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Effectiveness of planned teaching programme on knowledge regarding the home care management of Bronchial Asthma among patients

Kalabarathi S*, Anjali S

Department of Obstetrics and Gynecological Nursing, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India



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ABSTRACT

Asthma is an illness of the respiratory system wherein respiratory sections in which the lungs become over receptive and over-responsive. On account of this expanded affectability, lungs become aggravated when presented to certain aggravations, for example, cool air, smoke, and dust and so on Asthma causes irritation of the lungs and results in narrowing of the respiratory entries. The word asthma signifies "to inhale hard". As the name recommends, individuals with asthma experience issues in Breathing, Tightness of Chest and Wheezing. A quantitative pre-experimental one group research design was conducted among 60 patients with Bronchial Asthma. Convenient sampling technique was used to select samples. A structured questionnaire was used to collect demographic data and knowledge regarding home care management was assessed. The planned teaching program was given to the samples. After an hour, the knowledge was reassessed using the same structured questionnaire. The present study result states that there is a significant increase in the knowledge of the patients with bronchial asthma at $p < 0.001$ level. This indicates that planned, structured teaching is the effective and easy method to improve knowledge among patient with bronchial asthma regarding homecare management that helps to relieve symptoms through non-pharmacological intervention which in turn has a good prognosis in bronchial asthma.

*Corresponding Author

Name: Kalabarathi S

Phone: 9443544381

Email: principalnursing@gmail.com

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INTRODUCTION

Asthma is an illness of the respiratory system where respiratory sections wherein the lungs become over receptive and over-responsive. On account of this expanded affectability, lungs become aroused when

presented to certain aggravations, for example, chilly air, smoke, dust and so on Asthma causes aggravation of the lungs and results in narrowing of the respiratory sections. An individual's asthma changes relying upon the climate exercises, the executives rehearses and different variables (Conte *et al*, 2019).

Asthma is an exceptionally regular issue everywhere in the world. Studies have shown that Asthma has expanded by very nearly seven rates during the most recent thirty years in many nations. The fast expansion in asthma cases is more normal in metropolitan regions when contrasted with country territories. Expanded air contamination and upper respiratory lot disease are maybe two most significant purposes behind expanded asthma in India. Asthma can create at whatever stage in life, yet around 50% of individuals create it before the age of ten years while

around 25 percent of individuals create it before the age of forty years (Bryant-Stephens *et al.*, 2012).

The word asthma signifies "to inhale hard". As the name proposes, individuals with asthma experience issues in Breathing, Tightness of Chest and Wheezing (Chakravarthy *et al.*, 2002). Asthma influences an expected 300 Million Individuals overall handicap changed life years are lost and 2,50,000 Asthma deaths are accounted for around the world. Around 5,00,000 yearly hospitalizations (34.6% in Individuals matured 18 Years or Younger) are because of Asthma. Every year an expected 1.81 Million individuals (47.8%) in Individuals matured 18 Years, or Younger require treatment in the Emergency Department (Gupta *et al.*, 2018).

Asthma is under-analyzed and under treated in spite of the fact that the utilization of Inhaled Corticosteroids has had a beneficial outcome on results. The expanding number of clinic confirmations for Asthma, which is generally articulated in Young Adult, mirrors an expansion are owing to Asthma. Most Asthma deaths happen in those 45 years old and are to a great extent preventable, every now and again being identified with Inadequate long haul clinical consideration or postponements in acquiring clinical weight on patients with Asthma (Juniper *et al.*, 1996).

As per WHO Scale of issue somewhere in the range of 100 and 150 Million individuals around the world experience the ill effects of Asthma and this number is rising around the world, passages from this condition have reached more than 1,80,000 yearly. India has an expected 15 – 20 asthmatics (Singh and Shahi, 2008). As of 2018, 300 million individuals overall were influenced by asthma prompting roughly 2,50,000 passages for each year (Singh and Kumar, 2002). It is assessed that asthma has 7-10% commonness around the world. Around 8% of the Swiss populace experiences asthma as against just 2% some 25-30 years ago (Hertzen and Haahtela, 2005). In Germany, there is an expected 4 million Asthmatics. In Western Europe, all in all, Asthma has multiplied in ten years. In the United States, the quantity of Asthmatics has jumped by over 60% since the mid-1980s and passages have multiplied to 5000 per year (Nadig and Rajeshwari, 2016).

Kalabarathi and Nair (2020) investigated the risk factors of bronchial asthma in children. Out of 100 samples, 50(50%) risk factor of heredity, 71(71%) have problems in taking asthma medications, 44(44%) only use zipped pillow covers, 34(34%) do not use gas stoves in the kitchen, 10(10%) have moisture in the walls, 6(6%) have cases of asthma emergencies, 56(56%) find help-

less in dealing with an asthma child (Kalabarathi and Nair, 2020).

The purpose of the study is (Conte *et al.*, 2019) to assess the knowledge on home care management of Bronchial asthma among the patients at SMCH. (Bryant-Stephens *et al.*, 2012) to assess the Effectiveness of Planned Teaching Programme on knowledge regarding the Home Care Management of Bronchial Asthma among patients. (Chakravarthy *et al.*, 2002) to associate the effectiveness of planned teaching program regarding home care management of bronchial asthma with the demographic variables among patients.

MATERIALS AND METHODS

A quantitative approach with one group pre-experimental research design was used. The study was conducted in the Medical OPD and Medical ward at Saveetha Medical College and Hospital, Thandalam. 60 samples were selected using a convenience sampling technique. The criteria for sample selection are patients with age above 18 Years, patients with respiratory problems, patients taking medication for bronchial asthma, patients visiting both Male and Female Medicine OPD and Male and Female Ward and patients who are willing to participate in the Study.

