TO ASSESS THE KNOWLEDGE AND ATTITUDE IN ASTHMATIC PATIENTS.

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Abstract:

Introduction: Asthma is one of the commonly occurring diseases throughout the globe. It affects the people with all age clusters. It puts on a considerable encumbrance on subjects and their blood relatives. Generally, asthma inflicts a great social encumbrance in the relations of efficiency harmand source consumption rising commencing with deprived control of asthma. The prevalence of asthma is variable throughout the nations all over the globe. **Objectives:** To determine the frequency of adequate knowledge and positive attitude among the known asthma patients. Study Design: Cross sectional. Duration of Study: February 5, 2016 to August 4, 2016. Subjects and Method: Data was entered and analyzed through SPSS version 20. One hundred and thirty (130) patients were recruited from Out Patient Department of chest medicine JPMC on the basis of inclusion/exclusion criteria. An informed consent of the study population with the assurance to keep their information confidential was obtained to include their demographics in the study. Predesigned inquiry form containingconstituents for assessing the awareness and approachin asthma subjects concerning their illness would be given to eligible participant. A total of 14 questions were included in proforma, out of these 08 questions of knowledge and 6 questions for attitude. Adequate knowledge and positive attitude were labeled as per operation definition and were recorded on approved Performa. All the procedure was done by researcher himself. Results: In current study 130 subject's were recruited with age ranging between 18 to 60 years. The mean age of the subjectswere 37.32 ± 10.93 years, average duration of disease was 11.91 ± 8.95 years and duration of treatment was 7.99 ± 7.183 years. From 130 subjects, 55(42.3%) were male and 75(57.7%) were female. Adequate knowledge of Asthma was noted in 74(56.9%) subjects and positive attitude regarding Asthma was seen in 55(42.3%) subjects. Conclusion: In this study 74(56.9%) subjects had adequate knowledge and 55(42.3%) subjects had positive attitude. Persistent dedications are needed to have familiarity about the characteristics of asthma. Management of asthma patients and also to dissipate the traditions and misunderstanding related by illnesses and its treatment. It might assist subjects to take part in self managing strategies and improved controlling of the asthma.

Key Words: Asthma, Knowledge, attitude.

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INTRODUCTION

Asthma is one of the commonly occurring diseases throughout the globe. It affects the people with all age clusters. It puts on a considerable encumbrance on subjects and their blood relatives. Generally, asthma inflicts a great social encumbrance in the relations of efficiency harm and source consumption rising commencing with deprived control of asthma. The prevalence of asthma is variable throughout the nations all over the globe. 1. In Phase One of the ISAAC study, The frequency of asthma symptoms is less than 05.0% in the unindustrialized nations, and higher than 20.0% in industrialized nations². During the past few decades the frequency of asthma is rising.³⁻⁵ The prevalence is high in youngsters and adults residing in the cities and in areas where previously the frequency of asthma was less.^{2,5,6}

By improving the patients' education and self controlling behaviors, the death and disease burden can be reduced. education of subjects is identified as the main reason for deprived prediction. Most of the subjects visiting hospital emergency units usually had decreased familiarity about asthma. Decreased information concerning asthma, unawareness about suitable managing steps and unfamiliarity about how to escape from triggering factors are the prime issues in failure of asthma management. The management issues might increase due to uncooperative attitude of patients. Inspite of sufficient information of asthma, decreased self-confidence to manage the disease episodes is also a factor for treatment failure 8. The rising burden of chronic ailments and conditions in the public require long term management needs the education of the subjects

as a vital component for providing facility. For the appropriate management of the asthma subjects, a constructive attitude is required. The attentiveness for asthma is essential. If the subject is unable to know the seriousness about the illness and its symptoms or does not know the appropriate management the disease could not be controlled properly ⁹. 83.8% of patients have adequate knowledge and 71.2% of patients showed positive attitude ¹⁰.

