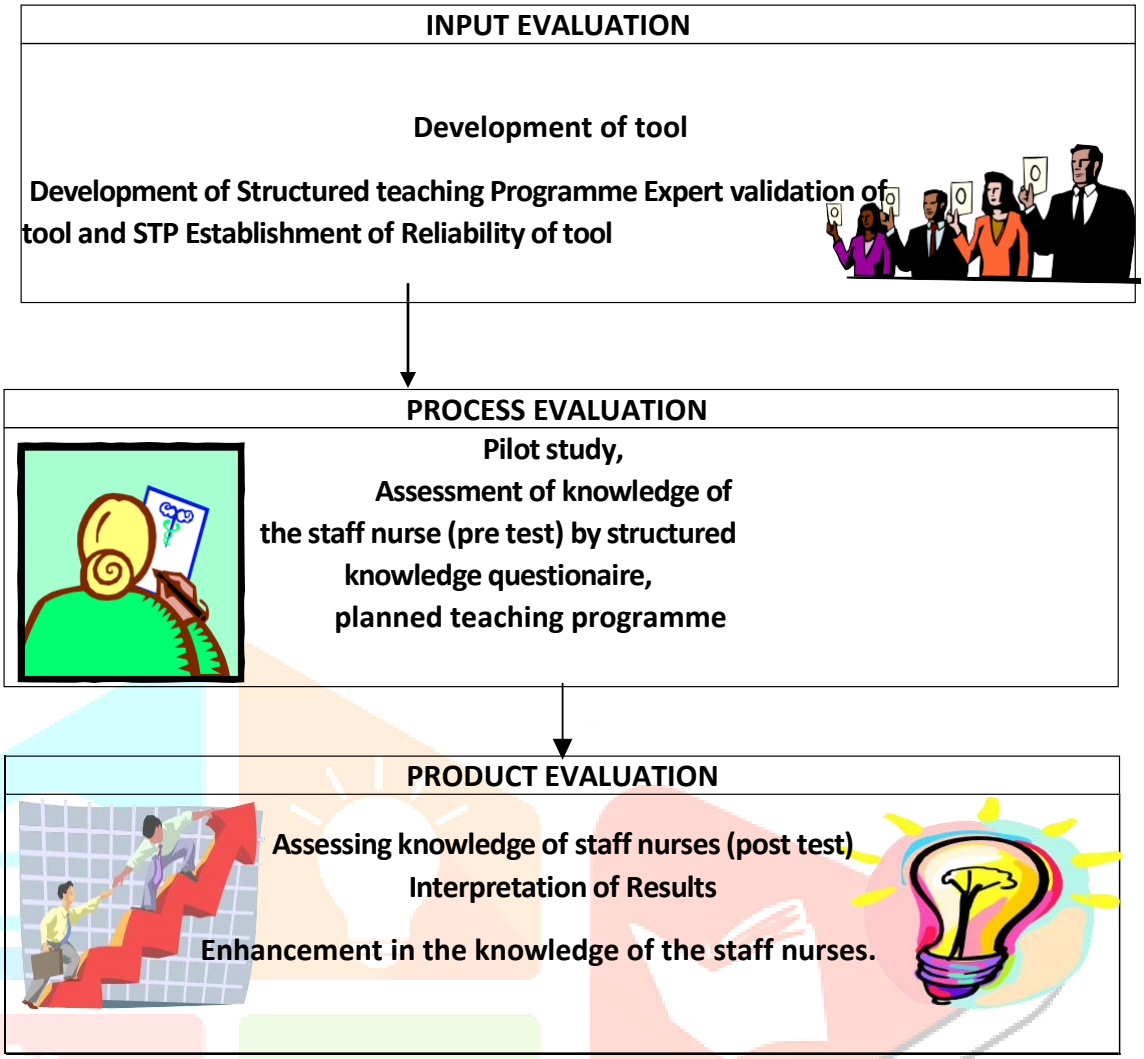

Figure 1: CIPP Evaluation Model by "Daniel Stuffle Beam (2002)," for Conceptual Framework of the Study

CHAPTER- II.

RESEARCH METHODOLOGY

RESEARCH APPROACH: In the present study a quantitative approach was used to assess the knowledge regarding of management of bronchial asthma.

