

"METERED DOSE INHALERS"- ASSESSING KNOWLEDGE & PRACTICES

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INTRODUCTION

"For breathe is life and if you breathe well you will live long on Earth"

When a child is born, it cries to take its breathe, which continues till death. Breathing thus is synonymous to being alive and to have difficulty in breathing is to have difficulty to stay alive. Breathing is a quiet and involuntary process in the absence of any pathology.

Asthma, a disorder that was first described by Hippocrates in the fourth century B.C. "as breath hard or pant" has now become a devastating social and economic burden to most countries health care systems, with millions of asthma afflicted individual worldwide.

Asthma is a common global problem. In childhood, here is 2:1 male/female preponderance, which equalize by the age of thirty.

Asthma as chronic disease is not curable but controllable. The most important thing to control it is by optimum medication.

NEED OF THE STUDY

Total cases of Respiratory Diseases are estimated 34 million including 155 million undiagnosed in 2006. Asthma affects approximately 300 million people around the

world. A worldwide increase in the prevalence of asthma is being reported with increase in wheezing, at an alarming rate of 5% per year. In India, it is a common disease and has estimated 15-20 million asthmatics. Rough estimate of prevalence are 10-15% in children in the age group between five to eleven years. At least 5-10% of populations of a metro are asthma victims. In Mumbai alone, this figure is as high as 8%. According to Times News Network, India could be the world asthma capital by 2020. Dr. SANJEEV MEHTA (2005) on the World Asthma day noted that every fifth Mumbaikar risks developing the disease. People sometimes buy the device from outside without any knowledge of the correct use of it, this leads to asthma attacks. Here the nurses play an important role in providing health education regarding the correct technique and care of the devices in asthma management.

STATEMENT OF PROBLEM

"A study to assess the effect of planned teaching on knowledge and practices regarding use of metered dose inhaler (MDI) among the asthmatic patient in selected hospitals of PCMC IN PUNE CITY."

OBJECTIVES OF THE STUDY

1. To identify knowledge and practices regarding use of metered dose inhaler in asthmatic patient.

2. To determine the effect of planned teaching regarding knowledge and practices of metered dose inhaler in asthmatic patient.
3. To find an association between the level of knowledge among asthmatic patient with selected demographic variable.

RESEARCH APPROACH

The descriptive evaluative approach was used because the present study was aimed at development of planned teaching on knowledge and practices regarding use of metered dose inhaler among the asthmatic patient.

RESEARCH DESIGN

In the present study the investigator selected single group pre-test and post-test design.

HYPOTHESIS

H0 – There will be no significant difference between pre-test and post-test score knowledge and practices regarding use of metered dose inhaler among asthmatic patient.

H1- There will be significant difference between pre-test and post-test score and practices regarding use of metered dose inhaler among asthmatic patient.

Inclusion Criteria

1. Asthmatic patient those who are willing to participate in the study.
2. This study will include asthmatic patient in selected hospitals of PCMC area.
3. Age of the asthmatic patient (male & female) between 18 to 60 years.

4. Patient who are using MDI for less than 1 month.

SETTING OF THE STUDY

The study was conducted in Dr. D. Y. PATIL MEDICAL COLLEGE AND RESEARCH CENTER PIMPRI, PUNE.

SAMPLING TECHNIQUE

Non-Probability Convenience sampling technique was used.

SAMPLE SIZE

Sample comprised of 60 asthmatic patients.

DESCRIPTION OF THE TOOL

Structured questionnaire schedule.

RESULTS:

1. FINDINGS RELATED TO SAMPLE CHARACTERISTICS

Age wise distribution of the sample: Most of the samples were in the age group of above 41 years (70%), 31-40 (16.75%), 21-30 (6.7%) and 10-20 yrs (6.7%). Majority of the samples were from the age group above 41 years.

Gender: Majority of samples, 65.0% was females and only 35.0% were males.

Education Status: 36.7% of the samples, which formed the majority, had up to 10th Std. level of education followed by 26.7% who had up to 12th Std. education. Only 25.0% had graduate followed by 11.7% post graduate.

Occupation of the Samples: 53.3% of the samples were business while 31% samples had service and 8.3% samples were students and 6.7% samples were unemployed.

Family monthly income of the Samples: 61.7% of the samples earned more than Rs15000/- while 31.7% samples earned 10,000 to 15,000 and 6.7% samples earned 5,000 to 10,000.