Current research was targeted to evaluate the knowledge and attitude of subjects with asthma concerning their illness in our inhabitants. Moreover, no local study or data among our population was available to give the statistics that can be used for development of the policies for the improved nontoxic and efficient medications for management of asthma, as to improve the quality of asthmatic subjects. The adherence to medications and the therapeutic consequences depend upon the knowledge and attitude of these subjects concerning the disease.

METHODS AND MATERIALS:

Study design: Cross sectional. Settings: Chest Medicine OPD, JPMC. Duration of study: February 5, 2016 to August 4, 2016. Sampling Non-probability uninterrupted sampling method. Sample size: By taking the percentage of positive attitude i.e. 71.2%, margin of error= 8%, confidence level =95%, then at least a sample of 130 was required. **Inclusion criteria:** Age 18-60. Either gender Subjects of asthma already diagnosed from last06 months and on treatment for at least two weeks. Exclusion criteria: Patients with chronic obstructive pulmonary disease. Renal or hepatic impairments, Lung cancer patients, Pregnant and lactating women, Gastroenteritis All above was assessed from history or medical record.

DATA COLLECTION:

The data collection was started after an approval from the CPSP. One hundred and thirty (130) patients were recruited from Out Patient Department of chest medicine JPMC on the basis of inclusion/exclusion criteria. An informed consent of the study population with the assurance to keep their information confidential was obtained to include their demographics in the study. Predesigned inquiry form containing constituents for assessing the awareness and approach in asthma subjects concerning their illness would be given to eligible participant. A total of 14 questions were included in proforma, out of these 08 questions of knowledge and 6 questions for attitude.

Adequate knowledge and positive attitude were labeled as per operation definition (See annexure A & B) and were recorded on approved Performa. All the procedure was done by researcher himself.

DATA ANALYSIS:

Facts and figures were entered and analyzed by using SPSS version 19.0. Mean and SD were calculated for age, knowledge score, attitude score and duration of disease and treatment. Frequency and percentage was calculated for gender, educational status, marital status, family history of asthma and economical status, adequate knowledge and positive attitude. Stratification with respect to age, duration of disease and treatment, gender, educational status, marital status, family history of asthma and economic level wereperformed. Chi-square tests were applied post stratification. P-value ≤ 0.05 was used as significant.

RESULTS:

In current study 130 subjects were recruited with age ranging between 18 to 60 years. The mean age of the subjects were 37.32 ± 10.93 years, average duration of disease was 11.91 ± 8.95 years and duration of treatment was 7.99 ± 7.183 years. Table 1. From 130 subjects, 55(42.3%) were male and 75(57.7%) were female. Adequate knowledge of Asthma was noted in 74(56.9%) subjects and positive attitude regarding Asthma was seen in 55(42.3%) subjects. Out of 130 patients, 3(2.3%) were graduate, 59 (45.4%) were illiterate, 29(30%) had primary education and 39 (22.3%) had secondary education. 41(35.1%) belonged to middle class, 87(66.9%) belonged to poor family and 2(1.5%) belonged to upper class.88 (67.7%) had family h/o of Asthma. 5(3.8%) were divorced, 97(74.6%) were married, 4(3.1%) 24(18.5%) were separated and were unmarried.TABLE 2. When adequate knowledge was stratified with respect to age and educational status, significant difference was observed and when same was stratified with respect to gender, duration of treatment, duration of disease, marital status, economical status and family h/o of asthma, no significant difference was observed.TABLE 3,4,5. When positive attitude of asthmatic patients was stratified with respect to gender, educational status and economical status, significant difference was observed and when same was stratified with age, duration of disease, duration of treatment, marital status and family h/o asthma, no significant difference was observed. TABLE 6.7

Table # 1 Descriptive of the Patients						
n Mean Std. Deviation						
Age	130	37.32	10.930			
Duration of Treatment in (Years) 130 7.99 7.183						
Duration of disease	130	11.91	8.95			
Knowledge Score 130 10.92 2.480						
Atittude Score	130	13.26	4.924			