RESEARCH DESIGN: The quasi experimental one group pretest- posttest design was adopted to measure the effectiveness of planned teaching programme.

Group	Pre test	Intervention	Post test
Staff Nurses	O_1	X	O_2

Table 1:The quasi-experimental design chosen for the study is depicted.

The symbols are described as follows:

O_1: Pre-test tool, for measuring knowledge of staff nurses regarding management of bronchial asthma

X:Administration of planned teaching programme regarding management of bronchial asthma

O_2: Post-test for measuring the knowledge of staff nurses regarding management of bronchial asthma

RESEARCH VARIABLES

There are two types of variables that were identified in this study. They are independent variables and dependent variables.

Independent variable: Planned teaching prpgramme for improving the knowledge of staff nurses regarding management of bronchial asthma .

Dependent variable: Knowledge of staff nurses regarding management of bronchial asthma.

RESEARCH SETTING: The present study was conducted at selected hospitals of district knagra, Himachal Pradesh.

Population: The populations of the present study are staff nurses.

Target population: the target population of present study staff nurses worked in selected hospitals of district kangra(H.P.)..

Accessible: staff nurses who are worked in selected hospital of district kangra and meet the specific criteria and are available at the time of study.

SAMPLE :Sample is the subset of the population selected to participate in the research study.

Sample size: The **s**ample for the study comprised of 60 staff nurses.

SAMPLING TECHNIQUE:.In the present study, non-probability purposive sampling technique was used to select the sample.

CRITERIA FOR SELECTION OF SAMPLE

The criteria for selection of sample was as follows

Inclusion criteria:

1. Staff nurses
2. Age limitation: 18 years to 50 years
3. Experience: 1 year or more than one year
4. Nurses who will voluntarily participate and give consent

Exclusion criteria:

1. Student nurses.
2. Nurses who will refuse to participate in the study.
3. Not available at the time of data collection.

SCORING PATTERN

Structured knowledge questionaire consist of 30 questions in which right answer was documented as correct one mark and wrong were documented as a zero mark.The complete ranged from 0-30.

SR.NO.	LEVEL OF KNOWLEDGE	SCORE	PERCENTAGE OF SCORE
1	POOR	0-10	0 % - 33.33 %
2	AVERAGE	11-20	33.34 % - 66.66 %
3	GOOD	21-30	66.67 % - 100 %

TABLE 1 :Criteria for assessing the level of knowledge regarding management of asthmatic patients.

SECTION – A

Description of socio demographic variables of subjects under study

Analysis of Demographic Characteristics of samples

Analysis of demographic data of the sample is described in terms of socio-demographic information such as Age, Marital Status, Qualification, Years of experience, Working area, Source of information.

Table No 3: Frequency and Percentage Distribution of Demographic variables of staff nurses.

Variables	Opts	Percentage	Frequency
Age	21-25 Years	26.7%	16
	26-30 Years	43.3%	26
	31-35 Years	30.0%	18
	36 Years and Above	0.0%	0
Marital Status	Married	65.0%	39
	Unmarried	30.0%	18
	Divorced	3.3%	2
	Widowed	1.7%	1
Qualification	GNM	68.3%	41
	Post basic (N)	11.7%	7
	B.SC (N)	20.0%	12
	M.SC (N)	0.0%	0
Years of Experience	0-2 years	28.3%	17
	2-4 years	48.3%	29
	4-6 years	16.7%	10
	More than 6 years	6.7%	4
Working Area	ICU	20.0%	12
	Emergency	15.0%	9
	Wards	53.3%	32
	OPD	11.7%	7
Previous Information	Yes	81.7%	49
	No	18.3%	11

Table no.2 shows : the frequency of subjects in each demographic variables along with their respective percentages.

SECTION – B

A Frequency and percentage distribution pre test and post test scores of level of knowledge

PRE SCORE:

Table No:3: Pre-test Level of knowledge of staff nurses regarding management of patients with bronchial asthma.

CRITERIA MEASURE OF PRETEST KNOWLEDGE SCORE	
Score Level (N= 60)	PRETEST f(%)
Inadequate knowledge.(0-10)	7(11.7%)
Moderate knowledge.(11-20)	53(88.3%)
Adequate knowledge.(21-30)	0(0%)

Maximum Score=30 Minimum Score=0

Table No.4 shows the Frequency and percentage distribution of pre test knowledge score of staff nurses score regarding bronchial asthma management.11.7% nurses have inadequate knowledge, 88.3 % nurses have moderate knowledge and 0 % nurses have adequate knowledge regarding bronchial asthma management.

