A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED VIDEO TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING MANAGEMENT AND PREVENTION OF COMPLICATIONS OF BRONCHIAL ASTHMA AMONG MOTHERS OF UNDER FIVE ASTHMATIC CHILDREN IN MASONIC HOSPITAL COIMBATORE.

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The Lord is my strength and my shield

My heart trusts in him and I am helped

My heart leaps for joy

And I will give thanks to him in song

Psalms 28:7

I bow in reverence to the Lord Almighty ,the foundation of knowledge and wisdom whose benign benediction enabled me to achieve this target

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Abstract

ABSTRACT

A study to assess the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children in Masonic Hospital Coimbatore was conducted as a partial fulfillment of requirement for the degree of Master of Science in Nursing, at Cherraan's College of Nursing ,Coimbatore under Tamil Nadu Dr M.G.R Medical university ,Chennai ,during the year 2010.

Objectives of the study

- To assess the level of knowledge of mothers of asthmatic children regarding management and prevention of complication of bronchial asthma.

- To assess the level of practice of mothers of asthmatic children regarding management and prevention of complication of bronchial asthma.

- To evaluate the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complication of bronchial asthma.

- To find out the relationship between knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

- To determine the association between knowledge among mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma with their selected demographic variables.

- To determine the association between practice among mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma with their selected demographic variables

Hypotheses of the study

H1 -The mean post test score of knowledge will be significantly higher than the mean pre test score regarding management and prevention of complications of bronchial asthma.

H2 -The mean post test score of practice will be significantly higher than the mean pre test score regarding management and prevention of complications of bronchial asthma.

H3 -There will be significant relationship between knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of asthma

H4 -There will be significant association between post test knowledge regarding management and prevention of complications of bronchial asthma with their selected demographic variables

H5 -There will be significant association between post test practice regarding management and prevention of complications of bronchial asthma with their selected demographic variables

Conceptual framework for the study was based on Stuffle Beam model. Research design used for the study was one group pretest post test design. The study was conducted at Masonic Hospital Coimbatore .The population for this study consisted of mothers of under five asthmatic children attended the hospital during the period of study. Convenient sampling technique was used to select the samples.

Data collection instrument consisted of demographic variables ,self administered multiple choice questionnaire to assess the knowledge and 3 point rating scale to assess the practice regarding bronchial asthma. The video teaching consists of detail about bronchial asthma.

The tool was given to five experts for content validity .Reliability of structured questionnaire was obtained by test retest method. (r=0.86) which was highly reliable. Pilot study was conducted at Child trust Hospital ,Ramanathapuram to find out the feasibility of the study.

The collected data were tabulated ,analyzed ,and interpreted by using descriptive (frequency ,percentage ,mean ,standard deviation) and inferential statistics (correlation coefficient ,paired 't' test, chi square test)

Major findings of the study

- The mean score of knowledge and practice in the post test was significantly higher than the pre test score. The 't' test value is highly significant at 0.05 level . Hence the stated hypothesis was accepted.

- There was a significant correlation between the knowledge of mothers of under five asthmatic children with their practice .The obtained 'r' value in the pre test and post test were positively correlated(r=0.66,0.86).Hence the stated hypothesis was accepted.

- There was a significant association between the knowledge of mothers of under five asthmatic children with their selected demographic variables such as age and education of mother. Hence the stated hypothesis was accepted

- There was a significant association between the practice of mothers of under five asthmatic children with their selected demographic variables such as number of children and previous source of information. Hence the stated hypothesis was accepted

INTERPRETATION AND CONCLUSION

Above findings suggest that the educational programme will help to change the knowledge and practice regarding management and prevention of complication of bronchial asthma among mothers of under five asthmatic children. Above findings portray that there was moderate relationship between knowledge and practice ,it means the knowledge can moderately modify the practice among mothers of under five asthmatic children.

Based on the findings ,the following recommendations were suggested.

- A similar study can be undertaken by utilizing other domain attitude.
- A similar study can be undertaken on larger scale.
- A comparative study can be done in the urban and rural areas.
- A similar study can be undertaken with control group.
- Studies are needed to develop standardized tool on knowledge on bronchial asthma
- A similar study can be undertaken by using different teaching methods.

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CHAPTER I

INTRODUCTION

BACKGROUND OF THE STUDY

"*When I am having an asthma attack I feel like a fish in the pond with out water*"

JESSIE, 10 YEAR

Children are the wealth of tomorrow and the growing citizens. Taking care of children will make them to meet the challenges of tomorrow and there by making a strong India. Indian children are very prone to respiratory infections because of variable population density and climatic changes.

'Asthma' is a Greek word which means 'breathless' or 'to breath with open mouth'. Global Strategy for Asthma management and Prevention Guidelines defines asthma as a chronic inflammatory disorder of the airway associated with increased airway hyper responsiveness , recurrent episodes of wheezing, breathlessness and chest tightness.

Asthma is a chronic lung disease characterized by airway inflammation and obstruction in which symptoms include wheezing ,coughing and shortness of breath. It may be caused or triggered by familial, infectious, allergic, psychosocial and environmental factors .

Asthma affects an estimated 300 million individuals worldwide. Evidence shows that prevalence of asthma is increasing especially in children. Annually the WHO has estimated that 15 million disability adjusted life years are lost and 250,000 asthma deaths are reported world wide. Approximately 500,000 annual hospitalizations (34.6% in individuals aged 18 years or younger) are due to asthma. The cost of illness related to asthma is around 6.2 billion dollars. Each year an estimated 1.81 million people (47.8% in individuals aged 18 years or younger) require treatment in the emergency department. Among children and adolescents aged 5-17 years asthma accounts

for a loss of 10 million schooldays and cost caretakers 726.1 million dollars because of work absence. Respiratory infections impose an enormous burden on the society

World Asthma Day is organized by the Global Initiative for Asthma (GINA) in collaboration with healthcare groups and asthma educators to raise awareness about asthma and improve asthma care throughout the world. World Asthma Day activities are organized in each country in May month and in 2009 the theme was "You can control your asthma".

There is no cure for asthma it can be controlled and treated with anti inflammatory agents and bronchodilators .Another way to control asthma is to avoid environmental triggers such as allergens, tobacco smoke ,home dust, certain chemicals and other indoor and outdoor air pollutants.**(Centre for Disease Control and Prevention Report, 2002)**

Severe childhood asthma is a serious, life threatening condition that presents a challenge for the patients, families and caregivers. Despite evolving medical and pharmacologic therapies the incidence and severity of asthma is increasing.

People with asthma may gain control over the disease with good management. An estimated 25% of children with asthma show no symptoms when they become adults. **(American Lung Association, 2002)**

Asthma is one of the oldest diseases about which there are lots of myths in most part of the world. The exact cause of this global disease still eludes scientists. The recent knowledge about the pathogenesis of the disease, led to rationalize the medications into different groups. Parallel to the increasing incidence of this disease, is the knowledge about the trigger factors and steps to reduce their exposure .**(Indian journal of paediatrics 2000).**

Lower respiratory tract infections, chronic obstructive pulmonary disease, tuberculosis and lung cancer are each among the leading 10 causes of death worldwide. Based partly on demographic changes in the developing

world and also on the changes in the healthcare systems burden of communicable   disease is likely to lessen while the burden of chronic respiratory diseases including asthma ,wheezing bronchitis and lung cancer will worsen **(WHO report 2000).**

Asthma is the most chronic and recurrent pulmonary disease of the pediatric age group and it is responsible for a considerable loss of school days , a large number of visits to the pediatrician and frequent hospitalization. Childhood asthma likely to have an impact on social and emotional aspects of lives of children and their families.

Health professional's efforts should be directed towards charting a better healthier future for humanity, a future in which millions of children no longer face morbidity and death in infancy and childhood due to asthma. To make such a change , present day our challenge is to gain a better understanding that makes a difference in the prevalence of these problems affecting the health of the children. Family members especially mothers have an important role in preventive aspects and through that health promotion of their children.

Pediatric nurses are in a position to identify the mother's knowledge, attitude and practice on asthma in children. This will enable the nurse to plan with specialized service to help the mother to understand about common childhood diseases that will make a significant difference in the prevalence of these diseases affecting the health of the children.

NEED FOR STUDY

Asthma is one of the world's most common long term diseases. The asthma is estimated to affect 300 million people world wide, a number that could increase by a further 100 million by 2025. Over 50 million people in Central and Southern Asia have asthma. **(Global Burden of Asthma Report)**

The prevalence of asthma is predicted to increase rapidly in the coming years. The increase is likely to be particularly dramatic in India , which is projected to become the world's most populous nation by 2050. An absolute

2 % increase in the prevalence of asthma in India would result in an additional 20 million people with asthma. The prevalence of asthma has increased markedly in recent years ,with up to a three fold increase seen among children in Southern Asia over the last two decades. About 10 out of every 100 children in India have asthma. **(World Asthma Day Report 2008)**

A comparative study on prevalence of asthma in urban and rural children in TamilNadu was conducted .A total of 584 children from Chennai and 275 children from 25 villages around Chennai were selected as the samples. The overall prevalence of asthma was 18% and the prevalence of diagnosed asthma was 5%. 22% of urban and 9 % of rural children between 6-12 years of age reported breathing difficulty. Urban children reported recent wheeze more often than rural children. **Chakravarthy S et al (2002)**

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. Due to misconceptions and erroneous assumption of facts parents are not readily accepting the inhalers thinking that it is very costly and it will leads to addiction. Most of the children due to the ignorance and negligence of the parents they are unable to diagnose bronchial asthma in the earliest period and to save the life from an acute asthma attack

General awareness of asthma is poor .Patient education programme should augment awareness eliminate social stigma and misconceptions in the society regarding asthma. Knowledge about the prevailing perception in the community would be the first step in achieving this. **S.Shivabalan et al(2002).**

In a population of patients who frequently visited the emergency department because of relapses and had multiple hospital admissions , an asthma education programme resulted in reduction in the number of relapses and readmissions. **Mayo et al (2000).**

World Health Organization recognizes asthma as a major health problem. Parent's perception of the child's disease is a significant factor influencing the acceptance of the disease and compliance to the therapy. There for patient education programme forms an integral component in the long term management of asthma. Knowledge empowers patients ,especially in a chronic disease like asthma.

On April 23rd 2009 a 17 year old student named Akruti Bhatia died because of an acute asthma attack at Modern school ,Vasanthvihar ,New Delhi. This incident prompted the researcher to make an initiative in this direction Because this incident can happen to any child with asthma at any time. So the parents as well as the teachers should be aware of the prevention and management of asthma. The parents should give proper information to the school authorities regarding their child's condition and encourage the child to carry the inhaler along with him or her every day to the school.

Hence the investigator wants to prepare a structured video teaching programme for the mothers of asthmatic children regarding the management and prevention of complications of bronchial asthma.

STATEMENT OF THE PROBLEM

A Study to assess the Effectiveness of Structured Video teaching Programme on knowledge and practice regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children in Masonic hospital Coimbatore.

OBJECTIVES OF THE STUDY

➢ To assess the level of knowledge of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

➢ To assess the level of practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

➢ To evaluate the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complications of bronchial asthma.

➢ To find out the relationship between knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

➢ To determine the association between knowledge among mothers of under five asthmatic children regarding bronchial asthma with their selected demographic variables.

➢ To determine the association between practice among mothers of under five asthmatic children regarding bronchial asthma with their selected demographic variables.

HYPOTHESES

H_1 :The mean post test score of knowledge will be significantly higher than the mean pre test score regarding management and prevention of complications of bronchial asthma.

H_2 :The mean post test score of practice will be significantly higher than the mean pre test score regarding management and prevention of complications of bronchial asthma.

H_3 :There will be significant relationship between knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

H_4 :There will be significant association between post test knowledge of mothers of under five asthmatic children regarding management and prevention of complications of asthma with their selected demographic variables.

H_5 :There will be significant association between post test practice of mothers of under five asthmatic children regarding management and

prevention of complications of asthma with their selected demographic variables.

OPERATIONAL DEFINITIONS

1) *Effectiveness*-The extend to which the structured video teaching programme on bronchial asthma has achieved the desired effect in improving the knowledge and practice of mothers of asthmatic children.

2) *Structured video teaching programme*- Teaching programme regarding management and prevention of complications of asthma as shown in video CD

3) *Knowledge* -Verbal response of mothers regarding management and prevention of complication of asthma as measured by a structured questionnaire .

4) *Practice* – Verbal response of the activities carried out by the mothers of under five asthmatic children which are beneficial for the management and prevention of complications bronchial asthma as measured by rating scale

5) *Under five asthmatic children*- Children below 5 years of age who are diagnosed by the physician as having bronchial asthma.

ASSUMPTIONS

➢ Mothers will not have adequate knowledge regarding management and prevention of complications of bronchial asthma

➢ Knowledge and practice regarding management and prevention of complications of bronchial asthma may varies from one mother to another mother

> Structured video teaching programme will enhance the knowledge and practice of mothers regarding management and prevention of complications of bronchial asthma.

DELIMITATIONS

> This study is limited to mothers of children with bronchial asthma attending Masonic hospital.

> Study is limited to four weeks

> Study is limited to children with bronchial asthma below 5year

PROJECTED OUTCOMES

> The study will determine the knowledge and practice of mothers regarding management and prevention of complications of bronchial asthma.

> The findings of the study will identify the demographic factors which are influencing the knowledge and practice of mothers regarding management and prevention of complications of bronchial asthma.

> The mothers will gain knowledge regarding management and prevention of complications of bronchial asthma.

CONCEPTUAL FRAMEWORK OF THE STUDY

Conceptual framework is the conceptual underpinning of the study. It is a group of concepts and a set of propositions that spell out the relationship between them .

POLIT and HUNGLER (2000) states that a conceptual framework is interrelated concepts that are assembled together in some rational scheme by virtue of their relevance to common theme. The purpose is to make research meaningful and generalize.

A **conceptual framework** is used in research to outline possible courses of action or to present a preferred approach to a system analysis project. The framework is built from a set of concepts linked to a planned or existing system of methods, behaviors, functions, relationships, and objects. A conceptual framework might, in computing terms, be thought of as a relational model.

The study was aimed at assessing the knowledge and practice regarding management and prevention of complications of bronchial asthma before and after the video teaching program.. The conceptual framework for this study was derived from the concepts of **Stuffle Beam Model** and was presented in (Fig-1).It is a comprehensive framework for evaluating the programmes.

The Model Include

* Context evaluation
* Input evaluation
* Process evaluation
* Product evaluation

Context Evaluation

Highlights the environment in which the proposed program exists describes the plan for decisions and collection of data apart from providing rationale for determination of objectives .In this study it refers to age, number

of children, education, monthly income, area of living ,type of family, previous source of information and pet animals in the house.

Input Evaluation

Serve as a basis for structuring decision. In this study it refers to existing knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

Process Evaluation

Evaluates implementing decisions, involves identifying decision and limitation. In this study it refers to administration of video teaching programme regarding management and prevention of complications of bronchial asthma .

Product Evaluation

It refers to energy, information or matter that is transferred to environment and enables recycling of decision as it relates to goals and objectives of input information and process information. In this study it refers to post test knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

Context → **Input** → **Process** → **Product**

Feed back

Demographic factors
- Age
- Number of children
- Education
- Monthly income
-Area of living
-Type of family
-Previous source of information
-Pet animals in the house

Setting
Masonic hospital Coimbatore

Mothers of under five asthmatic children

Nurse educator

Pre-test on knowledge and practice regarding management &prevention of complications of bronchial asthma

Administration of video teaching programme on bronchial asthma.

Teaching Learning Activity
➢ Explanation
➢ Clarification
➢ Observation

Post-test on knowledge and practice regarding management &prevention of complications of bronchial asthma

Fig : 1 CONCEPTUAL FRAMEWORK BASED ON DANIEL STUFFLE BEAM MODEL (CIPP MODEL)

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CHAPTER -II
REVIEW OF LITERATURE

Review of literature is an important step in the development of any research project. It helps the investigator to analyze what is known about the topic and to describe the methods of enquiry used in earlier work including the success and shortcomings. It gives the broad understanding of the problem

"Researchers almost never conduct a study in an intellectual vacuum their studies are usually undertaken within the context of an existing base knowledge"**(Polit and Hungler 1999)**

Review of literature is important for broadening the understanding and insight necessary for the development of a conceptual framework, which the problem fits and for the development of the tool. The investigator has made adequate use of available resources and has viewed the related research and non research literature, so as to proceed within the study

The literature has been reviewed under the following headings:

Section A: Studies related to bronchial asthma and its prevalence

Section B: Studies related to causes of bronchial asthma.

Section C: Studies related to management of bronchial asthma.

Section D: Studies related to awareness of parents regarding asthma and effects of educational interventions.

STUDIES RELATED TO BRONCHIAL ASTHMA AND ITS PREVALENCE

Herr M et.al(2007) conducted a study on epidemiology of allergic respiratory disorders in infants. Doctor diagnosed asthma occurs in 5% of children below two years of age. One third of the children below three years of age experience wheeze during a lower respiratory tract infection ,but only 7% of children wheeze apart from a respiratory infection. Asthma like cough and bronchial obstruction symptoms are reported in respectively 15% and 9% of children below two years of age. Depending on the definition of allergic

rhinitis used ,its prevalence varies from1% to 30% among two years of old children.