TABLE 2. Variable Distribution of the Patients

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Gender	Frequency	Percent
Female	75	57.7
Male	55	42.3
Adequate Knowledge		
No	56	43.1
Yes	74	56.9
Positive Attitude		
No	75	57.7
Yes	55	42.3
Educational Status		
Graduation	3	2.3
Illiterate	59	45.4
Primary	39	30.0
Secondary	29	22.3
Socio Status		
Economic		
Middle Class	41	31.5
Poor Family	87	66.9
Upper Class	2	1.5
Family h/o Asthma		
No	42	32.3
Yes	88	67.7
Marital Status		
Divorced	5	3.8
Married	97	74.6
Separated	4	3.1
Unmarried	24	18.5
Total	130	100.0

TABLE 3. Stratification of Adequate Knowledge in Asthmatic Patients						
Adequate Knowledge	Age Catego	ry	Total	P-value		
	<=30	>30				
No	11	45	56			
Yes	30	44	74	0.011		
Total	41	89	130			
Adequate Knowledge	Duration of	Duration of disease				
	<=25	>25				
No	52	4	56			
Yes	70	4	74	0.478		
Total	122	8	130			

TABLE 4. Stratification of Adequate Knowledge in Asthmatic Patients						
Adequate Knowledge	Duration of to	reatment				
	<=15	>15				
No	50	6	56			
Yes	66	8	74	0.986		
Total	116	14	130			
Adequate Knowledge	Female	Male				
No	34	22	56			
Yes	41	33	74	0.544		
Total	75	55	130			

TABLE 5. Stratification of Adequate Knowledge in Asthmatic Patients					
Adequate Knowledge	Adequate Knowledge Educatinal Status				

JPUMHS 2020; 10(04)

	Gradiuatio	Illterate	Primar	Secondary		
	n		у			
No	0	32	20	4	56	
Yes	3	27	19	25	74	0.001
Total	3	59	39	29	130	
Adequate Knowledge	Economical	Status			Toal	P-value
	Middle	Poor F	Family	Upper		
	Class			Class		
No	13	4	3	0	56	
Yes	28	44		2	74	0.078
Total	41	87 2		130		
Adequate Knowledge	Marital Stat	us			To-tal	P-value
	Divorced	Marrie	Separat	Unmarried		
		d	d			
No	2	42	4	8	56	
Yes	3	55	0	16	74	0.101
Total	5	97	4	24	130	

TABLE 6. Stratification of Positive Attitude in Asthmatic Patients						
Positive Attitude	Ag	Total	P-value			
	<=30	>30				
No	21	54	75	0.311		
Yes	20	35	55			
Total	41	89	130			
Positive Attitude	Durat	Total	P-value			
	<=25	>25				
No	70	5	75	0.540		
Yes	52	3	55			
Total	122	8	130			
Positive Attitude	Duratio	Total	P-value			
	<=25	>25				
No	66	9	75	0.597		
Yes	50	5	55			
Total	116	14	130			

TABLE 7. Stratification of Positive Attitude in Asthmatic Patients							
Positive Attitude		Total	P-Value				
	Female Male						
No	52		23	3	75		
Yes	23		32	2	55		
Total	75		55	5	130		
Positive Attitude		Educa	atinal Status		Total	P-value	
	Gradiuation	Illterate	Primary	Secondary			
No	0	40	23	12	75		
Yes	3	19	16	17	55	0.021	
Total	3 59		39	29	130		
Positive Attitude	Economical Status			Total	P-value		
	Middle Class		Poor Family	Upper Class			
No	16		59	0	75		
Yes	25		28	2	55	0.002	
Total	4	1	87	2	130		
Positive Attitude		Maı	rital Status		Total	P-value	
	Divorced	Married	Separated	Unmarried			
No	5	58	1	11	75		
Yes	0	39	3	13	55	0.101	
Total	5	97	4	24	130		
Positive Attitude	Family History of Asthma			Total	P-value		
	No Yes						
No	53 22		22	75			
Yes	35			20		0.397	
Total	88 42			130			

DISCUSSION:

