Original Research Article

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Knowledge and practices among parents of asthmatic children: a quasi-experimental study conducted at tertiary care center of Western India

Dhirja^{1*}, Mukesh C. Sharma¹, Jagdish P. Goyal², Remiya M.¹

¹Department of Nursing, ²Department Of Pediatrics, All India Institute of Medical Sciences, Jodhpur, Rajasthan, India

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*Correspondence:

Dhirja,

E-mail: dhirja08@gmail.com

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ABSTRACT

Background: Asthma is one of the most common chronic respiratory disease of childhood and emerging as a global health issue. It is primary cause of school absences and the third leading cause of hospitalization in children younger than the age of 15 years. Parents as the primary caregiver plays an important in management of the disease. The main objective of this study was to assess the knowledge and practices of parents of asthmatic children and improve it with the help of an informational booklet at AIIMS, Jodhpur.

Methods: It was a quasi-experimental, pre-test post-test control group design on 60 parents of children suffering from asthma (30 in control group and 30 in experimental group) coming to paediatric OPD. Non probability purposive sampling was used to select the subjects. Self-structured tools like socio-demographic information, knowledge questionnaire and practices extended questionnaire were used to collect the required data. Reliability and validity of tools were analysed. Data analysis was performed in SPSS version 16.

Results: The study findings reveal that most of the subjects had unsatisfactory level of knowledge and practices regarding asthma which significantly improvement in knowledge (t=11.449, p<0.05) and practices (t=-8.079, p<0.05) after application of informational booklet. Knowledge level of subjects were found to have significant association with education, occupation and monthly income of family.

Conclusions: Prevention is better than cure. Parents are primary caregiver of children and spend most of the time with them. Their sufficient knowledge regarding asthma and right practices can help in reducing sudden asthma attacks and hospital visit in these children. Informational booklet have a positive impact on improving the knowledge and practices among parents.

Keywords: Knowledge, Practices, Parents, Asthma, Children, Information booklet

INTRODUCTION

Childhood is the most precious gift from God. A child is carefree, happy and is untouched by the worries of everyday life but all are not so lucky because for many children playing in grass is a distant dream as even this small game can threaten their life by causing devastating respiratory disorder, which is known as bronchial asthma.¹

Asthma is a chronic inflammatory disorder of the airways. Inflammation of airways causes recurrent episodes of wheezing, breathlessness, chest tightness and cough, especially at night or in the early morning.² 3-35% of people in the world (300 million individuals) suffer from asthma and 100 million more patients may be added to this statistic until 2025.^{3,4} Aggarwal et al has reported asthma prevalence to be 2.38% in Indian population based on a survey conducted in Delhi, Chandigarh,

Kanpur and Banglore.⁵ According to WHO report 2016, asthma is the most common chronic disease of childhood, the primary cause of school absences and the third leading cause of hospitalization in children younger than the age of 15 years.⁶

Asthma is a non-curable but preventable disease.⁷ Treating children with asthma is not only limited to medication therapy and resistance against allergens, but education also plays a vital role. In this regard, Rekha et al reported increase in knowledge of mothers with asthmatic children after a structured teaching program.⁸ An RCT conducted on 50 parents shows significant improvement in the knowledge with the help of multimedia program on asthma.⁹ According to Clark et al knowledge of asthma provides the foundation for parents and children to make decisions in response to changing conditions such as climate changes, allergen levels and activity levels.¹⁰ Hence, the role of training is important to teach children and their parents how to control the disease.

The incidence of asthma is increasing among children and poor knowledge and practices of parents contributes to increase in morbidity and mortality due to it. This study aimed to identify the areas in which knowledge and practices of parents are lacking related to asthma and then empowering them with the help of an information booklet. Improved knowledge and better practices may help parents to better understand condition of their children. It may also help in bridging the existing gap between recommended and actual practices.