Dusser D et.al(2007) conducted a study on Mild asthma epidemiology, clinical characteristics and treatment recommendations .Mild asthma includes intermittent and persistent mild asthma according to the Global Initiative for Asthma(GINA) classification ,and affects between 50% and 75% of asthmatic patients. Mild asthma is more frequent, more symptomatic, and is less controlled in children than in adults. Mild asthma can lead to severe exacerbations with a frequency ranging from 0.12 to 0.77 .Severe exacerbations in mild asthma represents 30-40% of asthma exacerbations requiring emergency consultation.

Bellasio M et.al(2005) conducted a study on Access to health care for asthma in children and adolescents. Bronchial asthma represents the most frequent chronic illness in the pediatric age. Although a number of guidelines for the diagnosis, treatment and prevention of disease exists some studies have shown that their application on a large scale is still lacking, in this way leading to the inadequate treatment of symptoms and the frequent use of emergency visits and hospitalization

Kevin Brazil(2002) examined the patterns of adaptation among parents with a child who had moderate to severe persistent asthma. When compared to mothers in single parent families, mothers with intact families had greater tendency to use copying pattern related to family integration and cooperation. Such feelings demonstrate for additional support for mothers in their role in caring for the critically ill child

Donna Mc Cann(2002) conducted a study on the prevalence and management of asthma in primary aged school children . In 25 of the schools surveyed, an International Study of Asthma and Allergies in Childhood (ISAAC) questionnaire was distributed to parents of children in Years 3 and 4 (7–9 years). Parental reports indicated a current or previous diagnosis of

asthma in 24.3% children, with 17.8% receiving asthma treatment and 18.9% reporting wheeze in the previous 12 months. Of six wheezing children per Year 3/4 class, one was receiving no treatment for asthma, three had experienced four or more attacks of wheeze in the previous year with one wheezing child per two Year 3/4 classes experiencing more than 12 such attacks.

Chakravarthy S et.al (2002) conducted a study on prevalence of asthma in urban and rural children in Tamil Nadu. : A total of 584 children from Chennai and 271 children from 25 villages around Chennai formed the urban and rural groups. The results were analyzed separately for children 0-5 and 6-12 years of age. The overall prevalence of breathing difficulty (including asthma) was 18% and the prevalence of 'diagnosed' asthma was 5%. 22% of urban and 9% of rural children 6-12 years of age reported breathing difficulty 'at any time in the past' ($p < 0.01$).

H Parmesh et.al (2000) conducted a study on epidemiology of asthma in Bangalore city. Hospital based study on 20,000 children under the age of 18 years from 1979,1984,1989,1994 and 1999 in the city of Bangalore showed a prevalence of 9%, 10.5%, 18.5%, 24.5% and 29.5% respectively. The increased prevalence correlated well with demographic changes of the city. Children were categorized into three groups depending upon the geographical situation of the school in relation to vehicular traffic and the socioeconomic group of children. Children from schools of heavy traffic area showed prevalence of 19.34%, Children from heavy traffic region and low socioeconomic population had 31.14% and Children from low traffic area school had 11.15% respectively.

Nirmal Chand et.al (2000) conducted a study on measuring quality of life in young children with asthma in Amritsar. 826 school children between 12 to 17 children were given 10 items asthma questionnaire. One hundred of them (13.4 %) were identified to be asthmatic .Out of 100 students 61 were males and 39 were females. Mean age of students was 16.6 years. Asthma appears to

be common health problem in high school children, with 13.4 % children experiencing moderate to severe impairment of life style due to asthma. Summarily results are as follows on the average. Mild to moderate Quality Of Life impairment of symptoms domain (mean score 4.82). Mild Quality Of Life impairment in activity domain (mean score 5.17). Mild to moderate Quality Of Life impairment in emotional domain (mean score 4.94). Mild Quality Of Life impairment in environment trigger domains (mean score 5.00). Overall mild to moderate Quality Of Life impairment in young asthmatic children in the region with mean overall quality of life score 4.98.

Anderson H R et.al (2000) conducted a study on risk factors for asthma up to 16 years of age. From a national cohort study of 8806 children examined at ages seven, eleven and sixteen years data on asthma were analyzed to describe the natural history in childhood and its risk factors. Factors found to predict the subsequent onset of wheezy bronchitis included male sex of the child, mother's age at the time of birth ,pneumonia, allergic rhinitis, eczema and periodic abdominal pain.

Chhabra S K et.al (1998) conducted a study on prevalence of bronchial asthma in school children in Delhi. The age range was 4-17 years. In all, 2609 questionnaires were completed and returned (response rate 91%). There was a slight excess of males (54%). The prevalence of current asthma was 11.6% and past asthma was reported by 4.1% of children, giving a cumulative prevalence of 15.7%. Exclusive exercise-induced asthma was 2.8% and that associated with colds, 2.3%. The current prevalence of all wheezing was thus 16.7% and cumulative prevalence was 20.8%. While there was no sex-related difference in prevalence, wheezers were the highest in the 9-13 year age group. A significant association was found between the prevalence of wheezing and a family history of asthma (odds ratio 3.65) and presence of smokers in the family (odds ratio 1.62). There was no significant association with any economic class.

STUDIES RELATED TO CAUSES OF BRONCHIAL ASTHMA

Kusunoki T et.al (2008) conducted a study on obesity and prevalence of allergic diseases in school children. A questionnaire was administered to the parents of 50,086 school children. Association between childhood obesity and the various allergic diseases were evaluated by uni variate and multivariate logistic models. Significant associations were found between higher body mass index and allergic diseases. (p=0.03) There was significantly higher prevalence of bronchial asthma in girls with obesity (p=0.009) than in those with out obesity. Those who were obese and had allergic diseases were significantly more likely to have severe symptoms. Childhood obesity had positive association with bronchial asthma prevalence.

Yamaha M et.al(2003) conducted a study on bronchial asthma. Rhinovirus cause majority of common colds, which often provokes wheezing in patients with asthma .The precise mechanism responsible for the Rhinovirus infection induced exacerbations of bronchial asthma are still uncertain. Several reports reveal airway hyper responsiveness, increases in chemical mediators in airway secretions such as kinin and histamine, and airway inflammation in patients with bronchial asthma after Rhinovirus infection. It induces an accumulation of inflammatory cells in airway mucousa and submucousa including neutrophils, lymphocytes and eosinophils.

Kasperczyk J et.al(2002) conducted a study on influence of gas and dust air pollutants on development of asthma in children. The research included 5945 children of 10-11 years from 86 primary schools. The factor evaluated was the influence of exposure to air pollution on asthma induction. The analysis proved that long term exposure to sulphur dioxide caused an increased number of cases of children's asthma.(correlation r=0.95 with p<0.05).

Carlsen KH (2002) conducted a study on exercise induced asthma. Exercise induced asthma (EIA) is common in asthmatic children and adolescents. Since it may cause limitations to daily life activities in up to 30%,

mastering EIA is important in asthma management .EIA consists of bronchial obstruction occurring immediately, or soon after ,physical exercise as a result of increased respiratory water and heat loss due to increased ventilation during exercise ,with the subsequent release of mediators and stimulation of airway receptors.

Baena Cagnani CE et.al (2001) conducted a study on role of food allergy in asthma in childhood. Food allergy has been shown to trigger or exacerbate broncho obstruction in 2-8.5% of children with asthma. Sensitization to food allergens early in life is a risk factor for sensitization to inhalant allergens and respiratory symptoms later on .Epidemiological studies suggest that changes in the dietary composition, such as trans fatty acids ,could be involved in the increase of asthma prevalence .The introduction of formula feeding during the first year of life increases the risk of having asthma.

Mastrelli P et.al (2001) conducted a study on role of house dust mites(HDM) in asthma.71 mild to moderate HDM sensitive asthmatics were selected. Drug treatment to keep into two groups, according to the amount of home dust mites in their bed room measured after standard HDM reduction measures. Low HDM exposure(0.64+/- 0.5 microgrm dust group1 n=34) and high HDM exposure (12.5+/- 11.4 microgram group 2 n=37). Bronchial responsiveness to methacholine was determined at the beginning and end of the study. This long term study showed that exposure to lower levels of mite allergens in the bed room is associated with a decrease of bronchial hyper responsiveness in sensitized asthmatic subjects under optimal drug treatment.

Al Dawood K (2001) conducted a study on parental smoking and the risk of respiratory symptoms among school aged children. A self administered questionnaire was given to the parents of 1482 school children who satisfied the selection criteria of the study. The overall rate of smoking among parents of this sample was 18.2%. (32% among fathers and 4% among mothers) .There was an increased risk associated with parental smoking and respiratory

symptoms among asthmatic and non asthmatic children. The smoking rate among parents of asthmatic children was significantly higher than that of parents of normal children.

S K Kabra et.al (2000) conducted a study on risk factors associated with bronchial asthma in school going children of rural Haryana. . 2000 school going children were screened for presence of symptoms of asthma using a questionnaire suggested by International Study of Asthma and Allergy in Children (ISSAC). 40 children were identified as cases of bronchial asthma. Factors associated with presence of symptoms of asthma on multivariate analysis were passive smoking pets at home and absence of windows in living rooms .Factors such as family history of asthma, history of worm infestation, fuel used for cooking, location of kitchen and food allergy were not significant on statistical analysis. Thus, passive smoking, inadequate ventilation and pets (dogs and cats) at home are significant risk factors associated with presence of symptoms of asthma in rural children.

STUDIES RELATED TO MANAGEMENT OF BRONCHIAL ASTHMA

Cristofori R et.al (2003) conducted a study on management of bronchial asthma. Asthma is poorly controlled ,most patients report frequent symptoms and limitation to daily activities .Early intervention with anti inflammatory drugs is important ,also in preschool children with frequent or persistent symptoms, in order to prevent irreversible structural alterations of the airways and to improve long term prognosis. In the presence of more severe asthma inhaled corticosteroids can be associated with long acting beta2 agonists bronchodilators.

Maziak W et.al (2002) conducted a study on management of childhood asthma in the community. Community based random samples of children aged 5-7 and 9-11 years were studied. Detailed information on the use of antiasthma drugs and accessory treatment in the past year was collected by parental questionnaire. A total of 11,094   samples collected. Among children with

wheeze in the last year 36% had used bronchodilator and 19% were on regular anti inflammatory treatment. 47% of the children with current wheeze had not been diagnosed as asthmatics and received hardly any treatment. The proportion of children regularly using inhaled steroids was small (6%) among current wheezers and reached only 21% among children with diagnosed asthma and >12 wheezing attacks in the last year

Ray M S (2002) conducted a study on comparison of nebulized adrenaline versus salbutamol in wheeze associated respiratory tract infection in children. Adrenergic agonist both specific and non specific are beneficial in wheezing associated respiratory infection. Adrenaline is more effective than salbutamol and is thus a better ,inexpensive ,and relatively safe alternative

Lata Kumar (2001) conducted a study on comparison of the clinical efficacy of dry powder inhaler with metered dose inhaler and spacers in childhood asthma. Metered dose inhaler and dry powder inhaler have equal efficacy in anti inflammatory therapy of bronchial asthma in children.

G R Sethi(2001) conducted a study on comparison of efficacy of a commercial spacer device versus an improvised spacer device in delivering aerosolized beta 2agonist through metered dose inhaler in acute exacerbation of bronchial asthma. Metered dose inhaler with improvised spacer device is equivalent in efficacy and a more cost effective alternative to metered dose inhaler with commercial spacer for administration of beta 2agonist in acute asthma .

STUDIES RELATED TO AWARENESS OF PARENTS REGARDING ASTHMA AND EFFECTS OF EDUCATIONAL INTERVENTIONS

Bryant Stephens et.al (2004) conducted a study on community asthma education for parents of urban asthmatic children. Parents attended classes were assessed on their knowledge of asthma and its management for children and on their asthma management behaviours before and after teaching. The average test score on asthma knowledge before the intervention was 81% for

parents. Immediate post instructional test scores were significantly better with an average of 94%.Higher scores remain statistically significant at 6months and 12 months after the class.

Sue Hsien Chen et.al (2004) conducted a study on development of caremap in children with asthma in Taiwan. Parents of 42 asthma children were randomized into two groups., a quantitative survey was conducted. There was less emergency room attending rate in experimental group (6/month; $p < 0.05$) The understanding of the disease was much improved in parents of experimental group (13.85 ± 1.04 vs. 10.91 ± 2.14; $p < 0.01$). Furthermore, parents acquired a more positive attitude to asthma, and almost all of the control group had irregular follow ups by a physician and had irregular use of medication. . This study emphasizes that a care map in children with asthma (CACM) can be used to educate parents in how to provide the best treatment plan for their children.

Wanda Phipatanakul(2003) conducted a study on effects of educational interventions for self management of asthma in children and adolescents. Thirty-two of 45 identified trials were eligible, with a total of 37 006 patients 2 to 18 years of age. Education regarding asthma was associated with improvements in lung function , self-efficacy ˌ reductions in absenteeism from school , number of days of restricted activity , and number of visits to an emergency department . education was also associated with a reduced number of nights disturbed by asthma.

S Furber et.al (2002) conducted a study on asthma knowledge and medication compliance among parents of asthmatic children in Nanjing, China. Asthma knowledge and medication compliance among parents of 150 asthmatic children were assessed using a self-administered questionnaire. The results showed that 54.7% of parents had poor knowledge of asthma and its management. Parental compliance with medication was also suboptimal as only 43.3% of parents reported adherence with prescribed anti-asthmatic medication

for their children. child's medication. Education and occupation were found to be associated with asthma knowledge, however there was no association between age or income with knowledge. Income was associated with compliance with asthma medication, however no association was found between parents' age, education, occupation, or asthma knowledge with compliance. This study has identified the need for accurate and up-to-date information on asthma for parents of asthmatic children as well as programs aimed at teaching parents skills in managing their child's asthma.

S .Shivabalan et .al (2000) conducted a descriptive study on knowledge ,attitude and practice among 100parents of asthmatic children who attended two paediatric hospitals at Chennai. A diagnosis of asthma was accepted by only 39% of which only 3% knew exactly what asthma means. Perception that asthma is contagious was observed by 26% and 35% believed asthma is hereditary. Various dietary items were perceived as triggers .Most of the parents administered oral beta agonist medications before proceeding to the hospital. Only 13 were administering aerosol therapy at home.

Ashuthosh Lal et.al (1995) conducted a study on knowledge and attitude of parents of asthmatic children. The knowledge and attitude towards asthma, of parents, of 85 asthmatic children was assessed using a 17 item questionnaire. Results showed that 34.1% believed asthma to be contagious, 48.2% of the parents hesitated in referring to their child's illness as asthma. Other, commonly held beliefs were that asthma is a life long illness (35.3%) ; food items are important precipitating factors for acute attacks (88.2%) ; mild exacerbations need to be treated with bronchodilators (6.3%) ; bronchodilators should be started at home before consulting a physician in case of an acute attack (61.2%) ; and cure of asthma is possible through modern drugs (30.6%) or through alternative systems of medicine (65%). Ninety one per cent of parents lacked an awareness of the side effects of anti-asthma medication. It is concluded that parental education through improved physician parent

communication is necessary for enhancing the quality of care being provided to children with asthma, a fact also highlighted by the International Consensus Report on Management of Asthma

CHAPTER – III
RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. Research methodology has many dimensions and research methods do constitute a part of the research methodology. The scope of research methodology is wider than the research methods. Thus, when we talk of research methods but also consider the logic behind the methods. So that the research results are capable of being evaluated either by researcher himself or by others.

According to Sharma (1990) research methodology involves the systematic procedures by which the research starts from initial identification of the problem to its final conclusion. The role of methodology consist of procedures and techniques for conducting the study.

This chapter deals with the research approach, research design, setting of the study, population of the study, sample, sampling techniques, criteria for sample solution, inclusion criteria and exclusion criteria, development and description of the tool, pilot study, data collection and plan for data analysis as a part of the study.

RESEARCH APPROACH

The research approach used for this study was an evaluating approach. A pre experimental study, one group pre test, post test method was used to assess the effectiveness of structured video teaching programme on management and prevention of complications of bronchial asthma.

RESEARCH DESIGN

The research design is a blue print for conducting the study that maximum control over factors that could interfere with the validity of the findings. It guides the researcher in planning and implementing the study in a way than intended goal (Nancy Burns).

One group pretest, post test design was used for the study.

Group	Pre Test	Intervention	Post Test
Experiment	x	0	y

y-x = Teaching effect

  x = Assessment of knowledge and practice (Pre test)

  o = Structured Video Teaching Programme on bronchial asthma

  y = Assessment of knowledge and practice (Post Test)

VARIABLES

1. Dependent variables

Knowledge and practice mothers of under five children with bronchial asthma.

2. Independent variables

Structured video teaching programme on management and prevention of complications of bronchial   asthma.

3. Attributed variables

Age, number of children, educational status, area of living, type of family, monthly income, pet animals in the house, previous source of information.

```
┌─────────────────────────────────────────┐
│           TARGET POPULATION              │
│                                          │
│   Mothers of children with bronchial asthma │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│          ACCESSIBLE POPULATION           │
│                                          │
│  Mothers of under five asthmatic children attending │
│        Masonic Hospital, Coimbatore      │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│           SAMPLING TECHNIQUE             │
│                                          │
│          Convenient sampling 60          │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│        DATA COLLECTION PROCEDURE         │
└─────────────────────────────────────────┘
```

PRE TEST
Assessment of knowledge and practice regarding management and prevention of complication of bronchial asthma

Structured Video Teaching Programme on Bronchial asthma

POST TEST
Assessment of knowledge and practice regarding management and prevention of complication of bronchial asthma

DATA ANALYSIS
Descriptive and Inferential

CRITERIA MEASURES
Knowledge and practice on Bronchial Asthma

REPORTING
Thesis

Fig – 2 : DIAGRAMMATIC REPRESENTATION OF RESEARCH

DESIGN

SETTING OF THE STUDY

The study was conducted at Masonic Hospital Coimbatore ,considering the proximity, availability of samples and cooperation from the hospital management. The Masonic Hospital is situated at a distance of 8 km away from Cherraan's College of Nursing.