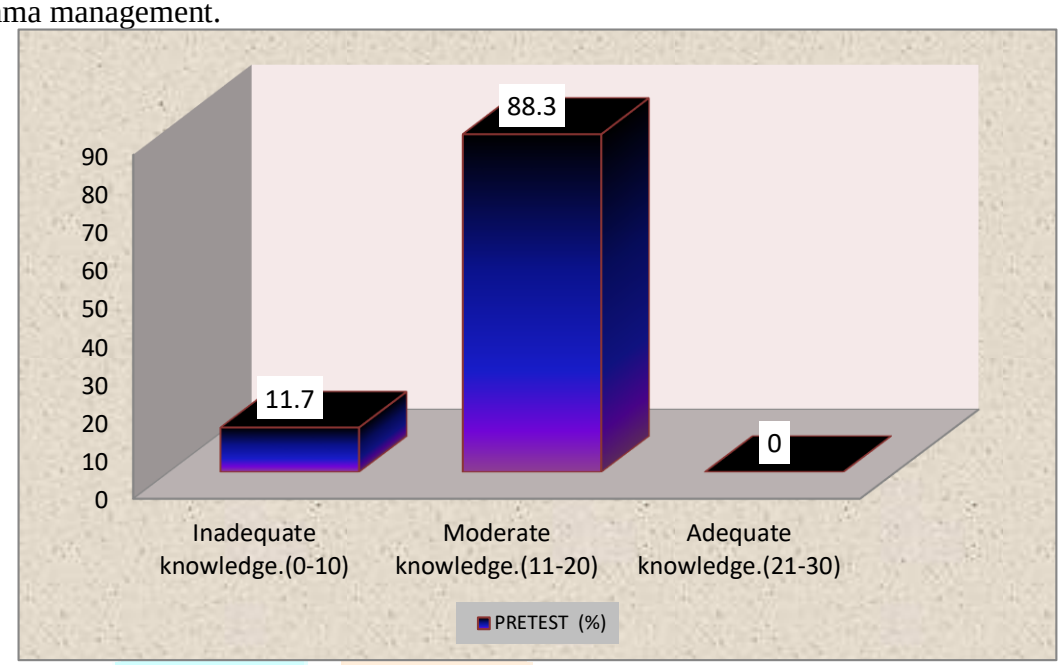

Figure No 1: Bar Diagram showing the percentage distribution of pretest level of knowledge score of staff nurses regarding bronchial asthma management

Table No 5: Descriptive Statistics table showing mean,SD,median score,mean percentage and range of pre-test knowledge score

Descriptive Statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range	Mean%
PRETEST KNOWLEDGE	16.25	3.198	17	20	10	10	54.20
	Maximum=	30	Minimum=	0			

Table No.5 shows the total mean percentage of the pretest knowledge score was 54.20% with mean 16.25 ,range 10,and SD was 3.198.of the staff nurses regarding bronchial asthma management.