Knowledge about use of MDI: Majority of samples, 98.3% had **knowledge about use of MDI** and only 1.7% was not having knowledge about use of MDI.

Diagnosis of the Samples: 45.5% of the samples were diagnosed with bronchial asthma while 38.3% samples had bronchitis

and 13.3% samples had COPD and 3.3 samples had breathlessness.

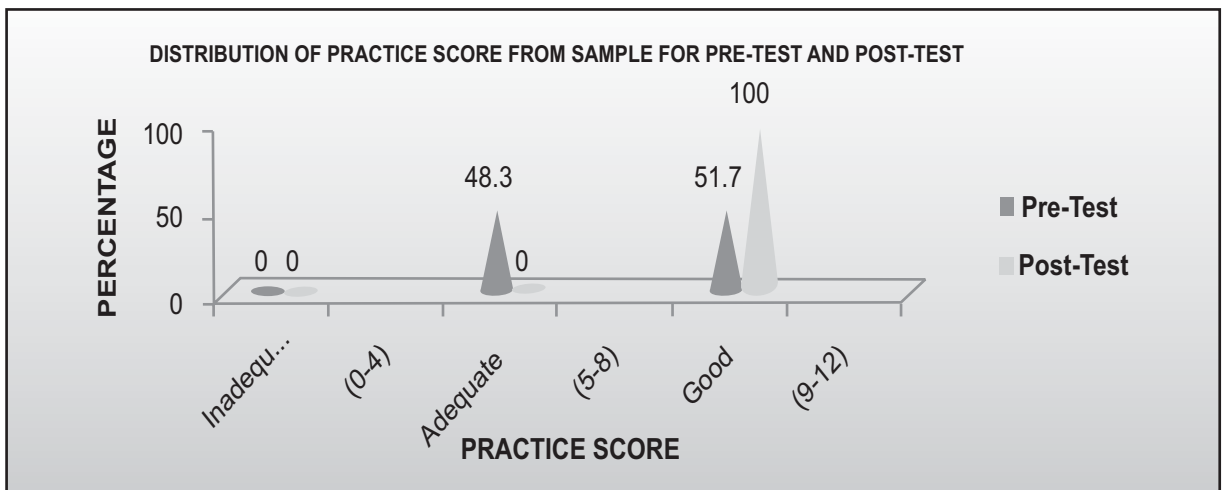
Duration of the illness: 70.0% of the samples had the duration of illness from up to 2 year while 16.7% had the duration of illness 2 to 4 year, 10.0% samples had the duration of illness 4 to 6 year and 3.3% samples had duration of illness above 6 years.

Types of MDI: Majority of samples, 76.7% have meter dose inhaler without spacer and only 23.3% samples have meter dose inhaler with spacer.

2. Finding related to knowledge score before and after planned teaching

KNOWLEDGE SCORE	PRE-TEST		POST-TEST	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Poor (0-10)	12	20	-	0
Good (11-14)	47	78.3	1	1.7
Excellent (15-20)	1	1.7	59	98.3

3. Finding related to practices score regarding use of MDI



4. Finding related to significant difference of knowledge score regarding use of MDI before and after planned teaching.

COMPARISON BETWEEN PRE-TEST & POST-TEST KNOWLEDGE SCORE

SCORE	MEAN	STD. DEVIATION	T VALUE	DF	SIG. (2-TAILED)
PRE-TEST SCORE	11.82	1.359	25.333	59	.000
POST-TEST SCORE	16.80	1.176			

5. Finding related to significant difference of practices score regarding use of MDI before and after planned teaching

COMPARISON BETWEEN PRE - TEST & POST-TEST PRACTICE SCORE

PRACTICE SCORE	MEAN	STD. DEVIATION	T VALUE	DF	SIG. (2-TAILED)
PRE -TEST	8.35	1.338	-15.110	59	.000
POST-TEST	11.10	.730			

6. Finding related to correlation of knowledge and practice score with demographic variable

There is a significant relationship between knowledge score and gender.

There is no significant relationship between age, education, occupation, family monthly income, knowledge about use of MDI, diagnosis, duration of illness, types of MDI and knowledge and practice score.

RECOMMENDATION

A comparative study can be undertaken in urban and rural areas.

- A similar study may be replicated on large samples.
- Longitudinal study on long range effect on knowledge and practices regarding use of metered dose inhaler.
- The study can be undertaken in different settings.

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