POPULATION

A population is the entire aggregation of cases in which the researcher is interested (Polit and Hungler 1999).

The target population selected for this study was mothers of children with bronchial asthma.

The accessible population selected for this study was mothers of under five children with bronchial asthma attended Masonic Hospital Coimbatore.

SAMPLE

The sample selected for the present study was 60 mothers of under five children with bronchial asthma attended the Masonic hospital during the period of data collection.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

- Mothers of children with bronchial asthma attending the Masonic hospital.
- Mothers of children with bronchial asthma below 5years.
- Mothers who are willing to participate.
- Mothers who can understand Tamil.

Exclusion criteria

- Mothers who are not willing to participate.
- Mothers of children with other medical problems.

SAMPLING TECHNIQUE

Sampling is the process of selecting the portion of the population (Polit and Hungler)

Samples were selected for this study by adopting convenient sampling technique. Samples were selected from the mothers of under five asthmatic children attended Masonic Hospital Coimbatore.

DEVELOPMENT OF THE TOOL

The research tool was developed in English after extensive review of literature and expert opinion. The structured self administered multiple choice questionnaire was used as an instrument to assess the knowledge and self administered rating scale was used to assess the practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

DESCRIPTION OF THE TOOL

The tool consists of three parts

Part-1

It consists of demographic variables of mothers of under five asthmatic children. (age, educational status, number of children ,type of family, family income, area of living, pets in the house, previous source of information etc)

Part-2

The self administered questionnaire consists of multiple choice questions to assess the knowledge of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

Part -3

The self administered rating scale to assess the practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma .

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STRUCTURED VIDEO TEACHING PROGRAMME

Structured video teaching program was developed by the researcher after intensive review and experts opinion. It consists of definition, causes, signs and symptoms, triggers, management, prevention and complications of bronchial asthma. The average time taken to show the video teaching was 15 minutes.

SCORING PROCEDURE

Tool-1

The maximum possible score is 25 for 25 items. A score of '1' mark was given for every correct answer and a score of '0' was given to every wrong answer.

For the purpose of study the total score was classified as follows

>75%   adequate knowledge

51 -74% moderately adequate knowledge

<50% inadequate knowledge

Tool-2

The rating scale to assess the practice of mothers of children with bronchial asthma regarding management and prevention of complications of bronchial asthma.

For a positive statement highest scores were given(2, 1,0)

For a negative statement scores were reversed (0,1,2)

For the purpose of study the total score was classified as follows

>75%   satisfactory practice

51-74% moderately satisfactory practice

<50% unsatisfactory practice

VALIDITY AND RELIABILITY

A) VALIDITY OF THE TOOL

Hustings Tolsma 1989 stated that content validity is a judgement regarding how well the instrument represents the characteristics to be

assessed. Judgments are based on prior research in the field and on the opinion of the experts.

The content of the self administered questionnaire and video teaching programme were checked and evaluated by 5 experts including 4 nursing experts, 1medical expert who validated the instrument regarding the adequacy of the content and sequence in framing the questions. Based on their valid suggestions reframing of the instrument was done.

B) RELIABILITY OF THE TOOL

Reliability of the tool concerns its ability to produce similar results when repeated measurements are made under identical conditions

(Kenneth and Bordens)

Reliability was established through test retest method. The tool was administered to six samples representing the characteristics of the population. After a gap of one week the retest was given. Coefficient correlation score of knowledge and practice was calculated and found to be reliable (0.86)

PILOT STUDY

Polit and Hungler (1999) denoted that pilot study is a small scale revision on trial run done in preparation for a major study

Pilot study was conducted at Child Trust Hospital Coimbatore after obtaining the permission from the Chief medical officer.6 mothers of under five asthmatic children were selected using convenience sampling. After getting oral consent from the subjects pre test questionnaire was administered. Structured video teaching was administered by means of video show to the individual mothers, after 2weeks post test was conducted. The pilot study revealed that the study is feasible. Data was analyzed to find out the suitability of the statistical methods.

DATA COLLECTION PROCEDURE

The data collection was be done for a period of one month. Permission to conduct the study was obtained from the director of Masonic hospital .The

samples were informed by the investigator about the nature and purpose of the study. After obtaining the oral consent, self administered questionnaire and rating scale were given to the study samples to assess the pretest. After collecting the pretest questionnaire the video teaching on management and prevention of complications of bronchial asthma was given. After two weeks interval again the same self administered questionnaire and rating scale was given to the same samples to assess the post test. The same duration was given to the study samples. All samples were very cooperative and investigator expressed her gratitude for their cooperation .The tool was checked for computation.

PLAN FOR DATA ANALYSIS

The demographic variables were analyzed by using descriptive statistics(frequency and percentage).The knowledge and practice were assessed by using mean and standard deviation. The effectiveness of video teaching programme was assessed by using paired 't' test. Correlation between knowledge and practice was assessed by using correlation coefficient. Association between knowledge and practice of mothers with their demographic variables was analyzed by using inferential statistics (chi-square).

ETHICAL CONSIDERATIONS

The study was conducted after the approval of the dissertation committee Samples were informed about the nature and purpose of the study. Consent was obtained before the collection of samples. Assurance was given to the study samples that the anonymity of each sample would be maintained strictly.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the description of sample analysis and interpretation of the collected data from the mothers of 60 asthmatic children with reference to their knowledge and practice regarding management and prevention of complications of bronchial asthma.

According to Denis Polit (2005) analysis is the method of organizing, sorting, and scrutinizing data in such a way that the research question can be answered.

The analysis and interpretation of the study was based on the data collected through structured multiple choice questionnaire to assess the knowledge and rating scale to assess the practice of the mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma. The result was computed by using descriptive and inferential statistics based on the objective of the study.

The study findings are presented in sections as follows.

SECTION I : Deals with the distribution of the demographic variables of mothers of under five asthmatic children regarding management and prevention complications of bronchial asthma

SECTION II : Deals with the pretest and post test score of knowledge of mothers of under five asthmatic children.

SECTION III : Deals with the pretest and post test score of practice of mothers of under five asthmatic children.

SECTION IV : Deals with the data on the effectiveness of structured video teaching programme in improving the knowledge and practice of mothers of under five asthmatic children.

SECTION V : Deals with the correlation coefficient between knowledge and practice of mothers of under five asthmatic   children

SECTION VI : Deals with the association between post test knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications   of bronchial asthma with their selected demographic variables.

SECTION I

Distribution of demographic variables of mothers of under five asthmatic children

Table -1

Frequency and percentage distribution of mothers of under five asthmatic children

S. No.	Demographic Variables	n	%
1.	Age of Mother		
	a) Below 25	15	25
	b) 26 to 30	12	20
	c) 31 to 35	16	27
	d) 36 and above	17	28
2.	Number of Children		
	a) 1	19	32
	b) 2	29	48
	c) 3 and above	12	20
3.	Education of Mother		
	a) Primary	20	33
	b) Higher Secondary	33	55
	c) Graduate & above	7	12
4.	Type of Family		
	a) Joint	28	47
	b) Nuclear	32	53
5.	Area of living		
	a) Urban	42	70
	b) Rural	18	30
6.	Monthly Income		
	a) Below 1000	10	17
	b) 1001 – 2000	13	22
	c) 2001 – 5000	20	33
	d) 5001 and above	17	28

7.	Previous source of Information		
	a) Newspaper	11	18
	b) Radio	16	27
	c) Television	19	32
	d) Health Professional	8	13
	e) Friends and Relatives	6	10
8.	Pet animals in the house		
	a) Yes	20	33
	b) No	40	67

Table 1 shows that regard to age ,among 60 mothers of asthmatic children 15(25%) were in the age group of below 25, 12(20%) mothers were in the age group of 26-30 years ,16(27%) mothers were in the age group 31-35 years and 17(28%) were having above 36 years.

Regarding number of children majority of mothers 29(48%) had 2 children,19(32%) had one child and 12(20%) had 3 or more than 3 children.

Regarding education of mothers 20(33%) of mothers had primary education, 33(55%) of mothers had higher secondary education ,7(12%) mothers were graduate.

Regarding the type of family majority 32(53%) having nuclear family and 28(47%) having joint family.

In relation to the area of living 42(70%) belongs to urban area and 18 (30%) belongs to rural area.

Regarding monthly income , among the mothers of asthmatic children 10 (17%) were having monthly income of below Rs 1000per month, 13(22%) total monthly income of Rs 1001-2000 per month, 20(33%) total monthly income of Rs 2001-5000 and 17(28%) total monthly income of Rs 5001 and above.

Regarding the previous source of information 11(18%) of mothers received through newspaper ,16(27%) from radio ,19(32%) from television, 8 (13%) from the health professional and 6(10%) from the friends and relatives.