METHODS

A quasi-experimental, pre-test post-test control group study was conducted on parents of children with asthma. The required sample size was calculated from effect size (d=0.94) obtained from pilot study for test power of 80% at 5% level of significance which came to be 21 but researcher decided to take 30 subjects in each group. Pilot study was used for sample analyses because no similar study was found during reviewing the literature. Nonprobability purposive sampling technique was used to select the subjects. The inclusion criteria included parents who were available in pediatric OPD, who can read and understand Hindi or English, who were having asthmatic child between 6 years to 12 years, diagnosed for more than 1 month and called for follow up within 3-5 weeks and parents of children on inhaled corticosteroids. Exclusion criteria included parents of children with any congenital abnormality or any history of chronic, heart, vascular or kidney disease.

The instruments used in this study included sociodemographic data sheet containing 10 questions about child and parent (gender, age, parent education, parent occupation, any family member in health related setting, monthly income, place of living and duration of diagnosis). Knowledge questionnaire included 30

multiple choice questions related to asthma, triggers, sign and symptoms, prevention, treatment and myths. One mark was given to right answer and zero mark to wrong answer. There was no negative marking. Knowledge level were categorized as poor (score <10), fair (11-20) and good (21-30). Reliability was assessed using KR 20 and was found to be 0.82. Practices filter questionnaires consisted of 21 dichotomous questions. The questionnaire was divided into domains such as environment, pharmacology, exercise, follow-up, emotional, asthma attack and inhaled corticosteroid related management. One mark was given to right answer and zero mark was given to wrong answer. The questions further included options to clarify actual practices carried out by subjects. There was no negative marking. Practice level was categorized as poor (score <7), fair (score 8-14) and good (score 14-21). The instruments was validated by 9 experts including paediatricians, child pulmonary health specialist and child health nurse specialists.

The study was conducted in three stages

The stage before intervention

After obtaining ethical clearance from the institute ethical committee of AIIMS, Jodhpur, subjects who were fulfilling the inclusion criteria were selected from the pediatric OPD of AIIMS, Jodhpur by purposive sampling technique. Out of 60 subjects, first 30 were allocated to the control group and next 30 to the experimental group. After getting acquainted with the subjects, the researcher introduced herself and stated the objectives of the study, its importance and how the research was going to be done, then informed written consent was obtained ensuring confidentiality of information and pre-test was obtained from both the groups.

The stage of intervention

In this study an information booklet was used to achieve the objectives of this study. An information booklet on asthma was developed after reviewing literatures, books and booklets and pamphlets available from various international asthma societies. The booklet included information about asthma, its triggers, sign and symptoms, prevention, asthma attack, diagnosis, medication, proper use of inhaler, breathing exercises and some facts about asthma.

The booklet was validated and approved from the experts. After obtaining the approval booklet was given to subjects of experimental group after getting pre-test data from them. A short briefing about the topics covered in the booklet was also given to them. Subjects of control group received no special treatment.

The stage after intervention

When the subjects came for the follow up after 3-5 weeks, post-test data was collected. Information booklet

on asthma was also given to subjects of control group after obtaining post-test data from them. Data were statistically analysed using SPSS version 16. Descriptive statistics include frequency, percentage, mean and standard deviation. Inferential statistical methods include unpaired t test to measure the effectiveness of the information booklet and Chi square to check the association of knowledge with demographic variables.

RESULTS

Table 1 describes the sociodemographic characteristics of the 60 subjects at the baseline survey. Most of the subjects had male asthmatic child in both the groups. There were 30 subjects in each group and result shows two groups had statistically comparable baseline characteristics.

Table 2 describes pre-test and post-test knowledge in experimental and control group. The result shows that mean pre-test and post-test knowledge scores of subjects were almost similar in control group (14.3±3.86 versus

14.2±3.58). However, in experimental group post-test knowledge scores has improved as compared to pre-test (24.9±2.85 versus 13.2±4.85). Most of the subjects 76.7% in control group had fair knowledge in pre-test. This remains same in post-test of control group. In experimental group, majority of subjects 63.3% had fair knowledge in pre-test whereas, 76.7% had adequate knowledge in post-test.

