



EFFECTIVENESS OF NURSE LED INTERVENTIONAL PACKAGE ON KNOWLEDGE OF MOTHERS REGARDING HOME CARE MANAGEMENT OF CHILDREN WITH BRONCHIAL ASTHMA IN OUTPATIENT DEPARTMENT OF THE SELECTED HOSPITALS AT KOLLAM DISTRICT

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ABSTRACT

A quantitative study was conducted to assess the effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma in outpatient department of the selected hospitals at Kollam district. A pre- experimental one group pretest posttest design was used and fifty samples were selected by using non probability purposive sampling technique. The tool used was self-structured knowledge questionnaire. Posttest was conducted on the 7th day of pretest. The collected data were analyzed using descriptive and inferential statistics. The result shows that the mean pretest and posttest score were 11.42 and 20.94 respectively. The calculated 't' value is 36.08 which was greater than the table value at 0.05 level of significance. It concludes that there is significant difference between mean pretest and posttest knowledge scores of mothers. The findings of the study suggest that nurse led interventional package was effective in improving the knowledge of mothers regarding home care management of children with bronchial asthma.

KEYWORDS: Nurse led interventional package, mothers of children with bronchial asthma, knowledge, home care management.

INTRODUCTION

An important aspect of parenting is understanding the changes your child will encounter during growth and development. As children advance through a sequence of growth stages they may face several challenges and relatively common problems. Although no children are exactly alike, there are universally accepted theories of human development and growth patterns. Children not only vary in physical appearance, but also express differences socially and mentally, as well as through personality and behavior.^[1] Bronchial asthma is a reactive airway disease characterized by airway obstruction or narrowing that is reversible either spontaneously or with treatment, airway inflammation and airway hyper responsiveness to variety of stimuli.^[2]

Bronchial asthma is the most common chronic disease among children that causes difficulty in breathing and is common in kids and teens. Symptoms include coughing, wheezing and shortness of breath. Children with asthma may have trouble completing task and getting along with other children compared to their peers without breathing problem. Bronchial asthma is a multifactorial disease, in which environmental, infectious, allergic and psychological elements all play a part. There is evidence

that emotional stress can either precipitate or exacerbate both acute and chronic asthma. Whatever precipitate an asthmatic attack, anxiety is likely to accompany it.^[3]

A study was conducted to assess the effectiveness of planned teaching programme on knowledge regarding prevention and management of childhood asthma and other allergic disorders among mothers of underfive in selected community population of Kanchipuram district. Pre experimental one group pretest-posttest research design was adopted and 60 mothers were selected by non-probability convenient sampling technique. The collected data were tabulated and analyzed by descriptive and inferential statistics. The mean pretest score was 9.82 and posttest score was 26.24. The 't' value obtained was 45.91 and is found to be significant at 0.05 level of significance. The study reveals that there was improvement in knowledge level of mothers, hence it indicates that the planned teaching programme was effective.^[8]

A study was conducted a study on asthma related knowledge, attitude and practice of parents of children with bronchial asthma. 100 parents of asthmatic children were enrolled by convenient sampling technique. The

study result shows that 80% parents did not know what is inhaled corticosteroid and most (85%) of them did not know how it worked, while 41% were aware of aerosol therapy, 8% had never used it for children. The study concluded that, there is an urgent need for preparation for parental education guidelines for preventing asthma exacerbation among asthmatic children living in India.^[9]

The rate of admission has been increased during seasonal variations in selected hospitals at Kollam. It is important to teach the mothers about the prevention of asthmatic attacks in children. So the researcher felt the need to conduct a study on mothers of children with bronchial asthma, and teach them how to prevent and manage bronchial asthma.

OBJECTIVES

- ❖ To assess the knowledge of mothers regarding home care management of children with bronchial asthma.
- ❖ To assess the effectiveness of nurse- led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma.
- ❖ To find the association between pretest knowledge scores of mothers with selected demographic variables such as age, education, occupation, type of family, type of house, previous knowledge regarding home care management of children with bronchial asthma, area of residence and duration of care of child with bronchial asthma.