It is inferred that majority of the mothers 40(67%) were having no pet animals in the house and 20 (33%) were having pet animals in their house.
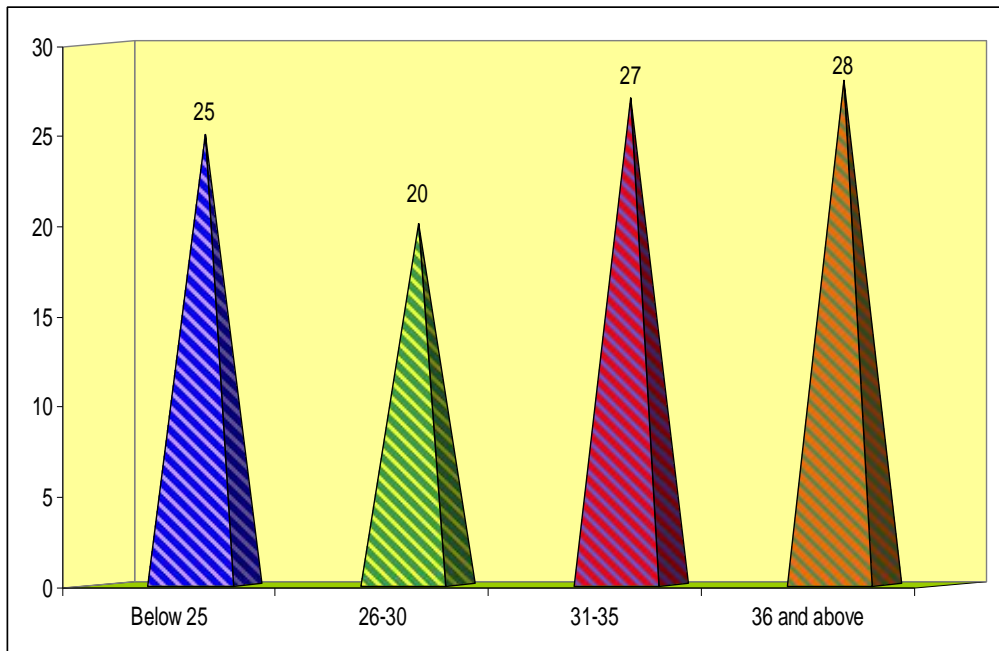
Fig-3:Percentage distribution of mothers according to age
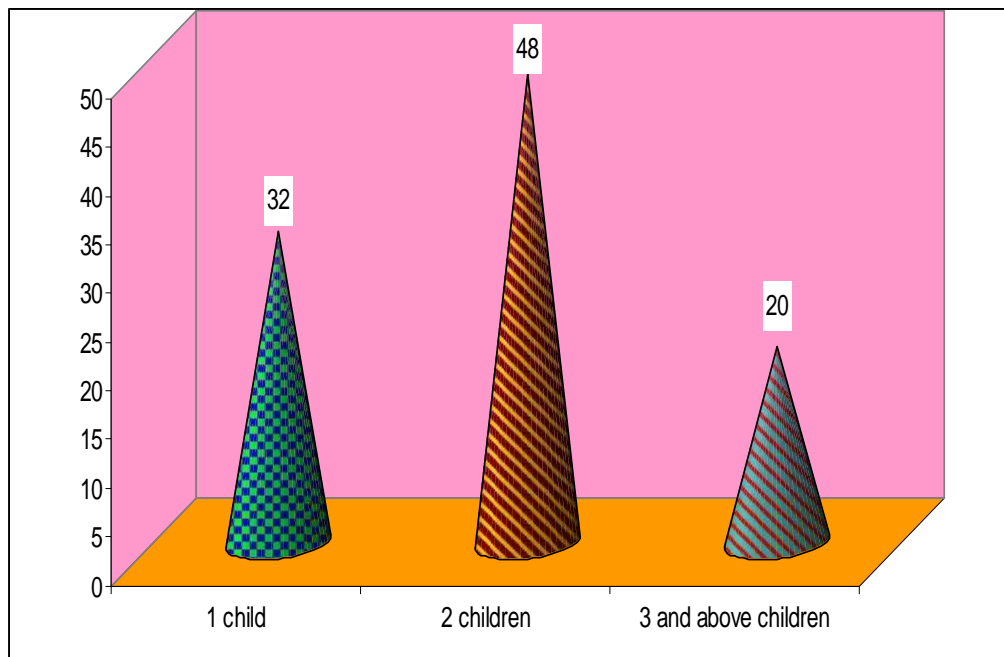
'Fig-4: Percentage distribution of mothers according to number of children
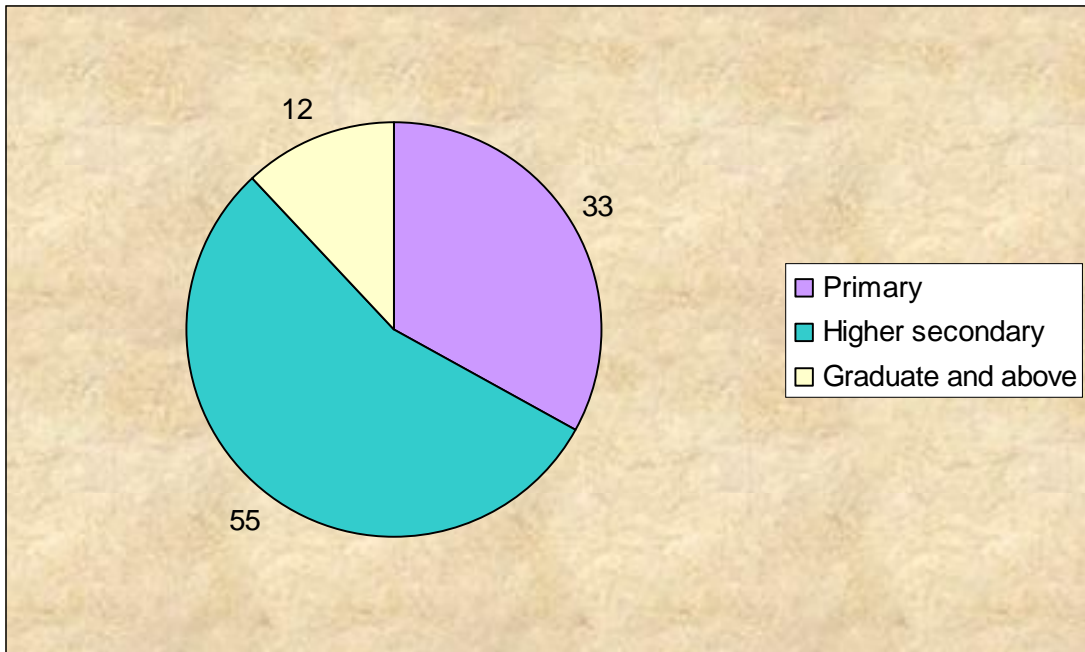
Fig-5 : Percentage distribution of mothers according to education
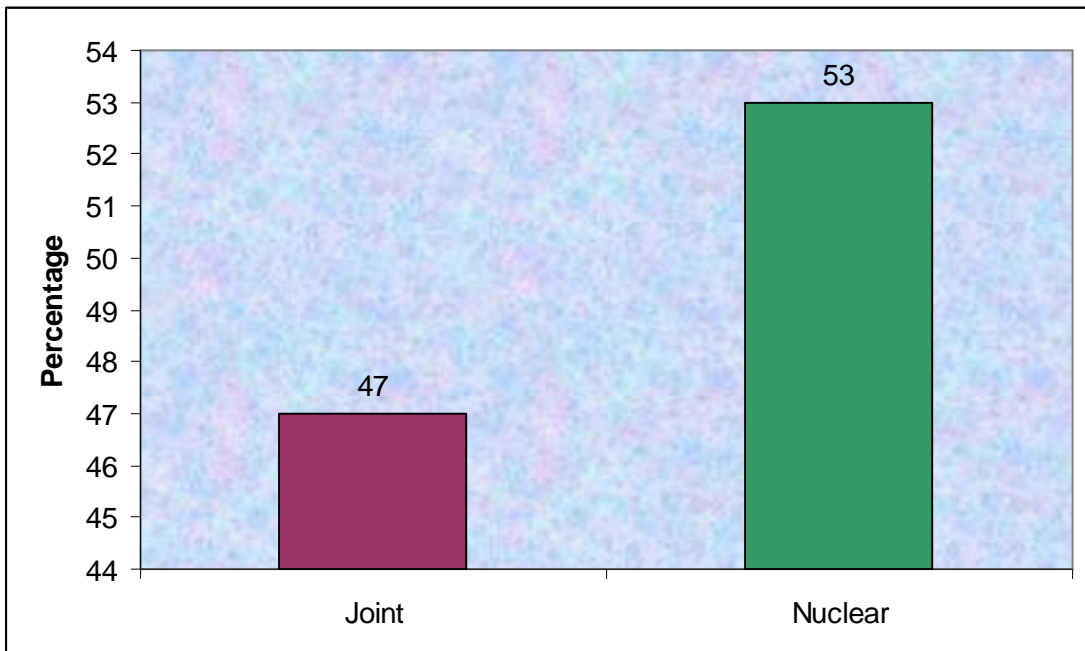
Fig-6 :Percentage distribution of mothers according to type of family
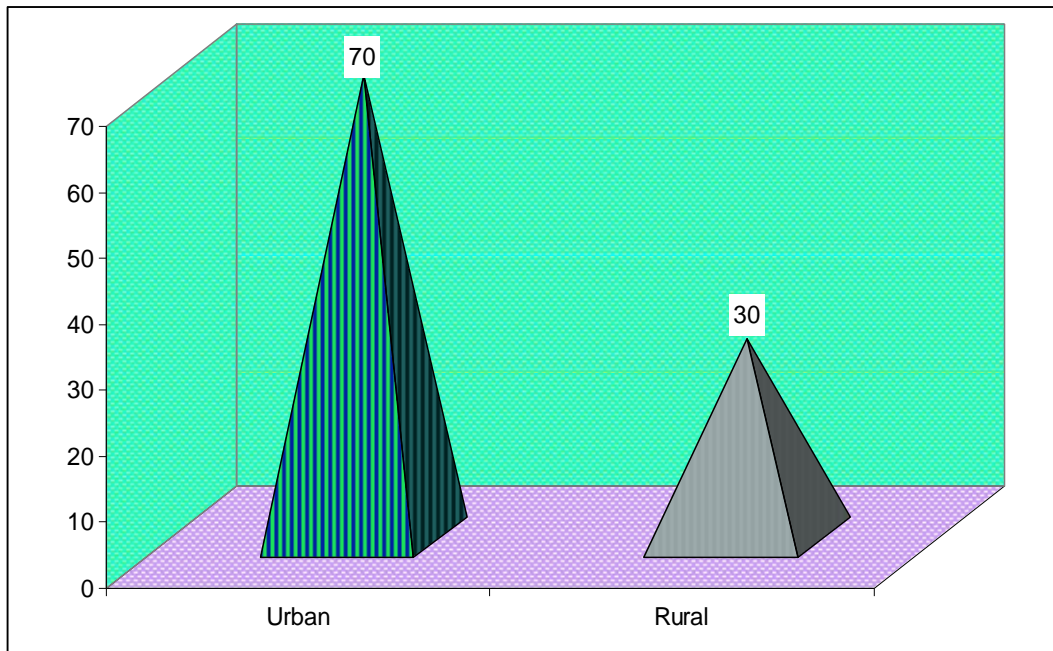
Fig-7 : Percentage distribution of mothers according to area of living
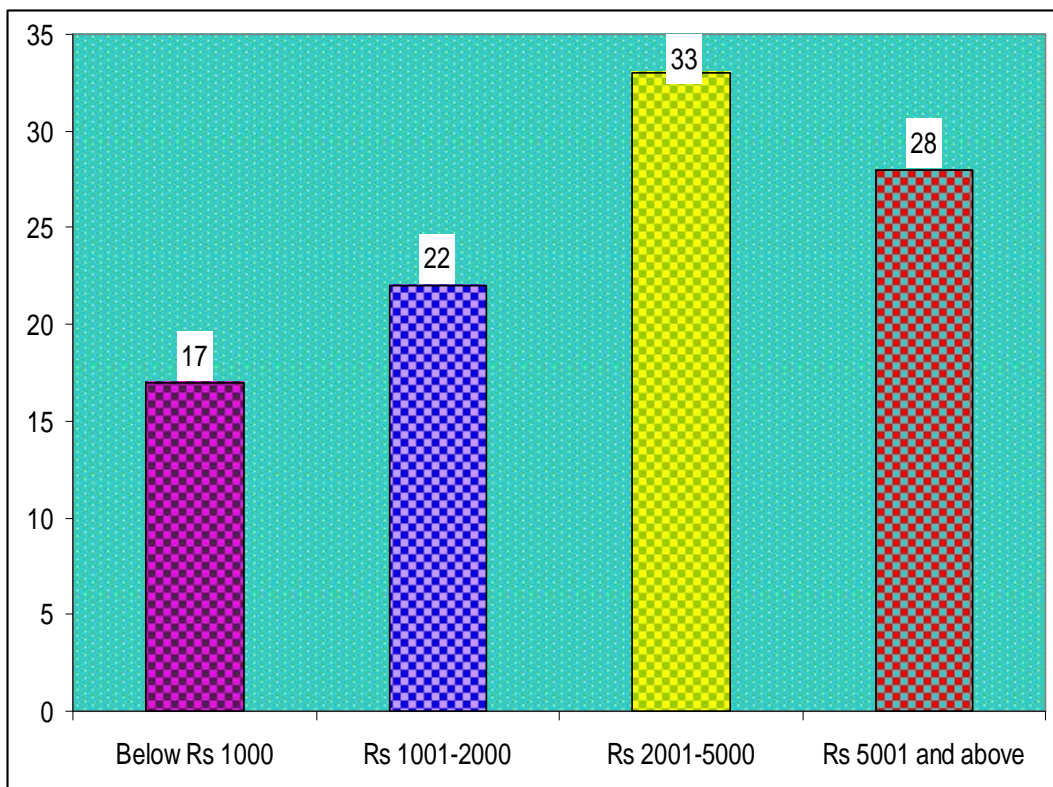
Fig -8 :Percentage distribution of mothers according to monthly income
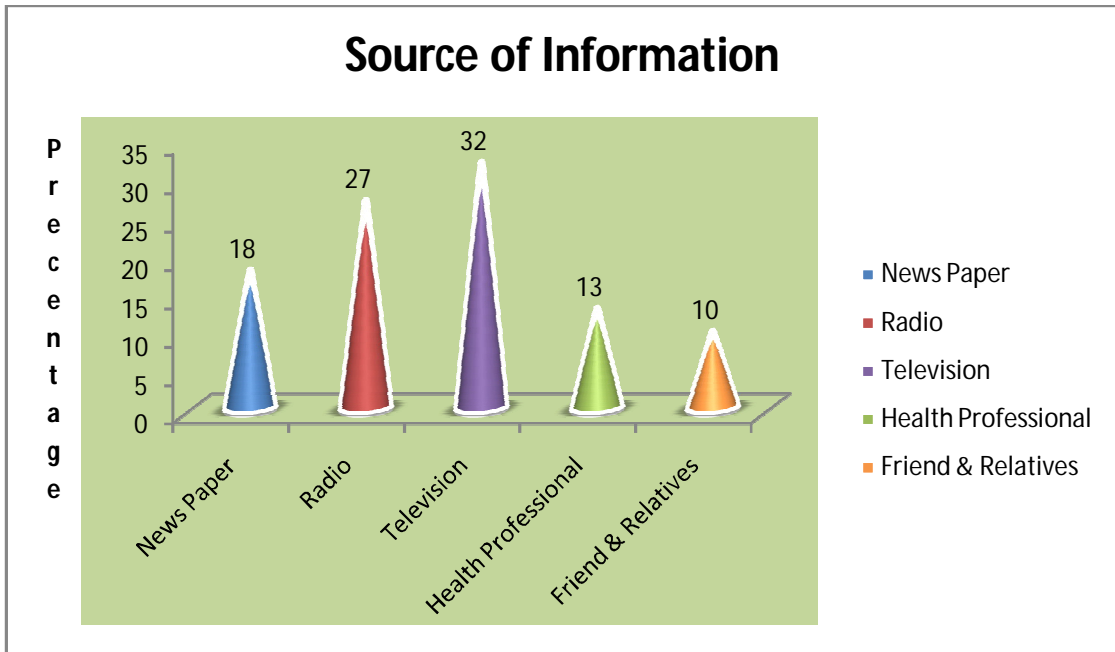
Fig-9 :Percentage distribution of mothers according to previous source of information
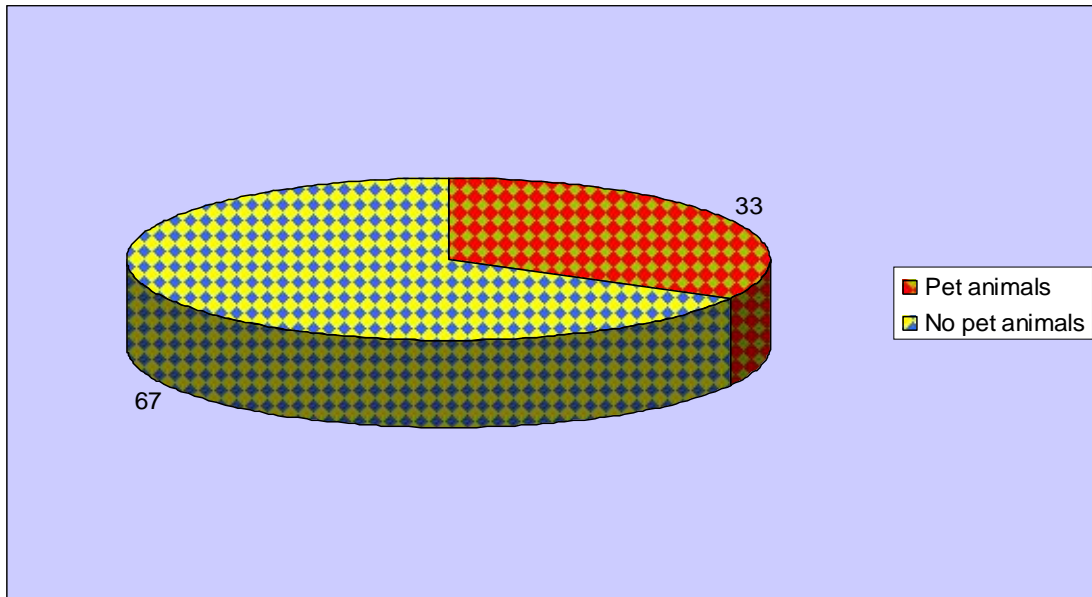
Fig -10 : Percentage distribution of mothers according to pet animals in the house

SECTION II: Deals with the pretest and post test score of knowledge of mothers of under five asthmatic children.

Table -2

Frequency and percentage distribution of mothers of under five asthmatic children according to level of knowledge in the pre test and post test.

N=60

S.No:	Level of Knowledge	Pre Test		Post Test	
		n	%	n	%
01.	Adequate Knowledge	2	3	37	62
02.	Moderately adequate Knowledge	22	37	23	38
03.	Inadequate Knowledge	36	60	0	0

Table 2 shows that out of 60 mothers 36(60 %) had inadequate knowledge, 22 (37%) of mothers had moderately adequate knowledge and only 2(3%) of mothers had adequate knowledge in the pre test .

In the post test 37(62 %) of mothers had adequate knowledge , 23(38 %) had moderately adequate knowledge and none of them had inadequate knowledge .

40
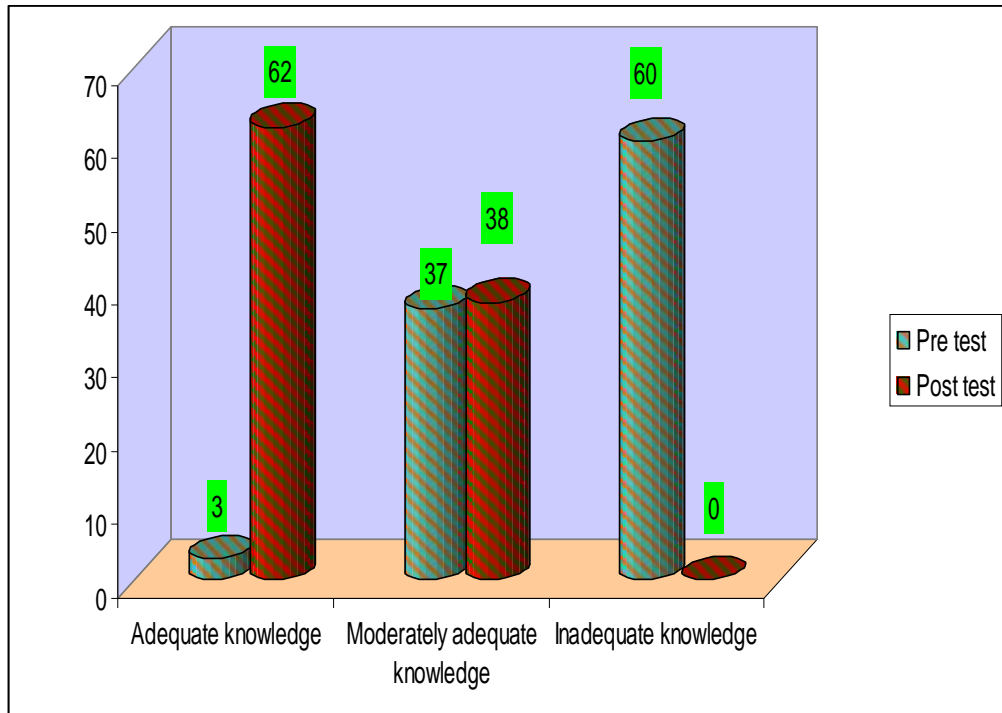
Fig -11:Knowledge on bronchial asthma among mothers

Table-3

Mean and percentage distribution of mothers of under five asthmatic children according to knowledge score in pre and post test on various aspects of bronchial asthma

VARIABLES	PRE TEST		POST TEST	
	Mean	%	Mean	%
General information	3.7	46.25	5.66	70.8
Causes	2.53	50.6	3.9	78
Symptom and triggers	2.38	59.58	3.71	92.91
Management	3.76	47	5.7	71.25

Table 3 reveals that in the pre test 46.25% had general information about asthma and the mean score was 3.7. In the post test 70.8% had general information about asthma and the mean score was 5.66.

In the pre test 50.6%had knowledge about causes of asthma and the mean score was 2.53. In the post test 78%had knowledge about asthma and the mean score was3.9

In the pre test 59.58 had knowledge about symptoms and triggers of asthma and the mean score was 2.38.In the post test 92.91% had knowledge about symptoms and triggers of asthma and the mean score was3.71

In the pre test 47% had knowledge about management of asthma and the mean score was 3.76.In the post test 71.25 had knowledge about management of asthma and the mean score was 5.7
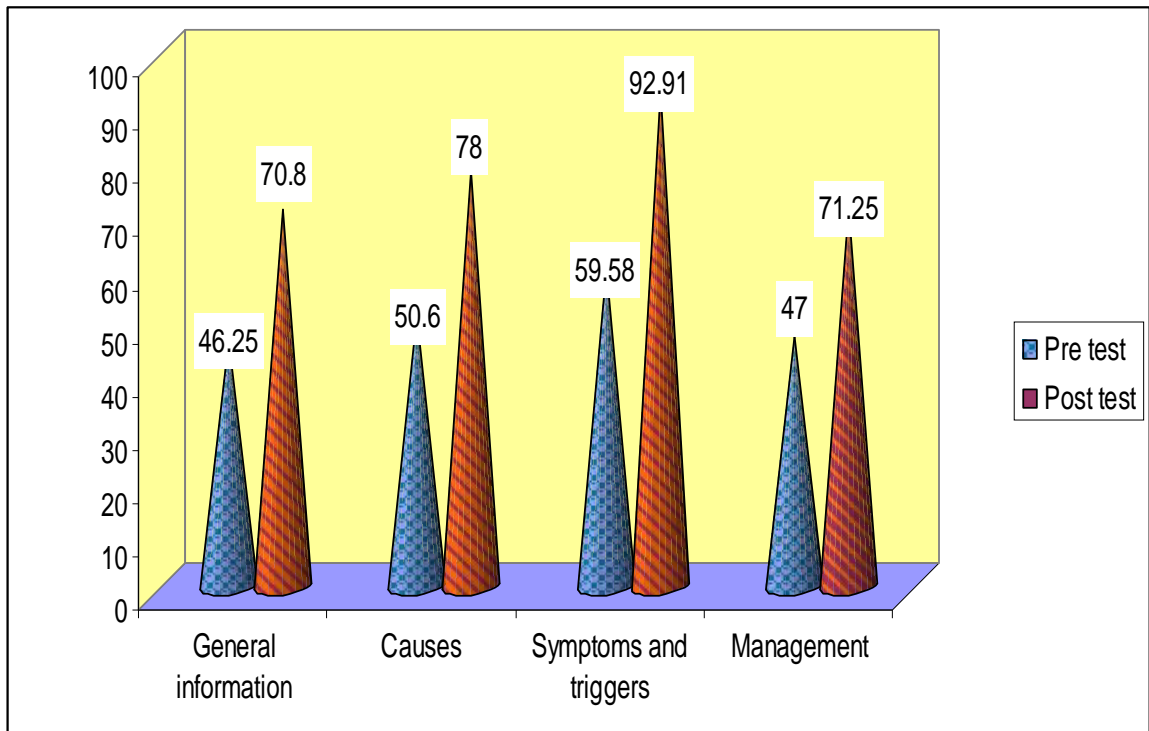
Fig-12:Knowledge of mothers regarding various aspects of bronchial asthma

SECTION III : Deals with the pretest and post test score of practice of mothers of under five asthmatic children

Table-4

Frequency and percentage distribution of mothers of under five asthmatic children according to the level of practice in the pre test and post test.