The recent research displayed that subjects suffering from asthma have deprived knowledge disease and have their numerous misunderstandings concerning the illness and its management. A large number of subjects refuse that they are suffering from Asthma. Many of asthmatic subjects have lack of knowledge regarding the inhalation therapy. A lot of misunderstandings regarding the use of inhaler practice are there. Like other long lasting diseases such as DM, high blood pressure; the asthma is alsoignored till. 17 In a study conducted at Islamabad the levels of responsiveness regarding the asthma knowledge and attitude were very low, also in current study the levels of awareness regarding asthma were very low, therefore results are similar. 11 A universal issue in managing is present he asthma management is a universal issue Due to witlessness or misleading facts/awareness of subjects concerning their illness it is treated underneath. 12 Problem of Asthma is rising worldwide. Subjects of asthma areusually unawareof their ailment and hadmisunderstandings thatare required to becorrected. 13

In our study, 74(56.9%) had adequate knowledge of Asthma and 55(42.3%) had positive attitude regarding Asthma. Out of 130 patients, 3(2.3%) were graduate, 59(45.4%) were illiterate, 29(30%) had primary education and 39(22.3%) had secondary education. 41(35.1%) belonged to middle class, 87(66.9%) belonged to poor family and 2(1.5%) belonged to upper class. 88(67.7%) had family h/o of Asthma. 5(3.8%) Were divorced, 97(74.6%) were married, were 4(3.1%) separated and were 24(18.5%) unmarried. Asthma occurrence is more frequent in urban regions in comparison to areas with less populations. 13 More than 68.0% of asthma patientsare unmindful of the asthma and had many false opinions related with disease.Comparable outcomes were reported in other researches from different regions. 14-16 The informationconcerning about the child's disease diagnosed as asthma was dispersed to relatives, and the relatives agreed that. This emphasizes the necessity for the partwhich could be played by mass media, private societies and community health personnel regarding the health education about asthma. In children no appropriate managements are offered from the initiation of disease due to the reasons that asthma is till reflected as dishonor in the families. 17-22

In asthma associated awareness; the top most importance is usually given to health personal for communicating the information. Routine best communicating relations by medical experts remain essential for controlling youthful asthma managing stages, this is proved from observation of many subjects. ¹⁸In a study conductedat USA analysed that relatives who were given printed action strategy in the emergency section of pediatrics were highly self-confident to arrange asthma exacerbation their children. ¹⁹ The struggles of experts in distributing the awareness for improving asthma might be supported. This study had also definite restrictions. First, this

research is hospital based; so the outcomes could not be hence the findings cannot be general to the public levels. Furthermore, to be familiar with the occurrence of Knowledge and attitude in subjects with asthma, larger studies are needed.

CONCLUSION:

In this study 74(56.9%) had adequate knowledge and 55(42.3%) had positive attitude. Persistent dedications are needed to have familiarity about the characteristics of asthma. Management of asthma patients and also to dissipate the traditions and misunderstanding related by illnesses and its treatment. It might assist subjects to take part in self managing strategies and improved controlling of the asthma.

ETHICS APPROVAL: The ERC gave ethical review approval

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin

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CONFLICT OF INTEREST: No competing interest declared.

REFRENCES:

- 1. Anjankumar DS, Adepu R, Parthasarathi G, Mahesh PA. Impact of community pharmacist provided patient education in asthma patients on treatment outcomes-a study. Indian J Pharm Educ Res. 2009;43(2):125-33.
- 2. Franks TJ, Burton DL, Simpson MD. Patient medication knowledge and adherence to asthma pharmacotherapy: a pilot study in rural Australia. TherClin Risk Manag.2005;1(1):33-8.
- 3. Wigal JK, Stout, Brandon M, Winder JA, Connaughy MC, Creer Tl, et al. The knowledge, attitude, and self-efficacy asthma questionnaire. CHEST. 1993;104(4):1144-8.
- 4. Prabhakaran L, Lim G, Abisheganaden J, Chee CBE, Choo YM. Impact of an asthma education programme on patients' knowledge, inhaler technique and compliance to treatment. Singapore Med J. 2006;47(3):225-31.
- 5. Horne R. Compliance, adherence, and concordance. CHEST. 2006;130(1):65-72.
- Jayasutha J, Saipavan, Roshini KV. Assessment of impact of patient counseling on knowledge, attitude and practices in asthma patients. Global J Pharmacol. 2014;8(4):486-9.