MATERIALS AND METHODS

The present study selected a quantitative approach to assess the effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma.

Study design

A pre experimental one group pretest posttest design was used.

Sample and sampling technique

In the present study, sample consisted of 50 mothers of children with bronchial asthma.

Inclusion criteria

- Mothers of children with bronchial asthma.
- Mothers willing to participate in the study.
- Mothers available during the time of data collection.

Exclusion criteria

- Mothers whose children are below 4 years of age.

Tool

The tool used for the study was structured knowledge questionnaire. It consisted of two sections,

Section A: Demographic proforma to collect the baseline information regarding the samples.

Section B: Structured knowledge questionnaire regarding home care management of children with bronchial asthma.

Technique/ intervention

The technique used for the study was nurse led interventional package. It consisted of video assisted teaching programme, pamphlet and demonstration of breathing exercise. The video include introduction, definition, incidence, causes, risk factors, clinical features, diagnostic method, medical management and home care management.

Data collection process

Institutional ethics committee clearance certificate was obtained from Bishop Benziger College of Nursing. The data were collected after obtaining prior permission from the concerned administrative authority of Bishop Benziger Hospital and Sanker's Hospital, Kollam and informed consent from the mothers. A brief introduction was given about the study and consent was taken from the mothers. Pretest was conducted on 1st day and nurse led interventional package was administered on the same day. Posttest was collected on the 7th day of pretest.

RESULTS

Data were analyzed under the following headings

Section A: Description of sample characteristics.

Section B: Evaluation of effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma.

Section C: Association between pretest knowledge scores with selected demographic variable such as age, education, occupation, type of house, type of family, previous knowledge of mothers regarding home care management of children with bronchial asthma, area of residence and duration of care of child with bronchial asthma.

Section A:

Table 1: Frequency and percentage distribution of sample according demographic variables.

Sl No	Variables	Category	Frequency	Percentage
1	Age	20-30	35	70
		31-40	15	30
2	Education	Higher Secondary	22	44
		Degree	25	50
		Post-graduation	3	6
3	Occupation	House wives	33	66
		Private employee	14	28
		Government employee	1	2
		Others	2	4
4	Type of family	Joint family	10	20
		Nuclear family	40	80
5	Type of house	Terraced	38	76
		Tiled	10	20
		Flat	2	4
6	Previous knowledge	Health professional	3	6
		Media	2	4
		Health professional & relatives	15	30
		Relatives & media	13	26
		Health professional & media	2	4
		Health professional, relatives & media	12	24
7	Area of residence	Rural	12	4
		Urban	38	76
8	Duration of care	<1 year	14	28
		1-3 year	26	52
		3-5year	9	18
		>5 year	1	2

- Most of the samples (70%) were in the age group of 20-30 years and remaining 30% of samples belongs to the age group of 21-30.
- In regards of educational status half of the mothers (50%) have degree qualification. Most of the samples (66%) were house wives.
- Most of the samples (80%) were lives as nuclear family, among that 76% samples are lives in terraced house.
- Majority of the samples (76%) are lives in urban area and remaining 24% of samples are lives in village area.

Table 2: frequency and percentage distribution of sample according to knowledge scores.

Level of knowledge	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Poor	22	44%	0	0
Average	28	56%	19	38%
Good	0	0	31	62%

It shows that in pretest, 56% of samples have average level of knowledge and remaining 44% of samples have poor level of knowledge. In posttest majority 62% of

samples have good level of knowledge and remaining 38% of samples have average level of knowledge.

Section B

Evaluation of effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma.

Table 3: Mean, standard deviation and 't' value of pretest and posttest knowledge scores of mothers regarding home care management of children with bronchial asthma.

	Mean	Standard deviation	't' value	Level of significance
Pretest	11.2	2.77	36.08	S*
Posttest	20.94	2.32		

*t value [60] = 2.000 *Significant at 0.05 level of significance.

The mean pretest scores of selected samples were [11.4 +2.77] higher than the mean posttest score [20.9 + 2.32]. Calculated 't' value was greater than the table value at 0.05 level of significance. This shows that nurse led

interventional package on home care management of bronchial asthma was effective in improving the knowledge among mothers of children with bronchial asthma.