Table 3 show that there is significant improvement in knowledge of subjects in experimental group (t=11.449, p<0.05). Hence, null hypothesis was rejected. This could be interpreted as information booklet on asthma was effective in improving the knowledge of subjects in experimental group.

Table 4 shows association of knowledge with selected demographic variables using Chi-square. The findings clearly reveal that there was significant association between level of knowledge and education of parent, occupation and monthly income of family (p<0.05). Thus, the null hypothesis was rejected.

Table 1: Frequency and percentage distribution of socio-demographic variables (N=60).

Variables	Control gro	oup	Experime	ntal group	P value
variables	N=30	%	N=30	%	P value
Parents					_
Father	20	66.7	23	76.7	0.76 ^(ns)
Mother	10	33.3	7	23.3	0.76()
Age of parent (in years)			-		
<20	0	0	0	0	
≥20-30	8	26.7	8	26.7	0.81 ^(ns)
≥30-40	18	60	19	63.3	
≥40-50	4	13.3	3	10.0	
Education of the parent					
Below 10 th class	9	30	10	33.3	
10th pass	7	23.3	9	30	0.77 ^(ns)
12th pass	9	30	5	16.6	0.77
Graduate and above	5	16.6	6	20	
Occupation of the parent		·	-		
Government job	2	6.7	5	16.7	
Private job	8	26.7	4	13.3	
Business	4	13.3	7	23.3	0.086 ^(ns)
Farmer	6	20.0	5	16.7	0.086
Daily wage worker	2	6.7	3	10.0	
Homemaker	8	26.7	6	20.0	
Family member in health related setting					
Yes	4	13.3	2	6.7	0.56 ^(ns)
No	26	86.7	28	93.3	0.30
Family income per month (in ₹)					
<5000	1	3.3	5	16.7	
50000-100000	14	46.7	11	36.7	0.57 ^(ns)
>10000	15	50.0	14	46.7	-
Place of living					
Rural	17	56.7	14	46.7	0.10(ns)
Urban	13	43.3	16	53.3	$0.12^{(ns)}$

Variables	Control group		Experimenta	l group	P value
Age of the child (in years)					
6-8	7	23.3	9	30.0	
8-10	13	43.3	10	33.3	0.53 ^(ns)
10- 12	10	33.3	11	36.7	
Gender of the child					
Male	19	63.3	17	56.7	0.85 ^(ns)
Female	11	36.7	13	43.3	0.83(/
Duration of diagnosis				•	
Below 6 months	6	20.0	13	43.3	
6 months-2 years	7	23.3	14	46.7	0.30 ^(ns)
>2 years	17	56.7	3	10.0	

ns-non significant, *significant, level of significance <0.05.

Table 2: Pre-test and post-test knowledge score regarding asthma management among parents of children having asthma in control and experimental group (N=60).

S.	Vnovelodas asons	Control group (N=30))	Experimental group (N=30)		
No.	Knowledge score	Pre-test (%)	Post-test (%)	Pre-test (%)	Post-test (%)	
1.	Good (21-30)	1 (3.3)	1 (3.3)	2 (6.7)	23 (76.7)	
2.	Fair (11-20)	23 (76.7)	23 (76.7)	19 (63.3)	7 (23.3)	
3.	Poor (≤10)	6 (20)	6 (20)	9 (30)	0 (0)	
Mea	n±SD	14.3±3.86	14.2±3.58	13.2±4.85	24.9±2.85	

Table 3: Comparison of post-test knowledge score of control and experimental group.

Maganag	Control g	roup	Experime	Experimental group t value		Ae.	P value
Measures	Mean	SD	Mean	SD	t value	aı	r value
Post-test knowledge	14.2	3.58	24.9	2.85	11.449	58	0.000^{*}

^{*}significant, level of significant at p<0.05 (df=58) (independent t test).