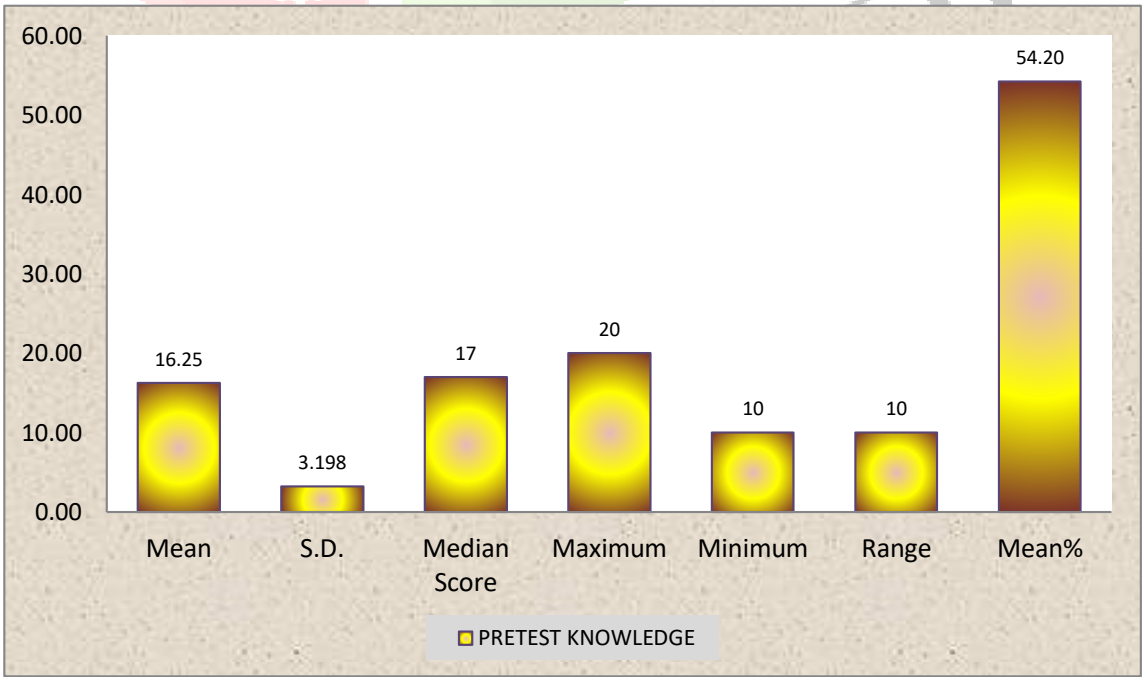

Figure No 2: Bar diagram showing mean,SD,median score,range and mean percentage of pre-test knowledge score of staff nurses

POST SCORE:

Table No 6: Post-test Level of knowledge of staff nurses regarding management of patients with bronchial asthma

CRITERIA MEASURE OF POSTTEST KNOWLEDGE SCORE	
Score Level (N= 60)	POSTTEST f(%)
Inadequate knowledge.(0-10)	0(0%)
Moderate knowledge.(11-20)	4(6.7%)
Adequate knowledge.(21-30)	56(93.3%)

Maximum Score=30 Minimum Score=0

Table No.6 shows the Frequency and percentage distribution of post test knowledge score of staff nurses score regarding bronchial asthma management.0.% nurses have inadequate knowledge, 6.7 % nurses have moderate knowledge and 93.3 % nurses have adequate knowledge regarding bronchial asthma management.

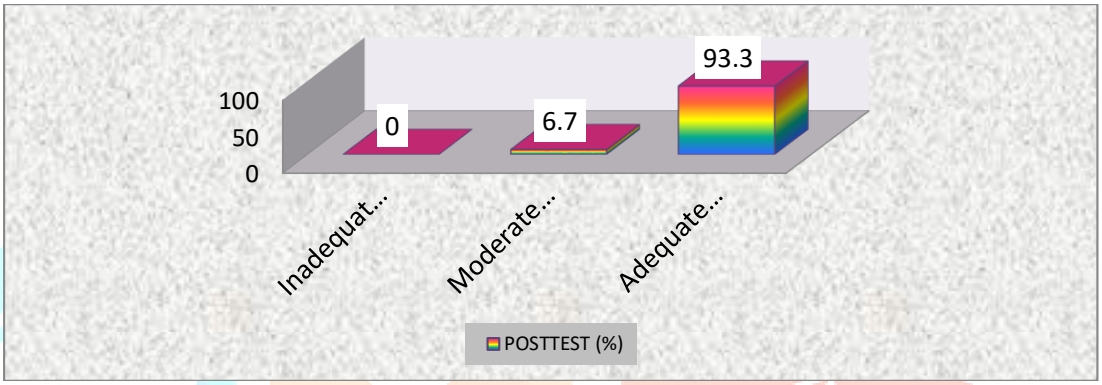

Figure No 3: Bar Diagram showing the percentage distribution of post-test level of knowledge score of staff nurses regarding bronchial asthma management

Table No 7: Descriptive Statistics table showing mean,SD,median score,mean percentage and range of post-test knowledge score

N= 60

Descriptive Statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range	Mean %
POSTTEST KNOWLEDGE	24.83	2.195	25	28	20	8	82.80

Maximum = 30 Minimum = 0

Table No.7 shows the total mean percentage of the post test knowledge score was 82.80% with mean 24.83 ,range 8,and SD was 2.195.of the staff nurses regarding bronchial asthma management.