Section C

Association between pretest knowledge scores with selected demographic variables.

Table 3: Association between pretest knowledge scores with selected demographic variables such as age, education, occupation, type of family, type of house, previous knowledge of mothers regarding home care management of children with bronchial asthma, area of residence and duration of care of children with bronchial asthma.

Sl no:	Demographic Variable	Knowledge level		Df	Table value	Chi square	Significance
		Poor	Average				
1.	Age of mother						
	20-30 years	21	14	1	3.84	12.12	S*
	31-40 years	1	14				
	>40 years	0	0				
2	Education						
	Illiterate	0	0	2	5.99	3.94	NS
	Secondary	7	15				
	Degree	15	10				
3	Post graduation	2	1				
	Occupation						
	House wife	14	19	3	7.81	1.05	NS
	Private employee	7	7				
4	Government employee	1	0				
	Others	1	1				
4	Type of family						
	Joint family	4	6	1	3.84	0.08	NS
	Nuclear family	18	22				
Sl no:	Demographic variables	Knowledge score		Df	Table value	Chi square	Significance
		Poor	Average				
5	Type of house						
	Hut	0	0	2	5.99	2.66	NS
	Terraced	16	22				
	Tiled	4	6				
	Flat	2	0				
6	Previous knowledge						
	Health professional	1	2	5	11.07	10.55	NS
	Relatives	0	0				
	Media	1	1				
	No information	0	0				
	a& b	10	5				
	b& c	5	8				
	a& c	1	1				
	a, b &c	1	11				
7	Area of residence						
	Rural	9	3	1	3.84	6.15	S
	Urban	13	25				
8	Duration of care						
	<1 year	12	2	3	5.99	8.60	S
	1-3 year	11	15				
	3-5year	4	5				
	>5 year	1	0				

The calculated chi square value for age is 12.12 for area of residence is 6.15 and for duration of care child with bronchial asthma is 8.60 were found to be greater than

table value. Hence there is a significant association between pretest knowledge scores and demographic

variables like age, area of residence and duration of care of child with bronchial asthma.

DISCUSSION

This is intended to assess the effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma. The findings of the study are discussed with reference to the objectives, hypotheses and findings of other studies.

A pre experimental study was conducted by Liva. N. J. to analyze the effectiveness of structured teaching programme on knowledge regarding bronchial asthma among mothers of underfive children. One group pretest posttest design was used. A sample size of 50 mothers of underfive children were selected by convenient sampling technique. The result denotes that statistically significant effectiveness of structured teaching programme was found. There was significant association was found in previous knowledge of mothers regarding bronchial asthma. No association was found in age, education, occupation, family income, type of house, type of family, past history of asthma and family history.^[10]

The findings of the present study, when compared with the referent study, it was found that, both studies are pre experimental one group pretest posttest study. The sample size of the both studies were similar that is 50 samples of mothers. But in the referent study the samples were mothers of underfive children, in the present study it is mothers of children who aged between 4-15 years. In the present study non probability purposive sampling technique was used, while in referent study it is convenient sampling technique was adopted. The setting of the both studies were hospital. The tool used in both studies were structured knowledge questionnaire. Statistically significant effectiveness was found in both studies. In present study, it was found that significant association was found between pretest knowledge scores with selected demographic variables such as age, area of residence and duration of care of child with bronchial asthma. While in the referent study it was found that, significant association was found between pretest knowledge score and demographic variable such as previous knowledge.

CONCLUSION

The present study was aimed to find the effectiveness of nurse led interventional package on knowledge of mothers regarding home care management of children with bronchial asthma. The result of the study shows that, the pretest score of samples were 11.42 and posttest score was 20.94. And calculated 't' value (36.08) is greater than the table value (2.00) at 0.05 level of significance. So there is significant difference between pretest and posttest knowledge scores before and after intervention. This shows that nurse led interventional package was effective in improving the knowledge of

mothers regarding homecare management of children with bronchial asthma.

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