Table 4: Association of knowledge with selected socio-demographical variable (N=60).

	Level of kn	owledge			Chi	
Variables	Good	Fair	Poor	df	square value	P value
Parents						
Father	2	27	14	2	4.632	0.099 ^{ns)}
Mother	1	15	1	2		0.099
Age of parent (in years)						
<20						
≥20-30	2	12	2			0.275 ^(ns)
≥30-40	1	24	12	4	5.123	
≥40-50	0	6	1			
Education of the parent						
Below 10th class	0	12	7	_		•
10th pass	0	14	6			
12th pass	0	9	2	6	19.317	0.005*
Graduate and above	3	7	0			
Occupation of the parent		•	-			•
Government job	3	4	0			
Private job	0	9	3	10		
Business	0	9	2		35.808	0.000*
Farmer	0	5	6			
Daily wage worker	0	2	3	_		

Variables	Level of kno	Level of knowledge		df	Chi	P value
Homemaker	0	13	1			
Family member in health related setting						
Yes	1	5	0	2	3.651	0.161 (ns)
No	2	37	15	۷	3.031	0.101
Family income per month (in ₹)						
<5000	0	1	5			
5000-10000	0	16	9	4	21.626	0.000^{*}
>10000	3	25	1			
Place of living	•		-	•		
Rural	0	23	8	2	3.385	0.184 ^(ns)
Urban	3	19	7	2	3.363	0.104
Age of the child (I years)						
6-8	2	10	4	_		
8-10	1	13	8	4	6.526	0.163 ^(ns)
10- 12	0	19	3			
Gender of the child						
Male	1	25	10	- 2	1.171	0.557 ^(ns)
Female	2	17	5	2	1.1/1	0.557
Duration of diagnosis						
Below 6 months	2	14	3	_		
6 months-2 years	0	14	7	4	3.509	0.477 ^(ns)
>2 years	1	14	5			0.777

level of significance p<0.05, ns-non significant, *significant.

Table 5: Pre-test and post-test practice score regarding asthma management among parents of children having asthma in control and experimental group (N=60).

Sr. No.	Practice score	Control grou	p (N=30)	Experiment	Experimental group (N=30)		
No.	Fractice score	Pre-test	Post-test	Pre-test	Post-test		
1.	Good (14-21)	11 (36.7)	11 (36.7)	9 (30)	29 (96.7)		
2.	Fair (7-14)	18 (60)	17 (56.7)	20 (66.7)	1 (3.3)		
3.	Poor (<7)	1 (3.3)	2 (6.7)	1 (3.3)	0 (0)		
Mean±	SD	13.03±2.6	12.7±2.76	12.73±2.79	17.6±1.84		

Table 6: Comparison of post-test practice score of control and experimental group.

	Control	Experimental			
Measures	group	group	_ t value	df	P value
	Mean SD	Mean SD			
Post-test practice	12.7 7.6	17.6 1.84	-8.079	58	0.000^{*}

^{*}significant, level of significant at p<0.05 (df=58) (independent t test).

Table 7: Association of practices with selected socio-demographical variable (N=60).

	Level of expressed practice				Chi-	
Variables	Good	Fair	Poor	df	square value	P value
Parent						
Father	12	29	2	_ 1	2.536	0.281 ^{ns)}
Mother	8	9	0	2		
Age of parent (in years)			-		•	
<20						
20-30	11	5	0	4	13.245	0.010 ^(ns)