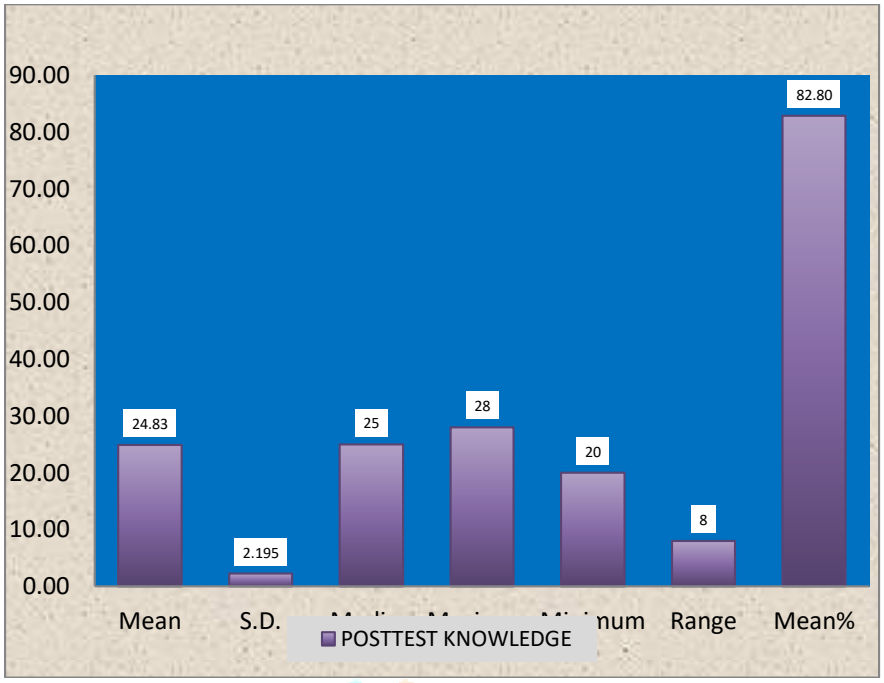

Figure No 4: Bar diagram showing mean,SD,median score,range and mean percentage of post-test knowledge score of staff nurses

SECTION –C

Comparison of pre test and post test level of knowledge

PRE/POST

Table No 8: Frequency and percentage distribution of pre test and post test Table No. 8 shows : the pre test and post test overall knowledge score of staff nurses regarding bronchial asthma management. In pre test 11.7% of staff nurses are having inadequate knowledge and in post test none of the staff nurses are having inadequate knowledge.

CRITERIA MEASURE OF KNOWLEDGE SCORE

Score Level (N= 60)	PRETEST f(%)	POSTTEST f(%)
Inadequate knowledge.(0-10)	7(11.7%)	0(0%)
Moderate knowledge.(11-20)	53(88.3%)	4(6.7%)
Adequate knowledge.(21-30)	0(0%)	56(93.3%)

