International Journal of Current Advanced Research
ISSN: O: 2319-6475, ISSN: P: 2319 – 6505, Impact Factor: SJIF: 5.995
Available Online at www.journalijcar.org
Volume 6; Issue 4; April 2017; Page No. 3132-3136
DOI: http://dx.doi.org/10.24327/ijcar.2017.3136.0202

Research Article

KNOWLEDGE ABOUT CHRONIC ASTHMA IN GENERAL POPULATION- AN AWARENESS STUDY

Ashik Ahamed A

Saveetha Dental College and Hospitals Chennai-600077

A R T I C L E I N F O

Article History:

Received 19th January, 2017
Received in revised form 25th February, 2017
Accepted 22nd March, 2017
Published online 28th April, 2017

Key words:

Awareness, Asthma, India.

A B S T R A C T

Objective: Assessing the knowledge and awareness about the asthma among the general population in India.
Methods: Structured questionnaires were randomly distributed to 100 Indian patients at chennai.
Results: The awareness of bronchial asthma questions showed that 64% of total sample thought that it could be a fatal disease, and about 50% thought that there is a difference between asthma and chest allergies in children. 50% thought that infectious respiratory diseases may increase asthma progression. In addition, 42% thought that the use of antibiotics doesn't help in diminishing bronchial asthma complications, and some thought that the patient can stop medication after an acute asthma attack. 66% thought that inhaled medication for asthma doesn't cause addiction. Very highly significant results are shown between asthma knowledge and age, the level of educationand if the individual knows a person who suffers fromasthma.
Conclusion: The study demonstrated Asthma knowledge in the Indian population is insufficient, and efforts should be carried out to spreadasthma management.

INTRODUCTION

Asthma is a chronic inflammation of the airways that is characterised by obstruction of the airways, causingdifficulty in breathing. This respiratory dysfunction is symptomised with chest tightness, wheezing, and shortness of breath. There are various factors that can affect its aetiology; genetics, emotion, nutrition, and environment[1]. Asthmamay affect anyone. According to the Global Initiative for Asthma report, currently it is estimated to be affecting 300 million individuals. When the disease is uncontrolled, it decreases the quality of life, prevent from day-to-day activities, and may sometimes leads to death. Hence, it is appraised as a serious health problem worldwide. It is estimated that the prevalence of asthma globally to be between 1% and 18% in different countries' populations[2,3,4]. Asthma is a serious disease since it is very common disease in India, and it doesn't only affect the individual physiologically, however it also affects the quality of individual's life, leads to failure in attending school, college or office, emergency hospital visits, hospitalisation, and caregivers and parents' time and effort[5,6,7]. Eventually, it affects the whole community as a consequence. Patient awareness and education are veryimportant in the prevention and control of acute exacerbations and complications of Asthma.

Corresponding author:* **Ashik Ahamed A
Saveetha Dental College and Hospitals Chennai-600077

It was reported that sufficient treatment of asthma relies on the correct evaluation and intervention by the physician or the parent, in a timely manner with the patient. During the past 20 years, there was a significant improvement in the knowledge about asthma concerning both pathophysiology and treatment. Hence, prevention and control of asthma is possible nowadays. The understanding of Asthma and its management to the asthmatic patients is significantas it has been reported that patient education increases compliance in chronic diseases. There are self-management awareness programs for asthma in order to improve healthcare practices, reduce morbidity, and lower the cost of care[8,9,10].

Aim

This study is conducted in order to evaluate and assess the knowledge and awareness about the asthma among the general population by selecting a small sample of group in Indian community.

METHODS

A structured questionnaire consisting of demography, questions about asthma, and question concerning self-education about the disease. The individual's demography consisted of age, sex, education, if the person suffers from asthma, and whether they have children who suffer from bronchial asthma or know someone who suffers from asthma. There were about 25 questions about asthma awareness

covering various aspects including a section about self-education about asthma and the sources of the information they know about asthma.

This survey was performed using a Structured Asthma Knowledge Questionnaire that was answered through face to face interviews with 100 randomly selected Indian patients visiting the Saveetha Dental hospital in Dec 2016 at Chennai. The data was collected, entered to a database and analysed and evaluated.All questionnaire answers were entered into a database. Afterward, using SPSS Version 20.00 the statistical analysis was computed.

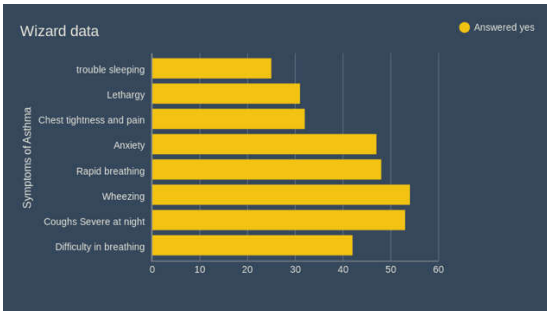
RESULTS

Demography

The study was conducted with 100 individuals from the patients who visited theSaveetha dental hospital, Chennai, Tamilnadu, India. The sample population was taken from various individuals from various background and various educational status. Examples of the samples' occupations include teachers, clerks, students, housewives, marketing, and finance jobs, and other jobs. As for the educational level; more than half of the sample were students or university graduates. There were 61 males (61% of total sample) and 39 females (39% of total sample). There was no specific age range but, nearly 75% were between the ages of 18 and 40. Concerning the disease itself; 24% of the sample were asthmatic, 16% had children who have bronchial asthma, and 42% had either a family member or friend who suffers from asthma.