N = 60

S.No:	Level of Knowledge	Pre Test		Post Test	
		n	%	n	%
01.	Satisfactory practice	0	0	40	67
02.	Moderately Satisfactory practice	16	27	20	33
03.	Unsatisfactory practice	44	73	0	0

The data presented in table 4 shows that out of 60 mothers 44(73 %) had unsatisfactory practice, 16(27 %) of mothers had moderately satisfactory practice and none of them had satisfactory practice in the pre test .

In the post test 40(67 %) of mothers had satisfactory practice, 20(33 %) had moderately satisfactory practice and none of them had unsatisfactory practice.
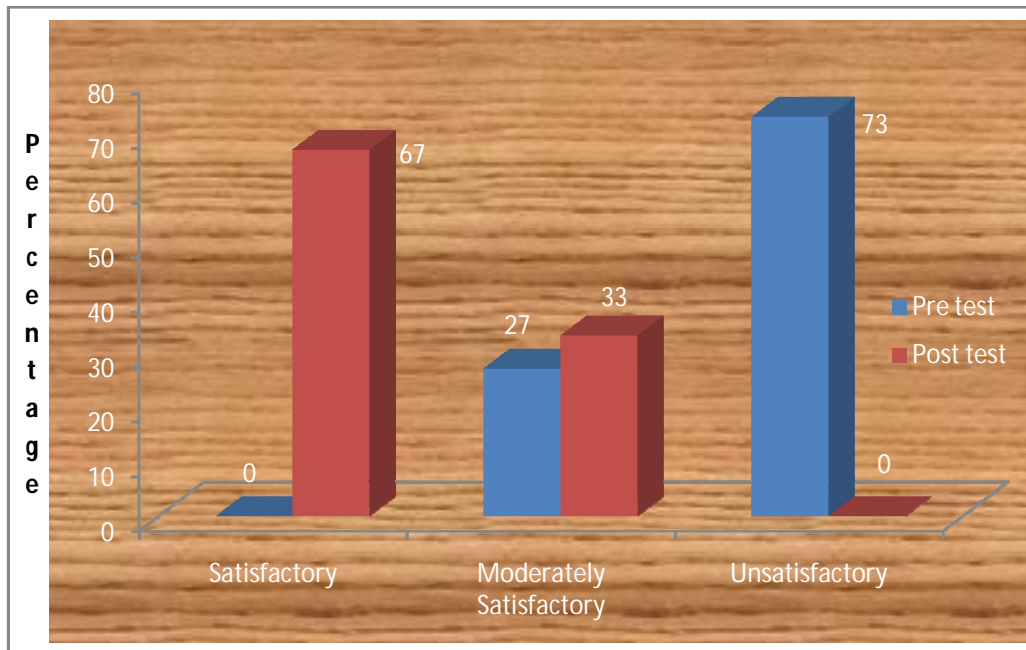
Fig-13:Practice on bronchial asthma among mothers

Table-5

Mean and percentage distribution of mothers of under five asthmatic children according to practice score in pre and post test on various aspects of bronchial asthma.

VARIABLES	PRE TEST		POST TEST	
	Mean	%	Mean	%
Prevention	11.1	46.59	18.06	75.27
Management	8.35	52.18	12.58	78.64

Table 5 reveals that in the pre test 46.59% had knowledge about prevention of asthma and the mean score was 11.1 In the post test 75.27% had general information about asthma and the mean score was 18.06.

In the pre test 52.18% had knowledge about management of asthma and the mean score was 8.35 In the post test 78.64% had general information about asthma and the mean score was 12.58.
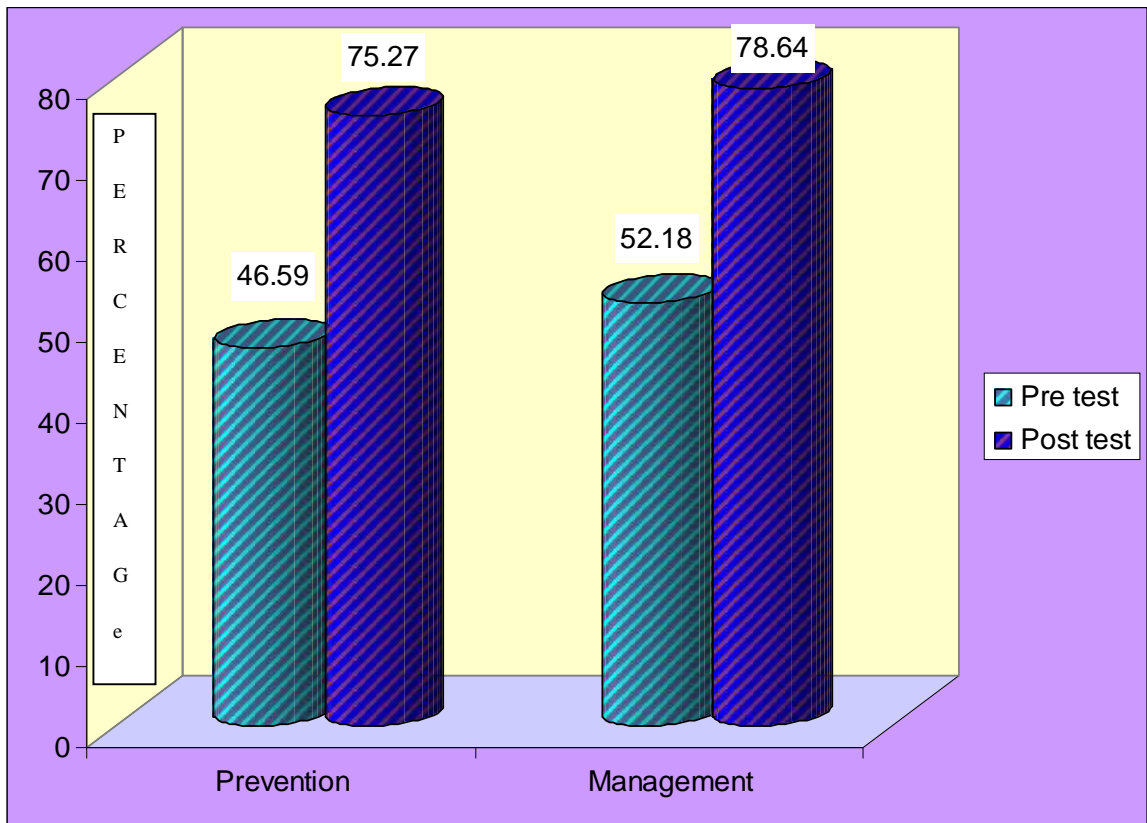
Fig-14:Practice of mothers regarding various aspects of bronchial asthma

SECTION IV: Data on the effectiveness of structured video teaching programme on knowledge and practice regarding bronchial asthma.

Table 6

Mean, SD and 't' value of knowledge regarding bronchial asthma among mothers of under five asthmatic children

<div align="right">N = 60</div>

S.No:	Variables	Mean	SD	't' Value
01.	Pre Test Knowledge	12.3	3.11	28.38
02.	Post Test Knowledge	19.15	2.3	

<div align="right">Significant at 0.05 level</div>

Table 6 shows that the post test mean knowledge score 19.15 was higher than the pretest mean knowledge score 12.3 among the mothers of under five asthmatic children . The obtained 't' value 28.38 was significant at 0.05 level (p<0.05). Hence the stated hypothesis was accepted.

Table 7

Mean , SD and 't' value of Practice regarding bronchial asthma among
mothers of under five asthmatic children

S.No:	Variables	Mean	SD	't' Value
01.	Pre Test Practice	19.53	3.81	26.27
02.	Post Test Practice	30.65	3.70	

Significant at 0.05 level

Table 7 shows that the post test mean practice score 30.65 was higher
than the pretest mean practice score 19.53 among the mothers of under five
asthmatic children . The obtained 't' value 26.27 was significant at 0.05 level
(p<0.05). Hence the stated hypothesis was accepted.

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SECTION V: Data on the relationship between the pre test and post test knowledge and practice of mothers of under five asthmatic children

Table -8

Mean , standard deviation, 'r' value of knowledge and practice regarding bronchial asthma among mothers of under five asthmatic children.

N = 60

S.No:	Variables	Knowledge		Practice		'r' value
		Mean	SD	Mean	SD	
01.	Pre test	12.3	3.11	19.53	3.81	0.66
02.	Post test	19.15	2.3	30.65	3.70	0.86

Table 8 Reveals that, the pre test knowledge score 12.3,standard deviation 3.11and practice score 19.53, standard deviation 3.81 has a significant positive correlation since the obtained 'r' value is 0.66.

The post test knowledge score 19.15,standard deviation 2.3 and practice score 30.65, standard deviation 3.70 has a significant positive correlation since the obtained 'r' value is 0.86.The above findings supports the research hypothesis.

SECTION VI : Data on the association between post test knowledge and practice of mothers of asthmatic children regarding management and prevention of complication of bronchial asthma with their selected demographic variables.

Table -9

Frequency, percentage and χ^2 distribution of knowledge among mothers of under five asthmatic children

S. No.	Demographic Variables	Adequate Knowledge		Moderately adequate knowledge		Inadequate Knowledge		χ^2
		n	%	n	%	n	%	
1.	Age of Mother a) Below 25 b) 26 – 30 c) 31 – 35 d) 36 and above	3 5 14 15	5 8 24 25	12 7 2 2	20 12 3 3	- - - -	- - - -	22.73[NS]
2	Number of Children a) 1 b) 2 c) 3 and above	9 21 7	15 35 12	10 8 5	17 13 8	- - -	- - -	3.11[NS]
3.	Education of Mother a) Primary b) Higher Secondary c) Graduate & above	7 26 4	12 43 6	13 7 3	22 12 5	- - -	- - -	10.27[*]
4.	Type of Family a) Joint b) Nuclear	25 12	42 20	17 6	28 10	- -	- -	0.26[NS]
5.	Area of living a) Urban b) Rural	25 12	42 20	17 6	28 10	- -	- -	1.44[NS]

6.	Monthly Income							
	a) Below 1000	5	8	5	8	-	-	
	b) 1001 – 2000	6	10	7	12	-	-	3.01^{NS}
	c) 2001 – 5000	14	24	6	10	-	-	
	d) 5001 and above	12	20	5	8	-	-	
7.	Previous source of Information							
	a) Newspaper	6	10	5	8	-	-	
	b) Radio	10	17	6	10	-	-	
	c) Television	12	20	7	12	-	-	0.32^{NS}
	d) Health Professional	5	8	3	5	-	-	
	e) Friends and Relatives	4	6	2	3	-	-	
8.	Pet animals in the house							
	a) Yes	12	20	8	13	-	-	0.34^{NS}
	b) No	25	42	15	25	-	-	

*Significant

NS – Not Significant

To find out the association between the knowledge of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma and selected demographic variables the null hypothesis was stated as follows.

H04- There will be no significant association between the knowledge of mothers of under five asthmatic children with their selected demographic variables.

The association between knowledge score of mothers and their number of children the obtained χ^2 value (3.11) p=5.9 was not significant at 0.05 level. The association between knowledge score of mothers and their type of family the obtained χ^2value (0.26)p=3.84 was not significant at 0.05 level .The association between knowledge score of mothers and their area of living the obtained χ^2value (1.44)p= 3.84was not significant at 0.05 level. The association

between knowledge score of mothers and their monthly income the obtained χ²value (3.01) p=7.8 was not significant at 0.05 level. The association between knowledge score of mothers and their previous source of information the obtained χ² value(0.32) p=9.4 was not significant at 0.05 level. The association between knowledge score of mothers and their pet animals in the house, the obtained χ²value (0.34) p =3.84 was not significant at 0.05 level.

This shows that there was no association between post test knowledge regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children with their selected demographic variables like number of children, type of family, area of living , monthly income, previous source of information, pet animals in the house. So the researcher has accepted the null hypothesis.

The association between the post test knowledge score of mothers of under five asthmatic children and age the obtained χ² value 22.73 p=7.8 was significant. The association between the knowledge score of mothers of under five asthmatic children and education the obtained χ² value 10.27 p=5.99 was significant. This shows that there was an association between knowledge of mothers of under five asthmatic children with their age and education. Hence the researcher has rejected the null hypothesis and accepted the research hypothesis.

Table 10

Frequency, percentage and χ² distribution of Practice among mothers

of under five asthmatic children.

S. No.	Demographic Variables	Satisfactory		Moderately Satisfactory		Unsatisfactory		χ²
		n	%	n	%	n	%	
1.	Age of Mother							
	a) Below 25	8	13	7	12	-	-	2.7^{NS}
	b) 26 – 30	7	12	5	8	-	-	
	c) 31 – 35	12	20	4	7	-	-	
	d) 36 and above	13	21	4	7	-	-	
2	Number of Children							
	a) 1	14	24	5	8	-	-	7.4*
	b) 2	22	37	7	12	-	-	
	c) 3 and above	4	6	8	13	-	-	
3.	Education of Mother							
	a) Primary							
	b) Higher Secondary	14	24	6	10	-	-	0.29^{NS}
		21	35	12	20	-	-	
	c) Graduate & above	5	8	2	3	-	-	
4.	Type of Family							
	a) Joint	17	28	11	18	-	-	0.82^{NS}
	b) Nuclear	23	38	9	16	-	-	
5.	Area of living							
	a) Urban	30	50	12	20	-	-	1.42^{NS}
	b) Rural	10	17	8	13	-	-	
6.	Monthly Income							
	a) Below 1000	5	8	5	8	-	-	3.56^{NS}
	b) 1001 – 2000	7	12	6	10	-	-	
	c) 2001 – 5000	15	26	5	8	-	-	
	d) 5001 and above	13	21	4	7	-	-	

7.	Previous source of Information							
	a) Newspaper	9	16	2	3	-	-	
	b) Radio	11	18	5	8	-	-	
	c) Television	13	21	6	10	-	-	21.19*
	d) Health Professional	4	7	4	7	-	-	
	e) Friends and Relatives	3	5	3	5	-	-	
8.	Pet animals in the house							
	Yes	13	21	7	12	-	-	0.03^{NS}
	No	27	45	13	22	-	-	

*Significant

NS – Not Significant

To find out the association between the post test practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma and selected demographic variables the null hypothesis was stated as follows.

H05- There will be no significant association between the post test practice of mothers of under five asthmatic children with their selected demographic variables.

The association between practice score of mothers and their age the obtained χ^2 value (2.7)p=7.8 was not significant at 0.05 level. The association between practice score of mothers and their education the obtained. χ^2 value (0.29) p= 5.9 was significant at 0.05 level. The association between practice score of mothers and their type of family the obtained χ^2 value (0.82) p= 3.84 was not significant at 0.05 level .The association between practice score of mothers and their area of living the obtained χ^2 value (1.42) p= 3.84 was not significant at 0.05 level.

The association between practice score of mothers and their monthly income the obtained χ^2 value (3.56) p= 7.8 was not significant at 0.05 level

.The association between practice score of mothers and their pet animals in the house, the obtained χ^2 value (0.03) p=3.84 was not significant at 0.05 level.

This shows that there was no association between practice regarding management and prevention of complication of bronchial asthma among mothers of under five asthmatic children with their selected demographic variables like age, education, type of family , area of living , monthly income , pet animals in the house . So the researcher has accepted the null hypothesis.

The association between the practice score of mothers of under five asthmatic children and number of children the obtained χ^2 value (7.4) p= 5.9 was significant . The association between the practice score of mothers of under five asthmatic children and previous source of information ,the obtained χ^2 value(21.19) p=9.4 was significant. This shows that there was an association between post test practice of mothers of under five asthmatic children with their number of children and previous source of information . Hence the researcher has rejected the null hypothesis and accepted the research hypothesis.

CHAPTER V

DISCUSSION

The aim of present study was to evaluate the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children in Masonic hospital Coimbatore. The study was conducted by using pre experimental design. The mothers of asthmatic children below the age 5 years were selected as the samples for the study. The sample size was 60.

The self administered multiple choice questionnaire and rating scale were used to assess the knowledge and practice regarding management and prevention of complications of bronchial asthma.

The response were analyzed through descriptive statistics (mean, frequency, percentage and standard deviation) and Inferential statistics (correlation coefficient, paired 't' test and chi square). Discussion on the findings were arranged based on the objectives of the study.

The first objective of the present study was to assess the knowledge of mothers regarding management and prevention of complication of bronchial asthma. The present study findings revealed that 2(3%)of mothers had adequate knowledge, and 22(37%) had moderately adequate knowledge, 36(60%) of mothers had inadequate knowledge in the pretest. In the post test 37 (62%) had adequate knowledge and 23(38%) had moderately adequate knowledge.

The second objective of the study was to assess the practice of mothers regarding management and prevention of complication of bronchial asthma. It revealed that 44(73 %) of mothers had Unsatisfactory practice and 16 (27 %)

had moderately satisfactory practice in the post test. All of them (100 %) had satisfactory practice in the post test.