The exclusion criteria for the samples are patients who are not present at the time of the study, patients who are not willing to participate in the study, patients with age below 18 years and patients who cannot understand Tamil and English Language. The data collection period was done with prior permission from the HOD of Department and ethical clearance was obtained from the institution. The purpose of the study was explained to the samples and written informed consent was obtained from them. A structured questionnaire was used to collect demographic data and knowledge regarding home care management was assessed.

The planned teaching program was given to the samples. After an hour, the knowledge was reassessed using the same structured questionnaire. The data were analyzed using descriptive and inferential statistics. The sample characteristics were described using frequency and percentage. Pearson's correlation coefficient was used to assess the effectiveness of planned teaching program among patients. Chi-square was used to associate the post-test level of knowledge with the selected demographic variables.

Table 1: Comparison of Pretest and Post-test level of knowledge regarding Home Care Management of Bronchial Asthma among Patients with Bronchial Asthma (N= 30)

Knowledge	Mean	S.D	Paired 't' test value
Pretest	12.70	10.06	t = 45.602
Post Test	23.87	0.82	p = 0.0001 S***

***p<0.001, S – Significant

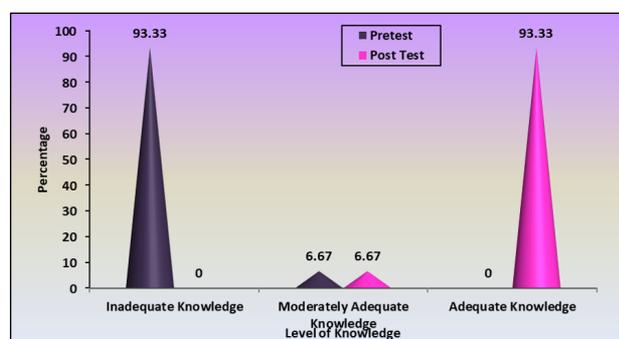


Figure 1: Percentage distribution of Level of knowledge regarding Home Care Management of Bronchial Asthma among patients with Bronchial Asthma

RESULTS AND DISCUSSION

Section A: Sample characteristics

Among 60 samples, 30 samples belong to Post-test, where most of the Patients with Bronchial Asthma 12(40%) were age between 46 – 50 years, 15(50%) were Male and Female respectively, 15(50%) were Married and Unmarried respectively, 12(40%) had Primary Education, 12(40%) were Agriculturist, 15(50%) were residing in Rural and Urban area and belonged to Nuclear and Joint Family respectively, 11(36.7%) had a monthly Income of the Family between Rs.3001-Rs.5000, 15(50%) were Vegetarian and Non-Vegetarian, 9(30%) had the habit of Tobacco Chewing and 12(40%) had to Source of Information as Health Professionals.

Section B: Assessment of level of Knowledge regarding Home Care Management of Bronchial Asthma among Patients with Bronchial Asthma.

The present study shows that the Pre-test, 28(93.33%) had inadequate knowledge and 2(6.67%) had moderate knowledge. Whereas in the Post-test, 28(93.33%) had adequate knowledge and 2(6.67%) had moderate knowledge regarding Home Care Management of Bronchial Asthma among Patients with Bronchial Asthma (Figure 1).

The current investigation is upheld by [Kaur et al. \(2019\)](#) examined on Assessment of information with respect to self-administration of bronchial

asthma among patients going to the outpatient branch of a North Zone tertiary consideration community. The outcomes demonstrated Poor information had been seen in 10.37% ([Kaur et al., 2019](#)).

Section C: Effectiveness of Planned Teaching Programme regarding Home Care Management of Bronchial Asthma among Patients with Bronchial Asthma.

The effectiveness of the planned teaching program is depicted by the pre-test mean score of knowledge was 12.70 with standard deviation 10.06 and the Post-test mean score of knowledge was 23.87 with a standard deviation of 0.82. The calculated paired 't' test value of t = 45.602 was found to be statistically highly significant at p<0.001 level. This clearly infers that Planned Teaching Programme administered to the Patients with Bronchial Asthma was found to be effective and significant improvement was observed in the Post-test level of knowledge regarding Home Care Management of Bronchial Asthma among Patients with Bronchial Asthma (Table 1).

The current investigation is upheld by [Jagadeeswari and Rangila \(2020\)](#) directed an examination to evaluate the impact of Bronchial Asthma Education Program on Asthma Control among 60 Asthma Patients. The consequences of the investigation show that among 30 examples in the exploratory gathering the pretest results uncover, 25(83.34%) had insufficient information, 4(13.33%) had tolerably sufficient information and 1(3.33%) had great knowledge. Whereas in the post-test, 20(66.67%) had satisfactory information and 10(33.33%) had reasonably satisfactory information with respect to Bronchial Asthma among asthma patients ([Jagadeeswari and Rangila, 2020](#)).

The variable demographic source of information had demonstrated factually huge relationship with the post-test level of information with respect to Home Care Management of Bronchial Asthma among patients with Bronchial Asthma at p<0.05 level and the other demographic variable had not indicated a measurably critical relationship with respect

to Home Care Management of Bronchial Asthma among patients with Bronchial Asthma.

CONCLUSION

The planned Teaching programme has significantly increased the Knowledge regarding Home Care Management of Bronchial Asthma among the Patients. Planned structured teaching is an effective and easy method to improve knowledge among patient with bronchial asthma regarding home-care management that helps to relieve symptoms through non-pharmacological intervention which in-turn has a good prognosis in bronchial asthma.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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