Variables	Level of	expressed p	oractice	df	Chi-	P value
30-40	8	27	2			
40-50	1	6	0	-		
Education of the parent			-		-	
Below 10th class	4	14	1			
10th pass	5	14	1	6	8.635	$0.195^{(ns)}$
12th pass	4	7	0			
Graduate and above	7	3	0			
Occupation of the parent						
Government job	6	1	0			
Private job	3	9	0			0.010 ^(ns)
Business	2	9	0			
Farmer	1	8	2	10	23.327	
Daily wage worker	1	4	0	_		
Homemaker	7	7	0			
Family member in health related setting						
Yes	2	4	0	2	0.234	0.890 (ns)
No	18	34	2	2	0.234	
Family income per month (in ₹)						
<5000	0	5	1			0.080 ^(ns)
5000-1000	7	17	1	4	8.33	
>10000	13	16	0	_		
Place of living						
Rural	8	21	2	2	3.15	0.206 ^(ns)
Urban	12	17	0	2	3.13	0.206(115)
Age of the child (in years)						
6-8	8	8	0			
8-10	5	16	1	4	3.57	0.467 ^(ns)
10- 12	7	14	1	_		
Gender of the child		·	•		•	
Male	10	25	1	2	1.44	0.485 ^(ns)
Female	10	13	1	۷	1.44	0.483` "
Duration of diagnosis						
Below 6 months	8	10	1			
6 months-2 years	7	13	1	4	2.64	0.619 ^(ns)
>2 years	5	15	0			
level of significance p<0.05 ns-non significant						

level of significance p<0.05, ns-non significant.

Table 8: Frequency and percentage distribution of pre-test practices among parents of children having asthma in experimental and control group (N=60).

S no	Practices	Control pre-	-test N (%)	Experimen	Experimental pre-test N (%)		
S. no.	Fractices	Yes (%)	No (%)	Yes (%)	No (%)		
	Damp dusting in your house.	27 (90)	3 (10)	25 (83.3)	5 (16.7)		
1	Other methods of cleaning used	•					
1.	Sweeping		2 (66.6)		5 (100)		
	Dry dusting	•	1 (33.4)		0		
	Family member smoking inside the house.	7 (23.3)	23 (76.7)	12 (40)	18 (60)		
	Who and for how long						
	Grandfather	6 (85.7)		6 (50)			
,	Father	0		4 (33.4)			
2.	Uncle	1 (14.2)		2 (16.6)			
	Average duration (in hours)						
	2-3	3 (42.8)		2 (16.6)			
	5-6	4 (57.1)		6 (50)			

S. no.	Practices	Control pre-t	est N (%)	Experiment	tal pre-test N (%)
	Most of the time	0		4 (33.4)	
	Use chulha inside house	10 (33.3)	20 (66.7)	11 (36.7)	19 (83.3)
3.	Other methods of cooking used				
3.	Kerosene		1 (5)		4 (9)
	LPG		19 (95)		15 (91)
	Cover the nose and mouth of the child with	-	21 (70)		22 (73.3)
	a cloth when going out in traffic. If no, then	9 (30)		8 (26.7)	
	specify the reason				
4	Never think about it		5 (23.8)		5 (22.7)
4.	Child is very young		7 (33.4)		3 (13.6)
	Child removes the mask on his own		5(23.8)		6 (27.2)
	Already giving medication to child on so		8 (38.09)		4 (18.1)
	no need of covering face		0 (30.09)		4 (10.1)
	Any other medication/home remedy to				
	child to treat/prevent asthma. Other	7 (23.3)	23 (76.7)	1 (3.3)	29 (96.7)
5.	treatment used				
	Kada	5 (71.4)		1 (100)	
	Honey and ginger	1 (14.2)		0	
	Homeopathy medication	1 (14.2)		0	
	Use any perfume/strong odour near child.	6 (20)	24 (80)	4 (13.3)	26 (86.7)
	How long you are near the child (in hours)				` '
6.	2-3	3 (50)		4 (100)	
	5-6	2 (33.4)		0	
	>10	1 (16.6)		0	
	Stop medication of child when symptoms	6 (20)	24 (90)	4 (12.2)	26 (96 7)
7.	subsides. Do symptoms resume after sometime	6 (20)	24 (80)	4 (13.3)	26 (86.7)
7.	Yes				
	No	6 (100)		4 (100)	
	Skipped the dose of your child's		-	<u> </u>	-
	medication in last 1 month. If yes, then	4 (13.3)	26 (86.7)	7 (23.3)	23 (76.7)
	how frequently.	1 (13.3)	20 (00.7)	7 (23.3)	23 (10.1)
8.	Once	2 (50)		3 (42.8)	
	Twice	2 (50)	•	2 (28.7)	-
	More than 3 times	0		2 (28.7)	
	Come for the follow up on time. Reason for	-			
	not attending follow-up	25 (83.3)	5 (16.7)	27 (90)	3 (10)
9.	Due to work		2 (40)		2 (66.6)
	Due to transport unavailability	-	2 (40)	-	0
	Forgot to come		1 (20)		1 (33.4)
	Child always carry his emergency	15 (50)	15 (50)	10 (22.2)	20 (66.7)
	medication. If no, specify the reason	15 (50)	` '	10 (33.3)	` '
10	Child is too young to carry		4 (26.6)		6 (30)
10.	Child is uncooperative		3 (20)		2 (10)
	Gave medication before leaving home		6(40)		7 (35)
	Forgot to carry		2 (13.4)		5 (25)
	Child practice any relaxation exercises. If	11 (36.7)	10 (63.3)	7 (23.3)	23 (76.7)
	yes, then how often		10 (03.3)		23 (10.1)
11.	Everyday	2 (18.2)		2 (28.6)	
	4-5 days a week	6 (54.5)		3 (42.8)	
	Randomly	3 (27.3)		2 (28.6)	
	Wash linens with hot water. If no, then	12 (40)	18 (60)	7 (23.3)	23 (76.7)
12.	how do you wash your linens	12 (40)		1 (43.3)	` ′
	With normal water along with daily clothes		18 (100)		23 (100)
13.	Carry child's medication whenever go outsid	e. If no, then ho	w would you m	anage the con	dition