This finding was supported by S. Shivabalan (2000) conducted a study on knowledge; attitude and practice of parents of asthmatic children attended two pediatric hospitals at Chennai. 100 parents of asthmatic children participated in this study. A diagnosis of asthma was accepted by only 39 % among them only 3% knew what exactly asthma means. 35 % believed that asthma is a hereditary disease .only 13 % where using aerosol therapy at home.

The third objective was to evaluate the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complication of bronchial asthma. The present study indicated that the post test mean value (19.15) of knowledge was higher than the pretest mean value (12.3) among mothers of under five asthmatic children. The obtained 't' value 28.38 which was highly significant at 0.05 level (p<0.05). Hence the stated hypothesis was accepted.

The post test mean value (30.65) of practice was higher than the pre test mean value (19.53) among mothers of fewer than five asthmatic children. The obtained 't' value 26.27 was highly significant at 0.05 level (p<0.05). Hence the stated hypothecs was accepted .The structured video teaching programme was effective in imparting the knowledge to mothers regarding management and prevention of complications of Bronchial asthma.

These findings were consistent with the study done by Bryant Stephens (2004) conducted a study on community asthma education for parents of urban asthmatic children. Parents attended classes were assessed on their knowledge of asthma and its management for children and on their asthma management behaviours before and after teaching. The average test score on asthma knowledge before the intervention was 81% for parents. Immediate post instructional test scores were significantly better with an average of

94%.Higher scores remain statistically significant at 6months and 12 months after the class.

The fourth objective was to find out the relationship between knowledge and practice regarding management and prevention of complication of Bronchial asthma among mother of under five asthmatic children. There was a significant positive correlation between the knowledge and practice in the pre test ('r'=0.66) and post test ('r'=0.86)

Hence the stated hypothesis was accepted so the relationship between the knowledge and practice among mothers of under five asthmatic children was significant. That means the level of knowledge can moderately modify the practice of the mothers.

These findings were supported by S. Furber et al (2002) conducted a study on asthma knowledge and medication compliance among parents of asthmatic children in Nanjing, China. Education and occupation were found to be associated with asthma knowledge, however there was no association between age or income with knowledge.

The fifth objective was to determine the association between the post test knowledge on management and prevention of complications of Bronchial asthma with their selected demographic variables. It revealed that there was a significant association between knowledge of mothers with their Age (χ^2 = 22.73 p<0.05) and education (χ^2 = 10.27 p<0.05) .

These was no significant association between the knowledge with their number of children, Type of family, Area of living, monthly income, previous source of information and pet animals in the house among mothers of under five asthmatic children .

These findings was supported by a study conducted by Chhabra S K (1998), conducted a study on prevalence of bronchial asthma in school children

in Delhi. There was a significant association between prevalence of asthma and area of living, pet animals in the house and the presence of smokers in the family. There was no significant association with any economic class.

The sixth objective was to determine the association between the post test practice of mothers of under five children regarding management and prevention of complication of Bronchial asthma with their selected demographic variables. It revealed that there was a significant association between practice of mothers with their number of children ($\chi^2 = 7.4$ p<0.05)) and previous source of information ($\chi^2 = 21.19$ p<0.05)

These was no significant association between the practice of mothers with their Age, Education, Type of family, Area of living, monthly income and pet animals in the house .

CHAPTER – VI

SUMMARY AND RECOMMENDATIONS.

This chapter deals with summary, findings, discussion, implications, limitations, conclusion and recommendations. The research effort of the investigator has helped in presenting the study findings that was revealed from the mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma.

SUMMARY

The summary includes the objective of the study, description of procedure used, major findings and conclusion and recommendations for further research study. The present investigation was regarding "Study to assess the Effectiveness of Structured Video teaching Programme on the knowledge and practice regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children in Masonic hospital Coimbatore''

The objectives of the study were the following

➢ To assess the level of knowledge and practice of mothers of asthmatic children regarding management and prevention of complication of bronchial asthma.

➢ To evaluate the effectiveness of structured video teaching programme on knowledge and practice regarding management and prevention of complication of bronchial asthma.

➢ To find out the relationship between knowledge and practice of mothers of asthmatic children regarding management and prevention of complication of bronchial asthma.

- To determine the association between knowledge among mothers of asthmatic children regarding bronchial asthma with their selected demographic variables.
- To determine the association between practice among mothers of asthmatic children regarding bronchial asthma with their selected demographic variables.

The conceptual framework adopted for the study was from the concepts of Stuffle beam model. It includes content, input, process, and product. This helped the investigator to evaluate the effectiveness of video teaching program on knowledge and practice regarding management and prevention of complications of bronchial asthma among mothers of under five asthmatic children in Masonic Hospital Coimbatore.

In the methodology the investigator selected one group pretest and a post test design. The variables in the study were as follows:

Independent Variable – Video teaching program on Bronchial asthma.

Dependent variable – Knowledge and practice regarding Bronchial asthma

Associate variable - Age, Education, number of children ,type of family, area of living, pets in the house, previous source of information.

For the pilot study, Child trust hospital ,Coimbatore was chosen, and 6 mothers were selected using convenience sampling, who were not included later in the main study. After getting consent from the subjects, pretest questionnaire was administered for treatment group. Video teaching program on bronchial asthma was administered to the group. After two weeks post-test questionnaire was administered to the group.

Convenience sampling was used to select study subjects. In this sampling technique the subjects who satisfied the inclusion criteria and attended the hospital during the time of data collection 60 mothers of under five asthmatic children were selected for the study.

The structured questionnaire used for data collection was developed by the investigator, which comprised of 3 sections. Section – 1 consisted of demographic variables, Section- II consisted of knowledge regarding Bronchial asthma and Section – III consisted of Practice regarding Bronchial asthma. The Reliability of the tool for the present study was established by using test retest method. Reliability was computed using Karl Pearson's correlation coefficient method and it was found to be r= 0.86, high.

The researcher prepared video package on Bronchial asthma Based on study objectives, a blue print was developed covering content area. The content was given to four nursing experts and 1medical expert and modifications were made in content according to suggestions made by experts.

The main study was conducted in Masonic hospital Coimbatore for 4 weeks 60 mothers were selected as per the sampling criteria using convenience sampling method. Purpose, objectives were explained and confidentiality was assured. With prior informed consent, pretest was conducted for treatment group. The investigator conducted video teaching programme. After two weeks post-test was conducted to treatment group. All the subjects were very co-operative and investigator expressed her gratitude for their co-operation. The data gathered were analyzed .

MAJOR FINDINGS

The major findings of the study are presented under the following headings based the objectives of the study.

➢ There was a significant difference between knowledge regarding Bronchial asthma before and after the video teaching program. The post test mean score was 19.15high as compared to the pretest mean value of 12.3

➢ There was a significant difference between practice of mothers regarding bronchial asthma before and after the video teaching program. The post test mean score was 30.65 as compared to pretest mean score of 19.53

➢ The structured video teaching programme was highly effective in imparting knowledge on management and prevention of complication of bronchial asthma. The obtained 't' value was 28.38 for knowledge,26.27 for practice which was significant at 0.05 level

➢ There was a significant positive correlation between the knowledge and practice among mothers regarding bronchial asthma before video teaching program 'r' = 0.66 (P<0.05).

➢ There was a significant positive correlation between the knowledge and practice among mothers regarding bronchial asthma after video teaching program, 'r' = 0.86 (p<0.05).

➢ There was a significant association between the age of mothers and Educational status of mothers of under five asthmatic children with their knowledge on bronchial asthma..

➢ There was no significant association between number of children, type of family, area of living, monthly income, previous source of information and pet animals in the house with the knowledge of mothers.

- There was a significant association between the number of children and previous source of information of mothers of under five asthmatic children with their practice on bronchial asthma..

- There was no significant association between the age, education, type of family, area of living ,monthly income , and pet animals in the house with the practice of mothers..

CONCLUSION

The study brought out the following conclusions

1) The knowledge and practice of mothers of under five asthmatic children regarding management and prevention of complications of bronchial asthma in the post test was significantly higher than the pre test.

2) The structured video teaching programme was found to be effective in increasing the knowledge and practice

3) There was a significant positive correlation between the knowledge and practice in the pre test and post test

IMPLICATIONS

It includes implication for nursing practice, nursing education ,nursing administration and nursing research.

IMPLICATIONS FOR NURSING PRACTICE

- Mothers of asthmatic children need to develop positive practice on Bronchial asthma.
- Video teaching program can be made part of health education in OPD.
- Nurses need to assess the knowledge and practice on Bronchial asthma among mothers.

- Nurses need to upgrade their knowledge on management and prevention of complications of bronchial asthma.

IMPLICATIONS FOR NURSING EDUCATION

- In-service education program for nursing personnel on inhaler therapy and management of bronchial asthma can upgrade the knowledge thereby helps to give health education to mothers .of asthmatic children.

- The study insists the need for the teaching on bronchial asthma to the nursing students and make them expert over the practice. Nursing curriculum should enable nursing students to develop advanced knowledge and acquire skills in practice of bronchial asthma.

IMPLICATIONS FOR NURSING ADMINISTRATION

- The study assists the nursing administrative authorities to initiate and carry out health education program in health care setting.

- Nursing leaders must utilize available resources, which are technologically sound in teaching mothers through mass health education program in community settings.

- Nursing administrators should provide adequate infrastructure facilities in counseling, teaching the mothers regarding bronchial asthma.

- Nursing leaders should enhance nursing service at home through readymade video package.

IMPLICATIONS FOR NURSING RESEARCH

- The study helps the investigator to develop insight regarding bronchial asthma through structured teaching program.

- This study will serve as a valuable reference material for future investigators.

- Teaching package prepared by the researcher will be helpful for giving mass health education.

LIMITATIONS

- Evaluation of effectiveness of structured video teaching program was limited to knowledge and practice domain.

- Sample size was limited to 60

- Setting was limited to only Masonic Hospital

- Practice was assessed by verbal response only.

- Video Teaching package may be applicable to middle and high income group only.

- Post test was done after 7 days of administration of structured teaching program. Influence of memory was not controlled.

RECOMMENDATIONS

- A similar study can be undertaken by utilizing other domain attitude.

- A similar study can be undertaken on larger scale.

- A comparative study can be done in the urban and rural areas.

- A similar study can be undertaken with control group.

- Studies are needed to develop standardized tool on knowledge on bronchial asthma

  - A similar study can be undertaken by using different teaching methods.

REFERENCES

BOOK REFERENCES

1. Anthony Milar (1999). "Hospital Paediatrics". 3rd (Ed). London, Churchill Livingstone Publications.

2. Burns M. Grave SK (1999). "Understanding Nursing Research". 3rd (Ed). London, W.B. Saunders Publication.

3. Denise F. Poli et al (2004). "Text Book of Nursing Research". 7th (Ed). Philadelphia, Lippincot Company.

4. Donna E Whaley (1997). "Essentials of Paediatric Nursing". 4th (Ed). New Delhi, ND Lard Coast Publications.

5. Fortar and Arnells (1999). "Text Book of Paediatrics", 4th (Ed). Philadelphia, Elbs Publications.

6. Ghai OP (2007) "Essential paediatrics" 6th (Ed). New Delhi, ND Publications.

7. Gupta D.C. (1994). "Introduction to Statistics". New Delhi, Jaypee Brothers Publication.

8. Gupta P (2005). "Statistical Methods". 23rd (Ed). New Delhi, Sultan Chand and Sons Publications.

9. Kader Parohoo (1997). "Nursing Research Principles, Practices and Issues". 1st (Ed). London, McMillan Publications.

10. Keelinger FN (1983). "Foundations of Behavioural Research". 2nd (Ed). New Delhi, Surjeet Publications.

11. Kothari C.R (1990). "Research Methodology and Techniques". 2nd (Ed). New Delhi, New Age International Publications.

12. Maria Hastings T (2003). "Fundamentals of Nursing Research". 3rd (Ed). Boston, Borlet Publications.

13. Marilyn J. Hocken Berry et al (2004). "Essentials of Paediatric Nursing". 7th (Ed). London, Mosby Publications.

14. R Dorothy Marlow (1998). "Text Book of Paediatric Nursing". 6th Edition, Philadelphia, WB Saunders Company.

15. Nancy burns and Susan (2005). "The Practice of Nursing Research". 5th (Ed), St. Louis, Elsvier Publishers.

16. Neil Mclntosh (2003). "Text Book of Paediatrics". 6th (Ed). London, Churchill Livingstone Publications.

17. Polit OF, Hungler BP (1999). "Nursing Research Principles and Method". 6th (Ed). Philadelphia, Lippincot Publications.

18. Reader SI, Martin LL (1997). "Nursing Research Principles and Method". 6th (Ed). Philadelphia, Lippincot Publishers.

19. Richard E Beharman et al (2004). "Text Book of Paediatrics". 17th (Ed). London, Elsvier Publicatinos.

20. Sunder Rao S, Richard T (1996). "An Introduction to Biostatisticsa manual for students in health science". 3rd (Ed). New Delhi, Jaypee Publications.

21. Thambulwadker RS (2005). "Paediatric Nursing". 2nd (Ed). Bombay, Vora Medical Publications.

22. Trecce and Treece (1986). "Elements of Research in Nursing". 2nd (Ed). Toenoto, Mosby Publications.

23. TNAI (2000). "Manual of Nursing Practice". 8th (Ed). New Delhi, Jaypee Brothers Publications.

24. Viswanathan J.et al (2004). "Text Book of Paediatrics". 3rd (Ed). Hyderabad, Orient Longman Publications.

25. Wong and Whaley (1997). "Essentials of Paediatric Nursing". 5th (Ed). Philadelphia, Mosby Publications.

JOURNAL REFERENCES

1. Al Dawood K (2001). Parental smoking and risk of respiratory symptoms among schoolboys. Journal of asthma 38(2): 149-154.

2. Bryant Stephens (2004) Philadelphia Community asthma prevention programme Journal of National Medical Association 96(7): 955-960.

3. Carslen K H (2002) Exercise Induced Asthma Paediatric Respiratory Review 3(2): 154-160.

4. Chakravarthy S (2002) Prevalence of asthma in urban and rural children in TamilNadu National Medical Journal of India 15(5): 260-263.

5. Chakurkar A B (2000) Paediatric Asthma an overview Paediatrics Today 3(9): 95 – 98.

6. Cristofori R (2003) Management of Paediatric Asthma Minerva Paediatrics 55(4): 331 – 344.

7. Deb S K (1998) Acute Respiratory Disease survey in Tripura Journal of Indian Medical Association 96(4): 111 – 116.

8. Dusser D (2007) Mild Asthma an expert review on epidemiology Journal of Allergy 62 (8): 591 – 604.

9. Frederick J M (1997) Effect of bedcovering system in children with asthma European Respiratory Journal 10(2): 361 – 366.

10. Kumar R K (2000) Bronchial asthma recent advances Indian Journal of Paediatrics 67(4): 293 – 298.

11. Kusunoki T (2008) Obesity and prevalence of allergic diseases in schoolchildren Journal of Paediatric Allergy and Immunology 19(6): 192 – 196.

12. Kundra S (2008) Utility of Indian adaptation of Integrated management of childhood illness Indian Journal of Paediatrics 75(8): 781- 785.

13. Maziak W (2002) The Management of childhood asthma in the community   European Respiratory journal 20(6): 1476 – 1482.

14. Neelamachija (2006). Sampling choosing participants. "Nightingale Nursing Times". 4 (7): 45 – 47.

15. Neelamakhija (2006). Research approaches in Nursing. "Nightingale Nursing Times". 8 (6): 34 – 36.

16. Nirmal Chand M D (2002) Measuring Quality of Life in young children with asthma National Medical Journal of India 15(5): 260 – 263.

17. Parmesh H (2002) Epidemiology of asthma in India Indian Journal of Paediatrics (69): 130 – 132.

18. Singh A B (2002)   Common environmental allergens causing respiratory allergy in India Indian Journal of Paediatrics (69): 65 – 69.

19. Von Hertzen L (2005) Signs of reversing trends in prevalence of asthma Journal of Allergy January 60(3): 121 – 125.

20. Weiland S K (2004) International Study of Asthma and Allergies in Childhood European Respiratory Journal September 24(3): 406 – 412.

21. Weinberger M (1991) Day to day management of asthma Paediatrician 18(4): 38 – 42.

22. Yamaha M (2003) Rhinovirus and asthma   Journal of Viral Immunology 16(2): 111 – 115.

NET REFERENCES

www.asthma.com

www.getaheadofasthma.com

www.aafa.com

www.asthma.org.uk

www.asthmavision.com

www.betterasthmacare.org

www.freebreather.com

www.asthma.about.com

www.medicalnewstoday.com

www.nationalasthma.org.au

www.nhlbi.nih.gov

www.agius.com

www.whoindia.org

www.indiastat.com

www.beatingasthma.com

www.whathealth.com

www.asthmastory.com

APPENDIX-A

LETTER SEEKING PERMISSION FOR CONTENT VALIDITY

CHERRAAN'S COLLEGE OF NURSING

(Affiliated to the Tamilnadu Dr. M.G.R. Medical University, Chennai - 32.
Approved by Indian Nursing Council, New Delhi and Tamilnadu Nurses and Midwives Council, Chennai)
New No. 521 (Old No. 278-A) Siruvani Main Road, Telungupalayam Pirivu,
COIMBATORE - 641 039, Tamilnadu, India.
✆ : 91-422 2343380, 2341066, 2346194, Fax : 91-422 2341066
E-mail : cihs2002@yahoo.co.in

Date :

REQUISTION FOR CONTENT VALIDITY

From
Mrs. JINCY JOSEPH,
M.SC (N) II YEAR,
Cherraan's college of Nursing,
Coimbatore.