- 7. Berntsen S, LødrupCarlsen K, Hageberg R, Aandstad A, MowinckelP, Anderssen S, et al. Asthma symptoms in rural living Tanzanianchildren; prevalence and the relation to aerobic fitness and body fat. Allergy. 2009;64(8):1166–71
- 8. Pearce N, Aït-Khaled N, Beasley R, Mallol J, Keil U, Mitchell E, et al. Worldwide trends in the prevalence of asthma symptoms: phase III of the international study of asthma and allergies in childhood (ISAAC). Thorax. 2007;62(9):758–66.
- 9. Rodriguez A, Vaca M, Oviedo G, Erazo S, Chico ME, Teles C, et al. Urbanisation is associated with prevalence of childhood asthma in diverse, small rural communities in Ecuador.Thorax.2011;66(12):1043–50.
- Mahendrakumar BJ, Jimmy J, Kumarswamy M, Naveen MR. Assessing the knowledge, attitude and medication adherence among asthma patients in a rural population. Asian J Pharm Clin Res. 2011;4(1):93-97.
- 11. Fardy HJ, Jeffs D. Assessment of general practitioners' asthma knowledge. AustFam Physician. 1991;20:1143–1144.
- 12. Lagerlov P, Veninga CC, Muskova M, Hummers-Pradier E, StalsbyLundborg C, Andrew M, Haaijer-Ruskamp FM. Asthma management in five European countries: doctors' knowledge, attitudes and prescribing behaviour. Drug Education Project (DEP) group. EurRespir J. 2000;15:25–29. doi: 10.1183/09031936.00.15102500.
- 13. Collins S, Beilby J, Fardy J, Burgess T, Johns R, Booth B. The national asthma audit. Bridging the gap between guidelines and practice. AustFam Physician. 1998;27:907–913.
- 14. Coates JR, Steven IUD, Beilby J, Coffey G, Litt JC, Wagner C. Knowledge of and reported asthma management among South Australian general practitioners. Br J Gen Pract. 1994;44:123–6.

- 15. Tomson Y, Hasselstrom J, Tomson G, Aberg H. Asthma education for Swedish primary care physicians a study on the effects of "academic detailing" on practice and patient knowledge. Eur J ClinPharmacol. 1997;53:191–6. doi: 10.1007/s002280050361.
- 16. Barker BH. Last breath. A general practice study of asthma knowledge. AustFam Physician. 1987;6:548–558.
- Shegog R, Bartholomew LK, Parcel GS, Sockrider MM, Masse L, Abramson SL. Impactof a computer-assisted education program on factors related to asthma selfmanagement behavior. J Amer Med Inform Assoc. 2001;8:49–61.
- 18. Scherer YK, Bruce S. Knowledge, attitudes, and self-efficacy and compliance with medical regimen, number of emergency department visits, and hospitalizations in adults with asthma. Heart Lung. 2001;30:250–257.
- 19. van der Palen J, Klein JJ, Seydel ER. Are high generalized and asthma-specific self-efficacy predictive of adequate self-management behaviour among adult asthma patients? Patient Educ Counsel. 1997;32:S35–S41.
- 20. Abdulwadud OA, Abramson MJ, Forbes AB, Walters EH. The relationships between patients' related variables in asthma: implications for asthma management. Respirol. 2001;6:105–112.
- 21. Mancuso CA, Wenderoth S, Westermann H, Choi TN, Briggs WM, Charlson ME. Patient-reported and physician-reported depressive conditions in relation to asthma severity and control. Chest. 2008;133:1142–1148.
- 22. Mancuso CA, Peterson MGE, Charlson ME. Effects of depressive symptoms on health-related quality of life in asthma patients. J Gen Intern Med. 2000;15:301–310