Maximum Score=30 Minimum Score=0

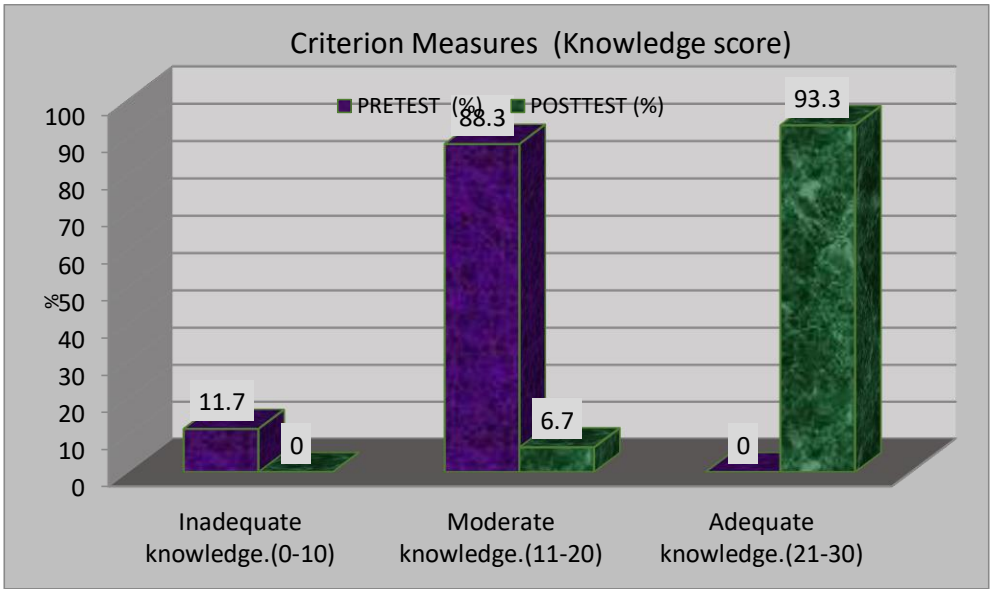

Figure No 5: Bar diagram represents distribution of pre test and post test knowledge score of staff nurses regarding bronchial asthma management

Table No 9: Over all mean,SD,paired 't'value ,range,p value and mean percentage value of pre test and post test

N=60

Paired T Test	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
PRETEST KNOWLEDGE	16.25±3.198	54.20	10-20	8.580	19.267 *Sig	<0.001	2.00
POSTTEST KNOWLEDGE	24.83±2.195	82.80	20-28				

** Significance Level 0.05 Maximum=30 Minimum=0

Table No 9:shows the effectiveness of planned teaching programme from pre test to post test.The mean score during pre test was 16.25 and SD 3.198 but there was gradual increase during post test M=24.83 AND SD=2.195.

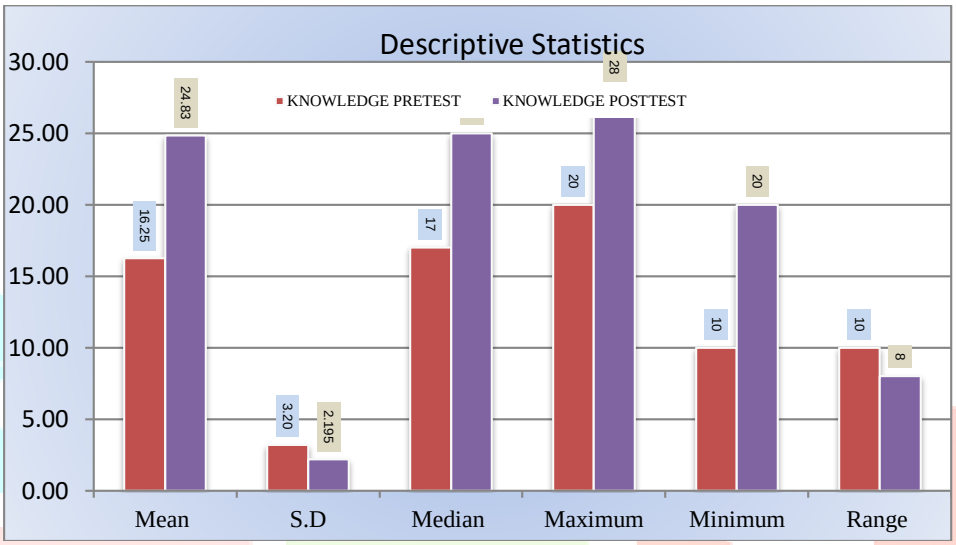

Figure No 6: Bar diagram represents mean,SD,median,, maximum,minimum and range value of pre test and post test score of staff nurses

Table 10: Showing Individual Score Gain(Effectiveness))

Table No.10 shows that effectiveness of planned teaching programme considering the overall score.Staff nurses gained 28.61% more knowledge on management of bronchial asthma , 28.61% gain is the net benefit of this study.

Diagram Showing Individual Score Gain(Effectiveness))						
Mean %	Pretest Knowledge	Posttest Knowledge	Difference	Pretest Knowledge Score %	Posttest Knowledge Score %	Difference%
Average	16.25	24.83	8.58	54.17	82.78	28.61