To

Through
The principal,
Cherraan's college of Nursing,
Coimbatore.

Principal
Cherraan's College of N̶ ̶
278-A, Siruvani Main 1
Telungupalayam Piri
Coimbatore-641 03

Respected Madam,
Sud: Requisition for expert opinion and suggestion for content validity of the tool.

I am a student of M.SC Nursing II year of Cherraan's college of Nursing, Coimbatore affiliated to the Dr.M.G.R Medical University, Chennai, as partial fulfillment of M.SC Nursing Programme, conducting "A study to assess the effectiveness of structured video teaching programme on the knowledge and practice regarding management and prevention of complication of bronchial asthma among mothers of asthmatic children in selected hospitals at coimbatore."

Here with I am sending the developed tool for content validity and for your expert opinion and possible suggestion. It will be very kind of you to return the same to the undersigned at the earliest possible.

Thanking you,

Date : 8.7.09
Place: Coimbatore

Yours faithfully,

(JINCY JOSEPH)

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APPENDIX-B

LETTER SEEKING PERMISSION TO CONDUCT RESEARCH STUDY

CHERRAAN'S COLLEGE OF NURSING

(Affiliated to the Tamilnadu Dr. M.G.R. Medical University, Chennai - 32.
Approved by Indian Nursing Council, New Delhi and Tamilnadu Nurses and Midwives Council, Chennai)
New No. 521 (Old No. 278-A) Siruvani Main Road, Telungupalayam Pirivu,
COIMBATORE - 641 039, Tamilnadu, India.
℡ : 91-422 2343380, 2341066, 2346194, Fax : 91-422 2341066
E-mail : cihs2002@yahoo.co.in

Date :

PERMISSION FOR CONDUCTING STUDY

From

Mrs. Rani Irudayaraj, M.Sc. (N), M.Phil.,
Principal
Cherraan's College of Nursing
Coimbatore.

To

The Director,
Masonic Hospital,
Race course Road
Coimbatore.

Respected Sir,

Mrs. Jincy Joseph is a student of M.Sc. Nursing in our college. She is conducting a study on "A study to assess the effectiveness of structured video teaching programme on the knowledge and practice regarding management and prevention of complication of Bronchial Asthma among mothers of asthmatic children in selected hospitals at Coimbatore.".

This is for her research work to be submitted to The Tamilnadu Dr. M.G.R. Medical University, in partial fulfillment of the university requirement for the award of M.Sc. (N) Degree.

As a part of her study she would like to collect the data from the mothers of asthmatic children in the hospital. Further details of the proposed project will be completed by the student personally. Kindly give permission for the same reason. The norms, ethics and policies practiced by the hospital will be addressed by the student.

Thanking you,

Principal

Principal
Cherraan's College of N
278-A, Siruvani Main
Telungupalayam Pirivu
Coimbatore-641 039.

DATE 24/7/09
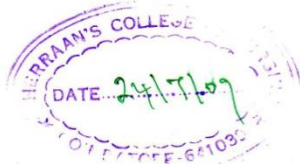
APPENDIX-C

LETTER GRANTING PERMISSION TO CONDUCT RESEARCH STUDY

MASONIC MEDICAL CENTRE FOR CHILDREN
(A UNIT OF COIMBATORE MASONIC CHARITY TRUST)
232, RACE COURSE ★ COIMBATORE - 641 018 ★ PHONE : 2220663 (6 Lines)
FAX : 0422-2221765 ★ E-mail : info@masonichospital.org

Date : ....

12th August 2009

To

The Principal,
Cherraan's College of Nursing,
New No.521 (Old No.278-A) Siruvani Main Road,
Telungupalayam Pirivu,
Coimbatore -39

Dear Sir,

With reference to your letter dt.24.07.09 we wish to inform you that we will permit your student Mrs.Jincy Joseph – M.Sc Nursing to conduct a project work on **"A Study to assess the effectiveness of structured video teaching programme on the knowledge and practice regarding management and prevention of complication of Bronchial Asthma among mothers of asthmatic children "** in our Masonic Hospital.

A copy of this project report to be submitted to the hospital..

This is for your kind information.

Thanking you,

Yours faithfully,

(K.V.RANGANATHAN)
GENERAL MANAGER

APPENDIX-D

FORMAT FOR CONTENT VALIDITY

Name of the expert :

Address   :

Total Content for the tool : Adequate/ Inadequate kindly validate each tool and tick   (✓)wherever applicable.

S.No.	No. of Tool/Section	Strongly Agree	Agree	Need Modification	Remarks

Signature of the expert with date

APPENDIX – E

CONTENT VALIDITY CERTIFICATE

I Here by certify that I have validated the Tool of 30083211 M.Sc (N) II year who is under taking "A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED VIDEO TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING MANAGEMENT AND PREVENTION OF COMPLICATIONS OF BRONCHIAL ASTHMA AMONG MOTHERS OF UNDER FIVE ASTHMATIC CHILDREN IN MASONIC HOSPITAL COIMBATORE."

Place: Signature of the expert

Date :

                                                                    Designation

APPENDIX-F

LIST OF EXPERTS WHO VALIDATED THE TOOL

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5) Mrs Vasumathy Msc (N)
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APPENDIX –G

STRUCTURED QUESTIONNARE

PART-I

Below are some of the questions related to your personal profile. You are requested to go through them one by one and answer them by (√) make in the options provided.

<u>TOOL PART 1   DEMOGRAPHIC DATA</u>

1) Age of mother
     a) Below 25years   ( )
     b) 25-30years   ( )
     c) 31-35years   ( )
     d) Above 35years   ( )

2) Number of children
     a) 1   ( )
     b) 2   ( )
     c) 3   and above   ( )

3) Educational status of mother
     a) Primary   ( )
     b) Higher secondary   ( )
     c) Graduate and above   ( )

4) Type of family
     a) Joint   ( )
     b) Nuclear   ( )

5) Area of living
     a) Urban   ( )
     b) Rural   ( )

6) Monthly income of family
    a) Below Rs.1000   ( )
    b) Rs.1000-2000   ( )
    c) Rs.2001-5000   ( )
    d) Above 5000   ( )

7) Pet animals in the house
    a) Yes   ( )
    b) No   ( )

8) Previous source of information
    a) News paper   ( )
    b) Radio   ( )
    c) Television   ( )
    d) Health professional   ( )
    e)Friends and relatives   ( )

Below are some of the questions related to the knowledge on management and prevention of complications of Bronchial asthma. You are requested to go through them one by one and answer them by (√) make in the options provided.

STRUCTURED QUESTIONNARE TO ASSESS THE KNOWLEDGE REGARDING ASTHMA IN CHILDREN

1) The most frequently occurring disease in childhood
    a) Respiratory infections   ( )
    b) Urinary tract infections   ( )
    c) Skin infections   ( )

2) The part of the body in which asthma affects
    a) Heart   ( )
    b) Lungs   ( )
    c) Brain   ( )

3) Bronchial asthma means
    a) Difficulty in swallowing   ( )
    b) Difficulty in breathing   ( )
    c) Chest pain   ( )

4) The more prevalence of asthma in India is due to
    a) Industrialization   ( )
    b) Variable population density & climate   ( )
    c) All the above   ( )

5) Asthma is more prevalent in
    a) Summer   ( )
    b) Winter   ( )
    c) Spring   ( )

6) Correct statement about asthma is
    a) Curable   ( )
    b) Not curable   ( )
    c) Controllable   ( )

7) Asthma is a chronic condition requiring regular treatment
    a) Correct   ( )
    b) Not correct   ( )
    c) Partly correct   ( )

8) Age group is mainly affected by asthma
    a) Below 1year   ( )
    b) 2-6 year   ( )
    c) 7-12 years   ( )

9) Causes of asthma
    a) Sin   ( )
    b) Dosham   ( )
    c) Allergy/heredity/infection   ( )

10) Young children are more prone to respiratory infections because of
    a) Small lumen of air passage   ( )
    b) Low body weight   ( )
    c) Seasonal changes   ( )

11) Asthma is more prevalent in urban than in rural because
    a) Due to industrialization   ( )
    b) Poor nutrition   ( )
    c) Incidence of indoor pollution   ( )

12) Asthma in children associated with
    a) Water pollution   ( )
    b) Soil pollution   ( )
    c) Air pollution   ( )

13) Increased industrialization leads to
    a) Soil pollution   ( )
    b) Air pollution   ( )
    c) Radioactive pollution   ( )

14) The symptom of asthma in children
    a) Coughing   ( )
    b) Sneezing   ( )
    c) Throat pain   ( )

15) The common allergy in Indian Climate
    a) Pollen   ( )
    b) Hay   ( )
    c) Home dust   ( )

16) The common trigger for asthma in children
    a) Food   ( )
    b) animals/pets   ( )
    c) Taking bath   ( )

17) The best treatment for asthma
    a) Medicine   ( )
    b) Prayer   ( )
    c) Surgery   ( )

18) The best route of drug administration for asthmatic children
    a) Oral medicines   ( )
    b) Injections   ( )
    c) Inhalations   ( )

19) Inhaler means
    a) Play material for children   ( )
    b) A type of metallic whistle   ( )
    c) Device used for asthma treatment   ( )

20) The best position for inhaler therapy
    a) Standing   ( )
    b) Sitting   ( )
    c) Lying   ( )

21) The instruction which is given before inhaler therapy
    a) Hold the breath till you count up to 10 ( )
    b) Hold the breath for 5 seconds   ( )
    c)Let out immediately   ( )

22) Aerosol therapy means
    a) Administration of drug in the form of liquid ( )
    b) Administration of drug in the form of vapour ( )
    c)Administration of drug in the form of solid ( )

23) The action of aerosol therapy
    a) It reduces the bronchial edema   ( )
    b) It increases laryngeal edema   ( )
    c) It liquefies the sputum   ( )

24) Duration of aerosol therapy
    a) 2-5 minute   ( )
    b) 5-10 minute   ( )
    c) 10-15 minute   ( )

25)Complication of asthma
    a)Atelectasis   ( )
    b)Meningitis   ( )
    c)Arthritis   ( )

PART III

Below are some of the questions related to the practice on management and prevention of complications of Bronchial asthma. You are requested to go through them one by one and answer them by (√) make in the options provided.

STRUCTURED RATING SCALE TO ASSESS THE PRACTICE REGARDING ASTHMA IN CHILDREN

	Question	Never	Sometimes	Always	Score
1.	Do you clean your house everyday?				
2.	Do you avoid taking your child to crowded areas?				
3.	Do you take your child out of the house when floor is being sweeped?				
4.	Are you protecting your child during winter season?				
5.	Do you have any control over the outdoor activities of your child?				
6.	Does your child use any inhaler or nebulizer?				
7.	Do you restrict anybody to smoke infront of your child?				
8.	Do you take your child immediately to the doctor when he / she is having asthma symptoms?				
9.	Do you give steam inhalation to your child when he is having breathing difficulty?				
10.	Do you apply vapourized balm during attack?				

11.	Whether your child carrying nebulizer every day to school?				
12.	Are you going for regular follow up to your child's doctor?				
13.	Are you recording the frequency of occurring of asthma symptoms in a diary?				
14.	Have you ever exposed your child to mosquito smoke or chemicals?				
15.	Do you use insecticide sprays when the child is inside the house?				
16.	Do you use agarbathies?				
17.	Do you use cow dung or firewood as cooking fuel?				
18.	Do you keep any open garbage in your kitchen?				
19.	Do you allow your child to play with pet animals?				
20.	Do you go for indigenous medicine?				

APPENDIX - H

nfs;tpgotk;

ghpt[-m

fHfzJ nfs;tpfS ffhdc'fs;gjpi ynjh;t[bra;J xdwpid Fwpapltk;[✓]

1. jhapd;taJ

   a. 25 tajpwF fH;   ( )
   b. 26 – 30 taJ   ( )
   c. 31 – 35 taJ   ( )
   d. 35 tajpwF nky;   ( )

2. FHei jfspd;vz zpfif

   a. 1   ( )
   b. 2   ( )
   c. \dWk;mjwF nky;   ( )

3. jhapd;fy;tpjjFjp

   a. Mukgf;fy;tp   ( )
   b. nkyepi yf;fy;tp   ( )
   c. glljhhp   ( )

4. FLkg mi kgg[

   a. TlLfFLkgk;   ( )
   b. jdpfFojjdk;   ( )

5. trpfFk;, lk;

   a. efhgwk;   ( )
   b. fpuhkk;   ( )

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6. tUkhdk;

    a. +.1000 fF fH;   ( )
    b. +.1001 – 2000   ( )
    c. +.2001 – 5000   ( )
    d. +.5000 fF nky;   ( )

7. tPl oy; bryy gpuhz pfs;c ssdth>

    a. Mk;   ( )
    b. ,yi y   ( )

8. M! ;Jkh gwwpj ;jftyfi s ,jd;Kd;bjhpe;J bfhz nld;

    a. brajpjjhs;   ( )
    b. nuonah   ( )
    c. bjhi yffhlrpbglo   ( )
    d. kUj;Jt gz pahshfs;   ( )
    e. ez ghfs;kwWk;c wtpdh;   ( )

gjhpt[;M

fHfz] nfs;tpfS ffhd c' fs;gjpi y njh;t[bra;J xdwpid
Fwpapl tk;[✓]

1. FHej j fS fF mjpfkhf VwgLk;neha;

   a. Rthr nehafs;   ( )
   b. rpWelh;nfhshWfs;   ( )
   c. njhy;nehafs;   ( )

2. M! j khtpdhy;ghjpffggLk;cl y;c Wgg[

   a. , Uj ak;   ( )
   b. Ei ualuy;   ( )
   c. \i s   ( )

3. M! ;Jkh vdgJ

   a. tpG' Ftj wF rpukggLj y;   ( )
   b. \rR tpLtj py;rpukk;   ( )
   c. be" R typ   ( )

4. ek;ehloy;M! ;Jkh gutyhf fhz ggLtj w;fhd fhuz k;

   a. bj hHpwgil rp   ( )
   b. kffs;bj hi f bgUffk;/fhy rhjh#z epi y   ( )
   c. mi dj;Jk;   ( )

5. M! ;Jkh vej fhy' fspy;mjpfk;VwgLfpwJ>

   a. btapy;fhyk;   ( )
   b. ki Hffhyk;   ( )
   c.trej fhyk;   ( )

6. M! ;Jkhi t gwwp rhpahd fUj;Jffz pgg[

   a. Fz ggLjj Koak;   ( )
   b. Fz ggLjj KoahJ   ( )
   c. flLggLjj f;ToaJ   ( )

7. M! ;Jkh vdDk;eIz J fhy neha'fF bjhl h;rpfpri r nj i tggLfpwJ.

    a. rhp   ( )
    b. j tW   ( )
    c. ghj p rhp   ( )

8. vej taj py;M! ;Jkh mj pfk;ghj pffpwJ>

    a. 1 taj pwF fhH   ( )
    b. 2 – 6 taj pwFs;   ( )
    c. 7 – 12 taj pwFs;   ( )

9. M! ;Jkhtpd;fhuz ' fs;

    a. rhgk;   ( )
    b. nj h# k;   ( )
    c. myh$p / gukgi u / bj hwWneha;   ( )

10. FHej j fS fF Rthrghi j neha;vj dhy;mj pfk;VwgLfpwJ>

    a. rpwpa Rthr FHhafs;   ( )
    b. Fi wthd c l y;vi l   ( )
    c. fhyepi y khWghL   ( )

11. M! ;Jkh fpuhkj i j tpl efujj py;Vd;mj pfkhf fhz ggLfpwJ.

    a. bj hHpwrhi yapd;tshrrp fhuz khf   ( )
    b. rj ;J Fi wghL   ( )
    c. FoaLggj;gFj ap Yss fHpt[kwWk;RwWggj fHptfs;   ( )

12. FHej j fS fF M! ;Jkh vj dhy;VwgLfpwJ>

    a. eIh;khRgLj y;   ( )
    b. kz ;khRgLj y;   ( )
    c. fhwW khRgLj y;   ( )

13. bj hHpwrhi y tshrrp mj pfhpgg[fhuz khf VwgLk;tpi stf

    a. kz ;khRgLj y;   ( )
    b. fhwW khRgLj y;   ( )
    c. thbdhyp brayghL khRgLj y;   ( )

14. FHei j fS fF M! ;Jkhtpdhy;tUk;mwpFwpfs;

    a. , Uky;   ( )
    b. Jkky;   ( )
    c. bjhz j l typ   ( )

15. , ejpa fhyepi yapy;bghJ thf fhz ggLk;xt;thi k

    a. Jfsfs;   ( )
    b. i tfnfhy;   ( )
    c. tll LkhRfs;   ( )

16. FHei j fS fF bghJ thf M! ;Jkh vj dhy;mjpfhpf;fpwJ>

    a. c z t[( )
    b. tpy' Ffs;/ bryyy gphz pfs;   ( )
    c. Fspjj y;   ( )

17. M! ;Jkhtpwfhd rpwej rpfprij r

    a. kUe;J   ( )
    b. gfjp   ( )
    c. mWi t rpfprij r   ( )