S. no.	Practices	Control pre-test N (%)		Experimental pre-test N (%)	
	Rush to the nearby hospital		5 (100)		4 (100)
14.	Discuss about health of child with his/her teachers during parent teacher meeting. If no, then how would managed asthma attack	20 (10)	10 (33.3)	17 (56.7)	13 (43.3)
	a) Call to home		6 (60)		8 (26.3)
	b) Take the child to the hospital		4 (40)		5 (16.7)
15.	Have any pet at home. If yes, then which pet and how long child is in contact with the pet	14 (46.7)	16 (53.3)	6 (20)	24 (80)
	a) Dog	5 (35.7)		3 (50)	
	b) Cow	3 (21.4)		2 (33.4)	
	c) Buffalo	2 (14.2)		0	
	d) Goat & Sheep	4 (28.57)		1 (16.6)	
	For how much duration (in hours)				
	2-3	5 (35.7)		3 (50)	
	4-5	5 (35.7)		2 (33.4)	
	Never	4 (28.5)	-	1 (16.6)	
16.	Talk to child about how to deal with stress. If no, then why	15 (50)	15 (50)	10 (33.3)	20 (66.7)
	Child is too young		6 (40)		12 (60)
	Don't know about it		7 (60)		8 (40)
17.	Remove child from known triggers of asthma. If yes, then what measures you took	23 (76.7)	7 (23.3)	25 (83.3)	5 (16.7)
	More clothes in winters	13 (56.5)		10 ((40)	
	Avoid cold drinks and cold food	6 (26)		8 (32)	
	Prevent child from playing in dust	5 (21.5)		7 (28)	
18.	Position child in lean forward position at time of asthma attack. If no, then which position you give at the time of asthma attack	15 (53.3)	14 (46.7)	19 (63.3)	11 (36.7)
	Supine		7 (50)		5 (45.5)
	Sit-up		5 (35.7)		4 (36.3)
	Prone		2 (14.2)		2 (18.1)
19.	Child take 7-10 breaths in each puff	25 (63.3)	5 (16.7)	23 (76.7)	7 (23.3)
20.	Child rinse mouth with water after inhalation of medicine	4 (13.3)	26 (86.7)	6 (20)	24 (80)
21.	Clean mouthpiece every time after use	7 (23.3)	23 (76.7)	12 (40)	18 (60)