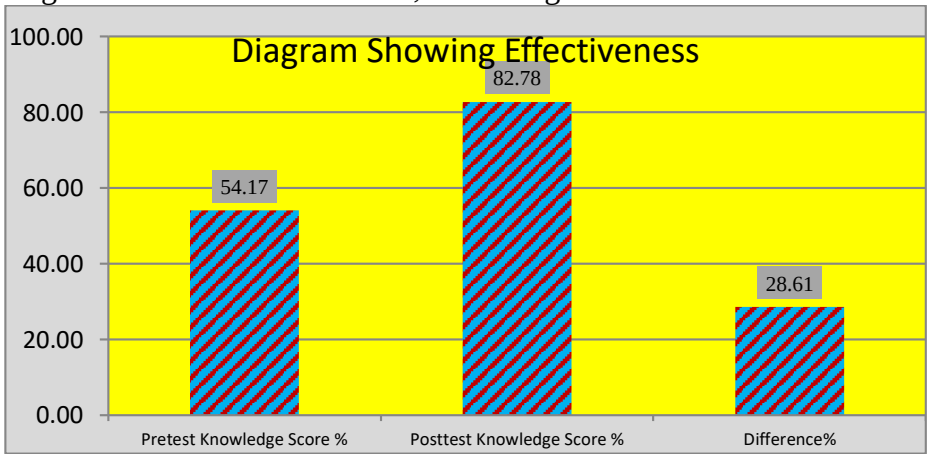

Figure No 7: Diagram Showing Mean Percentage Scores of pre-test knowledge and post-test knowledge score

SECTION – D

Analysis of association between socio demographic variable with pre test /post test knowledge of staff nurses regarding bronchial asthma management

PRE TEST SCORE

Table No 11: Table Showing Association between demographic variables and pre test level of knowledge of staff nurses regarding bronchial asthma management

Association Of Pretest Knowledge Scores Of With Selected Socio-Demographic Variables.

Variables	Opts	Adequate knowledge	Moderate knowledge	Inadequate knowledge	Chi Test	P Value	df	Table Value	Result
Age	21-25 Years		13	3	1.183	0.554	2	5.991	Not Significant
	26-30 Years		24	2					
	31-35 Years		16	2					
	36 Years and Above		0	0					
Marital Status	Married		34	5	0.452	0.929	3	7.815	Not Significant
	Unmarried		16	2					
	Divorced		2	0					
	Widowed		1	0					
Qualification	GNM		38	3	2.869	0.238	2	5.991	Not Significant
	Post basic (N)		6	1					
	B.SC (N)		9	3					
	M.SC (N)		0	0					
Years of Experience	0-2 years		15	2	0.683	0.877	3	7.815	Not Significant
	2-4 years		25	4					
	4-6 years		9	1					
	More than 6 years		4	0					
Working Area	ICU		10	2	2.891	0.409	3	7.815	Not Significant
	Emergency		9	0					
	Wards		27	5					
	OPD		7	0					
Previous Information	Yes		45	4	3.183	0.074	1	3.841	Not Significant
	No		8	3					

Table 11: shows that the association between the level of score and socio demographic variable. Based on the objectives used to Chi-square test used to associate the level of knowledge and selected demographic variables. The Chi-square value shows that there is is no significance association between the level of scores and other demographic variables (Age , Marital Status, Qualification, Years of experience,Working area,Source of information) The calculated chi-square values were less than the table value at the 0.05 level of significance.

POST TEST SCORE

Table No 12: Showing Association between demographic variables and post test level of knowledge of staff nurses regarding bronchial asthma management

Table12:- shows that the association between the level of score and socio demographic variable. Based on the objectives used to Chi-square test used to associate the level of knowledge and selected demographic variables. The Chi-square value shows that there is significance

Association Of Posttest Knowledge Scores Of With Selected Socio-Demographic Variables.

Variables	Opts	Adequate knowledge	Moderate knowledge	Inadequate knowledge	Chi Test	P Value	df	Table Value	Result
Age	21-25 Years	15	1	0	0.084	0.959	2	5.991	Not Significant
	26-30 Years	24	2	0					
	31-35 Years	17	1	0					
	36 Years and Above	0	0	0					
Marital Status	Married	36	3	0	0.316	0.957	3	7.815	Not Significant
	Unmarried	17	1	0					
	Divorced	2	0	0					
	Widowed	1	0	0					
Qualification	GNM	40	1	0	6.629	0.036	2	5.991	Significant
	Post basic (N)	5	2	0					
	B.SC (N)	11	1	0					
	M.SC (N)	0	0	0					
Years of Experience	0-2 years	16	1	0	1.647	0.649	3	7.815	Not Significant
	2-4 years	26	3	0					
	4-6 years	10	0	0					
	More than 6 years	4	0	0					
Working Area	ICU	11	1	0	1.358	0.715	3	7.815	Not Significant
	Emergency	9	0	0					
	Wards	30	2	0					
	OPD	6	1	0					
Previous Information	Yes	46	3	0	0.127	0.721	1	3.841	Not Significant
	No	10	1	0					