18. M! ;Jkh FHei j fS fF vj d;thapyhf kUe;J bfhLffggLfpwJ>

    a. tha;tHpahf bfhLffggLk;kUe;J   ( )
    b. C rp   ( )
    c. Rthrpgg[\ ykhf   ( )

19. Rthrpj j y;vdgJ

    a. FHei j ffhd tpi sahl L bghUsfs;   ( )
    b. xU ti fahd c nyhf tprpy;   ( )
    c. M! ;Jkh rpfprij rff gadgLk;fUtp   ( )

20. Rthrpgg[rpfprij rffhd rpwej epi y

    a. epwgJ   ( )
    b. c l fhUtJ   ( )
    c. gLggJ   ( )

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21. \ rR ga妈rˌapd;nghJ vej ti fahd Fw妈gg[bfhLffggl儿J>

   a.10 vz ɋ k;ti u \ rɟ r ml ffˌpg妈oj;Jf;
     bfhsֽs ntz ᶫk;   ( )
   b.5 vz ɋ k;ti u \ rɟ r ml ffˌpg妈oj;Jf;
     bfhsֽs ntz ᶫk;   ( )
   d. \ rɟ r c lnd bts妈na tˌpl ntz ᶫk;   ( )

22. Rthr ga妈rˌp vdgJ

   a. Mtˌpahj y;\ ykhf kUeɟ j brYj;Jj y;
   b. khj j ˌpi u \ ykhf kUeɟ j brYj;Jj y;
   c. rˌpugg[\ ykhf kUeɟ j brYj;Jj y;

23. Rthr ga妈rˌpapd;brayghL

   a. rsˌpi a fi ujj y;   ( )
   b. Rthr FHha;tˌPffj i j mjˌpfhˌpffˌpwJ   ( )
   c. Rthr Ez FHha;tˌPffj i j Fi wffˌpwJ   ( )

24. Rthr ga妈rˌpapd;fhy mst[

   a. 2 – 5 eˌpkˌpl ' fs;   ( )
   b. 5 – 10 eˌpkˌpl ' fs;   ( )
   c. 10 – 15 eˌpkˌpl ' fs;   ( )

25. \ rRj妈z wyˌpd;gˌpd;tˌpi stˌfs;

   a. Ei ua妈y;bray;, He;J nghFj y;   ( )
   b. \ i s/j z ᶫtlk;ghjˌpffggLk;bfhoa tˌpahjˌp ( )
   c. \ lᶫ tˌPffk;   ( )

gjhpt[-,

fHfz J nfs;tpfS ffhd c' fs;gj pi y bghUjj khd

ml J ti z apy;Fwpap l t k;[✓]

		xUbghGJk;, yi y	vgbghGjhtJ	vgbghGJk;	kjpgbgz ;
1.	ep' fs;jpdKk;c' fs;tpl i l Rjj k;brawp' fsh>				
2.	ep' fs; c' fs; FHej ji a behpry; mjpfk; c ss , l' fS ff bfhz L bry;ti j j tphffpwlhfsh>				
3.	ep' fs; c' fs; tpl i l Rjj ggLj;Jk; nghJ c' fs; FHej ji a btsppna bfhz L bry;tlhfsh>				
4.	ep' fs; c' fs; FHej ji a Fsph; fhyj jpy; , Ue;J ghJfhgghfsh>				
5.	ep' fs; c' fs; FHej j apd; btsp el tofj ffi s fl LggLj;Jthfsh>				
6.	c' fs; FHej j Vnj Dk; Rthr kUei j gadgLj;Jfpwjh>				
7.	c' fs;FHej j Kd;ahuhtJ g[fgpoffj i l tpj pgglhfsh>				
8.	c' fs; FHej j apl k; M! ;Jkhtpwfhd mwpwFwpfs; bj hpej hy; c l nd kUj;Jthpl k; bfhz L bry;tlhfsh>				
9.	c' fs; FHej j fF Rthr nfhshW c ss nghJ Mtpg; gpoggplhfsh>				
10.	c' fs; FHej j ghj pffggLk; nghJ i j yk; c gnahfpgglhfsh>				
11.	c' fs; FHej j j pdKk; gsspfF begj yrh; bfhz L bryfpwjh>				
12.	ep' fs; c' fsJ FHej ji a j pdKk;kUj;Jthpl k;mi Hj;J bry;tlhfsh>				

#					
13.	ef' fs; M! ;Jkh i lhpi a c gnahfpffpwlhfsh>				
14.	bfhR kUe;J g[fapypUe;J c' fs; FHej ji a ghJfhffpwlhfsh>				
15.	ef' fs; c' fs; FHej j tll oDs; , UfFk; nghJ fpUkp ehrpdpfi sg; gadgLj;J tlhfsh>				
16.	ef' fs; gjjpfi s gadgLj;J tlhfsh>				
17.	ef' fs; ri kggj wF tpwF flj li a gadgLj;J tlhfsh>				
18.	ef' fs; c' fs; ri kay; mi wapy;jpwej btspFgi g bjhloi a i tjjpUgglhfsh>				
19.	ef' fs; c' fs; FHej bryy gpuhz mahL tpi sahl mDkjjpgglhfsh>				
20.	ef' fs; tll L kUe;Jfi s cgnahfggLj;J tlhfsh>				

APPENDIX – I

SCORING KEY FOR KNOWLEDGE VARIABLES

Question no	Correct Response	Score
1	a	1
2	b	1
3	b	1
4	c	1
5	b	1
6	c	1
7	a	1
8	b	1
9	c	1
10	a	1
11	a	1
12	c	1
13	b	1
14	a	1
15	c	1
16	b	1
17	a	1
18	c	1
19	c	1
20	b	1
21	a	1
22	b	1
23	a	1
24	c	1
25	a	1
	Total	25

APPENDIX – J

SCORING KEY FOR PRACTICE VARIABLES

Positive statements

Never	-	0
Sometimes	-	1
Always	-	2

Negative statements(Reverse score)

Never	-	2
Sometimes	-	1
Always	-	0

APPENDIX - K

BRONCHIAL ASTHMA

INTRODUCTION

India is a vast country. Because of variable population density and variable climate respiratory infections are very prevalent in India. Respiratory infections are the most common infections which affects the small children. Children are having small lumen of air passage and poor immunity

DEFINITION

Asthma is a condition in which the airways of the lungs are narrowed making breathing difficulty.

INCIDENCE

Asthma is estimated to affect 300 million people worldwide. About 10 out of every 100 children in India have asthma. It is more common in urban than rural because of industrialization and air pollution. Asthma is more common in winter season and it is affected mainly the age group of 2-6 years of age.

1 in 10 children has asthma

3 children in every class have asthma

Every 19 minutes a child admitted to the hospital because of asthma

CAUSES OF ASTHMA

Respiratory infection-Respiratory syncytial virus is the major virus causing asthma during childhood.

Bacterias also will cause asthma.

Heredity-If both the parents are asthmatic there is 50% chance of occurring asthma in children

TRIGGERS OF ASTHMA

Major triggers of asthma are the following

Allergens-Pollen grains, animals(cat, dog ,horse),birds

Irritants-cigarette smoke, wood smoke, smoke from the vehicles, paint, mosquito coils ,insecticide sprays.

Changes in climate ,exercises, strong emotions(laughing or crying)

Foods(icecream ,chocolate ,cool drinks)

HOW ASTHMA AFFECTS THE LUNGS

When any allergic reaction occurs the muscles of the airways become tightened and it becomes narrowed. Thickened mucous secretion also leads to narrowing of the airways which leads to breathing difficulty

CLINICAL MANIFESTATIONS OF ASTHMA

- Coughing
- Wheezing
- Coughing with wheezing
- Frequent night coughing
- Coughing after running, laughing, or crying

MANAGEMENT OF ASTHMA

Medicine is the best treatment for asthma. Asthma medicines if giving in the form of inhalation is the best route of administration of drug. This is called inhaler therapy. Inhaler should be given to the child in the sitting position for 10-15 minutes.

What to do if your child has an acute asthma attack?

Don't be panic and make your child calm. Give the nebulizer to the child. Wait for some time. If symptoms are still persisting go to your doctor

How to use an inhaler?

Shake the inhaler well. Place the inhaler in the mouth and take a deep inspiration. Count for 1-10 and slowly exhale.

HOME MANAGEMENT OF ASTHMA

- Give steam inhalation when your child is having breathing difficulty
- Apply balm or vicks on the chest and the back when the child is having difficulty in breathing.
- Maintain asthma diary and record the frequency and time of occurring asthma symptoms.
- Go to the doctor immediately whenever your child develops asthma symptoms

PREVENTION OF ASTHMA

- Clean your house everyday. Keep the child out of the house when the floor is being sweeped
- Avoid exposure to cold air
- Don't allow anybody to smoke in front of your child
- Don't use any insecticide sprays in front of the child
- Don't allow your child to play with pet animals
- Don't keep the child in front of firewood smoke
- Don't take your child to crowded areas
- Provide seasonal clothing to your child
- Don't keep any open garbage in the kitchen
- Do not keep mosquito coil or agarbathies in front of your child

- When your child is having asthma symptoms do not give any ice cream, chocolate, or cool drinks

- Control the outdoor activities of the child

If you are not treating your child's asthma properly many complications can occur. Atelectasis ,Status asthmaticus, Bronchopneumonia are common complications.

I hope you all have understood about the definition, causes, triggers, clinical manifestations ,management, prevention and complications of bronchial asthma. Thank you for listening me till now.

THANK YOU

APPENDIX - L

tz f'fk/

KdDi u:

, ej'ah xU k'fgbgh'a ehL. gyjuggl! fhye'i yfs'Yk;kffs; bjhi f bgUffjj'dhYk/ gy ti fahd Rthr nehafs; ek; ehl'oy; gutyhf fhz ggLf'dwJ.

FHej jfi s ghj'fFk;gyjuggl! nehafs'py;Rthrk;rkgejggl! bjhwW nehafns Kjdj k tf'ff'wJ. FHej jfS fF neha;vj'hgg[rfj'p Fi wthd fhuz jj'dhYk/ \rRfFHha;mst[r'w'ajhf , Uggj'dhYk; bjhwW nehafs;VwgLf'dwd.

ek; c l y'py/ Ei ual'uy; Trhr c WgghFk;   M! ;Jkh   vdgJ RthrfFHha; RU'Ftj'dhy; VwgLk; xU nehahFk;   , jdhy/ \rR t'LtJ k'ft'k;r'ukhf , UfFk;

c yf mst'py; M! ;Jkht'dhy; ghj'ffggl! thfs'd; vz z 'fi f 300 k'pyyy'd; ngh; Mth; 100 y; 10 FHej jfs; M! ;Jkht'dhy; ghj'ffggl! Lssdh;   nkYk/ , eneha; f'uhkg'wjj jf; fhl'oYk/ efhg'w' fs'py;mj'fkhf fhz ggLf'wJ.

M! ;Jkh ki H kwWk;Fsh'fhy' fs'py;r'w'a FHej jfi s k'ft'k; ghj'ff'wJ.

gjj'py; xU FHej jfF M! ;Jkh cssJ.   xU tFgg'py; 3 FHej jfs;   M! ;Jkh   neha'ffhf   kUj;Jtki da'py; mDkj'ffggLf'whhfs;

fhuz ' fs;

- i tu! ;f'pUk'fs;, eneha;c z !htjw'fhd Kff'a fhuz 'p
- ghf'Oh'aht'k; M! ;Jkh neha; c z !hfFk; gukgi u tha'yhft'k; , eneha;c z !hFk;
- bgw'nwhh; , UtUfFk; M! ;Jkh , Uej'hy; FHej jfF 50 rj t!j k; , eneha;tu thagg!ssJ.

M! ;Jkhi t J}z Lk;fhuz ' fs;

c' fs;FHei jfF vej fhuz ' fshy;M! ;Jkh mjpfhpffpwnjh/ mjpypUe;J FHei jfi s mggjwggLjjpi tffntz Lk;

myh$p

fugghd/ kyhpd;kfuejJ}s/ g{i d/ eha/ gwi tfs; rpfbul;g[f/ tpwF/ thfd' fspypUe;J btsptUk; g[f/ thri d jputpa' fs/ bfhRthjjp/ bgapz l/ fhyepi y khWghL/ clwgapwrp/ tshrrp btspghLfs; (mjpfkhf rphpjj y)/ mGjy)/ rhfnyl/ l! fphlk/ Fspnghd' fs; Mfpa mi dj;Jk; M! ;Jkhi t J}z Lk; Kffpa fhuz ' fs;MFk;

vggo M! ;Jkh Ei ualui y ghjpffpwJ:

vgbghGJ clypd; csns myh$p Ei Hfpwnjh mgbghGJ \rRfFHhapd; ji rfs; , Wffkhfp RU' FfpwJ. mJ nghynt/ rsp mjpfkhfp \rRf; FHhapd; ji rfs; RU' Ftjhy/ Rthrk; tpLtjwF f#l khfpwJ.

mwpFwpfs;

* , Uky;
* , Ggg[\rR , i ugg[
* , utpy;mjpfkhf , UKjy;
* mGj gpdndh/ rphpjj gpwnfh (myyJ) Xod gpdngh , Uky;tUk;
* mjpfkhf \rR , i ujjy;(myyJ) vLjjy;

, jpy; VnjDk; mwpFwpfs; bjdgljhy/ clnd kUj;Jti u mq ftk;

M! ;Jkhtpd;kUj;Jt Ki wfs;

M! ;Jkh kUe;Jfi s cwp" Rjy; Ki wapy; vLjjhy/ mJ cgnahfKssJ. mej neujjpy;clfhheJ bfhss ntz Lk; mj;Jld; , kkUe;J 10-15 epkpl k; ti u vLff ntz Lk; vLjjhy/ Rthrf; FHha; tpffk;Fi wak; guh' nfhi lnyljh;ti f kUejfns , ej M! ;Jkh nehafF kpfrpwej J.

c' fs;FHei jfF jpObudW M! ;Jkh tejhy;vdd braa ntz Lk>

e' fs;mturglhky;c ' fs;FHei ji a mi kj ep i yfF bfhz L tu ntz Lk;

mLj j j hf lnhaler (, d@nfyh) bfhLff ntz Lk;

, t;ti fahd Kj Yj t p braj g pdDk/ \rR , i ugg[bj hlhe;J , Uej hy/c l doahf kUj;J ti u mq ft k;

, d pnfyh;

1. , dnfyi u ed whf FYff ntz Lk;

2. mLj j goahf tha py; , dnQyi u i tj;J ed whf MHkhd \rR vLff t k;

3. g pd dh;1 – 10 ti u vz z ntz Lk;

4. mLj j hf bkJ thf bts pna \rR t pl ntz Lk;

FHei j fF M! ;Jkh c ss nghJ j hakhh fs;t pl oy;braa ntz oai t.

1. \ffi lgg[c ss nghJ Mt pg poff ntz Lk;

2. \rR j pz wy;c ss nghJ kUej pi d khhg[kw Wk;KJ F gFj pa py; j lt p bfhss ntz Lk; M! ;Jkhtp d; mw p Fw pfs;bj dgl lhy;c l doahf kUj;J ti u mq ft k;

3. \rR j pz wy;myyJ , Uky;thuj pj py;myyJ khj j j pwF vj j i d Ki w kw Wk;vej neuk;tej J vdW xU i lh pa py; Fw pj;J i tj;Jf;bfhss ntz Lk;

jLggj wfhd Ki wfs;

1. t pl i l Rj j khf i tj;Jf;bfhss ntz Lk;

2. t pl i l Rj j ggLj;Jk; bghGJ FHei ji a t pl ow F bts pna , UfFkhW ghhj;Jf;bfhss st k;

3. kfffs; beUfFk; mj pfkhf c ss , l ' fs py; FHei ji a bfhz L bryy Tl hJ.

4. FHei j fs;Kdghf vtUk;r pbul ;g poff ntz l hk;

5. FHei ji a bryy g puhz pfs pd;tp i sahl mDkj poff Tl hJ.

6. FHei j t pl oDs; , UfFk; nghJ g{rr pf; bfhyyy p kUeJ gadgLj j Tl hJ.

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7. mLgg[vhpfFk;nghJ mjpypUe;J btsptUk;g[f FHei ji a ghjpffhky;ghJfhffntz Lk;

8. FHei jfF M! ;Jkh cssJ vdwhy; mthfi s mjpfhi y kwWk; khi y nti sfspy; btspna tpi sahLti j jLff ntz Lk;

9. FHei j tIloDs;, UfFknghJ bfhRthjjp kwWk; CJgjjp gadgLjj TIhJ.

10. ri kay;mi wapy;c ss Fgi gfi s jpwe;J i tff TIhJ.

tpi stfs;

M! ;Jkhi t rhpahd Ki wapy;ftdpfftpyi y vdpy;gytpj khd gpurri dfs;Vwgl thagg[c ssJ.

Kot[u:

, Jti u ehk; M! ;Jkh vdDk; Rthr neha; gwwpa fhuz ' fs/ J}z Lk;fhuz ' fs/ vggo Ei uaUui y ghjpffpwJ. mwpFwpfs/ kUj;Jt Ki wfs/ tIloy; fi lggpoff ntz pai t/ jLggjwfhd Ki wfi sg; gwwpf;bj hpe;Jf;bfhz nlhk;

, Jti u ehd; Twpai tfi s nflj mi dtUfFk; vdDi la edwpi a bj hptpj;Jf;bfhsfpnwd; edwp! tz ffk!