Table 5 shows pre-test and post-test practices in experimental and control group. The result shows that mean pre-test and post-test practice scores dip in control group (13.03±2.6 versus 12.7±2.76). However, in experimental group post-test practice scores has improved as compared to pre-test (17.6±1.84 versus 12.7±2.76). Most of the subjects 76.7% in control group had fair practice score in pre-test. This remains same in post-test of control group. In experimental group, majority of subjects 66.7% had fair practice score in pre-test whereas 96.7% had good practice in post-test.

Table 6 show that there is significant improvement in practices of subjects in experimental group (t=-8.079, p<0.05). Hence, null hypothesis was rejected. This could be interpreted as information booklet on asthma was

effective in improving practices of subjects in experimental group.

Table 7 shows association of practice with selected demographic variables using Chi-square. The findings clearly reveal that there was no significant association of practices with any socio-demographic variable.

Table 8 describes frequency and percentage distribution of pre-test practices in experimental and control group. This table elaborates the wrong practices actually carried out by subjects. Though most of the subjects in both the groups were following right practices but still there was a section of group who were following wrong practices. Most of the subjects refrain from covering nose and mouth of child while going out in traffic. Kada is considered as most common home remedy to treat

asthma. Some subjects stop medication as symptoms of child subside. Most of the subjects do not teach the child to carry his/her emergency medication because they are already giving it before child leaves home. More than 30% of subjects didn't discuss medical condition of their child with teachers and don't know about lean forward position during asthma attack. More than half of the subjects neither clean mouthpiece nor rinse the mouth of child after use of inhaled corticosteroids.

DISCUSSION

This study revealed that parents of asthmatic children had insufficient knowledge regarding asthma and its management. This also showed that parents gained knowledge after application of an information booklet in experimental group. There was a significant difference between the mean of parents' knowledge before and after the intervention (p<0.05). Similar results were found in a research conducted by Zarei et al, that indicates knowledge score of parents increased significantly after training using a computer-based programme (p<0.05).11 Another research conducted by Krishna et al showed parallel results which was done on children with asthma using multimedia education programs. 12 This intervention helped in increasing the knowledge of parents and children in order to control and prevent asthma attack. Similar results were found in a research conducted on 60 mothers of children suffering from asthma which revealed that structured teaching program was effective in improving the knowledge with t value of 6.56 and p < 0.05.1

A study conducted on 100 parents of asthmatic children showed 86% of parents didn't knew about working of inhaled corticosteroids which is consistent with the results of our study.¹³ Present study indicates that parents of asthmatic children had fair practices related to asthma and its management. It was found that parents were not covering mouth and nose of their children neither giving them emergency medications to carry. In a study conducted by AlOtaibi et al showed that 52.4% parents gave herbal medicine to children during an asthma attack which was inconsistent with the results of our study which shows only around 20% of parents following this practice.¹⁴ The results of this study showed that initially in control group only 43.3% of knew about lean forward position during asthma attack which raised to 93.3% in experimental group.

This study revealed that there was significant association of knowledge with education and occupation of the parent and monthly income of family which was also seen in a study conducted by Prashanth.¹

Limitation

Only single setting was selected to conduct the study, hence the findings cannot be generalized.

CONCLUSION

The study concluded that most of the subjects in both the groups had inadequate knowledge related to asthma. Knowledge of subjects in experimental group had significantly improved after implementation information booklet. Parents as the primary caregivers are the first ones who encounter with diseases in their children. Adequate knowledge and right practices will help in early identification and effective management of this disease condition. Physician and nurses should always pay attention to educate the parents of children suffering from asthma. In routine OPD physician and nurses are not able to give quality time to counsel the parents, an information booklet will help in bridging this gap and will further help in improvement of overall knowledge and practices of children.

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