association between the score level and demographic variable (Qualification). There is no significance association between the level of scores and other demographic variables ((Age , Marital Status,Years of experience,Working area,Source of information) The calculated chi-square values were less than the table value at the 0.05 level of significance.

Table No 13: According to Demographic variables mean,SD,mean percentage of knowledge score in pre-test

Table No.13:shows the association between socio demographic variables and pre test level of knowledge among staff nurses according to mean,SD,mean percentage.

PRETEST Scores

Variables	Opts	Mean%	Mean	SD	N
Age	21-25 Years	53.8%	16.13	3.72	16
	26-30 Years	55.9%	16.77	2.69	26
	31-35 Years	52.0%	15.61	3.43	18
	36 Years and Above	0.0%			0
Marital Status	Married	53.2%	15.97	3.32	39
	Unmarried	55.6%	16.67	3.12	18
	Divorced	56.7%	17.00	2.83	2
	Widowed	60.0%	18.00		1
Qualification	GNM	54.6%	16.39	3.08	41
	Post basic (N)	54.3%	16.29	3.30	7
	B.SC (N)	52.5%	15.75	3.74	12
	M.SC (N)	0.0%			0
Years of Experience	0-2 years	54.5%	16.35	3.28	17
	2-4 years	52.9%	15.86	3.22	29
	4-6 years	56.0%	16.80	3.39	10
	More than 6 years	57.5%	17.25	2.99	4
Working Area	ICU	58.1%	17.42	3.58	12
	Emergency	51.1%	15.33	2.18	9
	Wards	52.3%	15.69	3.37	32
	OPD	60.0%	18.00	1.63	7
Previous Information	Yes	55.0%	16.51	3.04	49
	No	50.3%	15.09	3.78	11

Table No: 14 According to Demographic variables mean,SD,mean percentage of knowledge score in post-test

Table No.14:shows the association between socio demographic variables and post test level of knowledge among staff nurses according to mean,SD,mean percentage

POSTTEST Scores

Variables	Opts	Mean%	Mean	SD	N
Age	21-25 Years	83.5%	25.06	2.17	16.00
	26-30 Years	80.8%	24.23	2.12	26.00
	31-35 Years	85.0%	25.50	2.20	18.00
	36 Years and Above	0.0%			0.00
Marital Status	Married	82.6%	24.79	2.30	39.00
	Unmarried	82.4%	24.72	1.96	18.00
	Divorced	85.0%	25.50	3.54	2.00
	Widowed	90.0%	27.00		1.00
Qualification	GNM	84.4%	25.32	1.85	41.00
	Post basic (N)	79.0%	23.71	2.81	7.00
	B.SC (N)	79.4%	23.83	2.52	12.00
	M.SC (N)	0.0%			0.00
Years of Experience	0-2 years	84.7%	25.41	2.09	17.00
	2-4 years	80.8%	24.24	2.34	29.00
	4-6 years	84.3%	25.30	1.77	10.00
	More than 6 years	85.0%	25.50	2.08	4.00
Working Area	ICU	83.6%	25.08	2.47	12.00
	Emergency	84.4%	25.33	1.87	9.00
	Wards	82.6%	24.78	2.24	32.00
	OPD	80.0%	24.00	2.08	7.00
Previous Information	Yes	83.5%	25.04	2.17	49.00
	No	79.7%	23.91	2.17	11.00

SUMMARY

This chapter dealt with analysis and interpretation of data obtained from 60 staff nurses at selected hospitals of district kangra Himachal Pradesh. The present study shows that structured teaching programme is effective in improving the knowledge level of staff nurses i.e. from a mean pre-test score (16.25) to mean post test knowledge score (24.83).These findings were consistent with the findings of,,,t" value obtained was (19.267) at P <0.05 level of significance) which was highly significant.The post test score was high as compare to pre-test score,which shows the effectiveness of planned teaching programme.

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