The awareness of bronchial asthma questions

Regarding the knowledge about asthma; 64% of total sample thought that it could be a fatal disease, 46% thought that it is a chronic disease and 62% thought it has acute exacerbations on exposure to allergens, 50% understand that genetic, hereditary, and environmental factors play a role in the progression of bronchial asthma and about half of the sample thought that there is a difference between asthma and chest allergies in children.



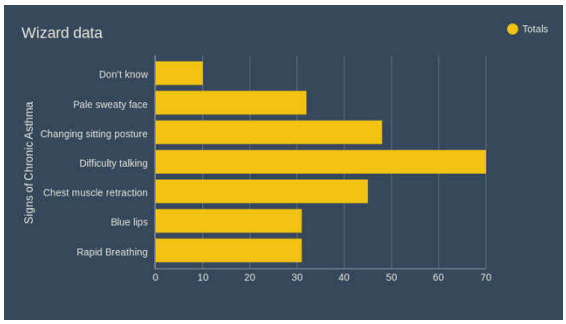


Table 1: Demography

	n (Total=100)
Sex	
Male	61
Female	39
Age	
<18	6
18-25	40
26-40	35
>40	19
Level of Education	
Less than high school	10
High school	20
Some college	55
Graduate	19
Suffering from asthma	
Yes	24
No	76
Their children suffering from asthma	
Yes	16
No	84
Family or friend suffering from asthma	
Yes	42
No	58

AWARENESS ABOUT ASTHMA AMONG GENERAL POPULATION

Questions	Correct Answer	Correct Answer n (%)	Incorrect Answer n (%)
Asthma is a fatal disease	Yes	64	36
Asthma is a chronic disease	Yes	46	54
Asthma has acute exacerbation son exposure to allergens	Yes	62	38
Genetic, hereditary, and environmental factors play a role in the progression of asthma	Yes	50	50
There is a difference between asthma and chest allergies in children	No	50	50
Infectious respiratory disease increase the chance of asthma progression	Yes	50	50
Direct or indirect exposure to cigarette smoke, perfumes, incense, or paint fumes could lead to asthma progression	Yes	63	37
Exposure to sudden changes in environment increase the progression of asthma	Yes	64	46
Asthmatic Children should not avoid certain foods, such as fish, eggs, and bananas	Yes	54	46
Asthmatic patient should not avoid sports activities and physical education classes	Yes	62	38
Asthmatic patient should constantly follow up with a physician who should inform him or her about the symptoms of asthma and how to handle them by avoiding triggers	Yes	65	35
The patient should be educated about the red zone to manage an acute asthma attack	Yes	43	57
The frequent use of antibiotics helps in diminishing the complications of asthma	No	42	58
The patient can stop taking medication after an acute asthma attack	No	47	53
Asthma in children younger than six years of age needs treatment	Yes	61	39
One patient's asthma medication shouldn't be used by another asthmatic, without referral to a doctor	Yes	67	33
Asthma prophylactic treatment doesn't cause a dangerous side-effect	No	60	40
The inhaled medication for asthma doesn't cause addiction	No	34	66
Specialised centres are required to provide education and awareness to the patients and the community about asthma	Yes	62	38
There is a need for including scientific content about asthma in school	Yes	45	55
There is a need for creating educative program for schools, aiming to increase awareness about asthma	Yes	67	33

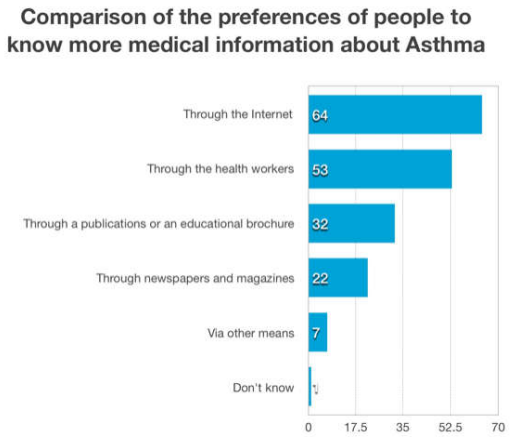
Concerning the symptoms of asthma; more than 50% thought they include wheezing and severe cough at night and nearly 50% thought that they include anxiety and rapid breathing. However, only 25% thought that trouble sleeping is a symptom of asthma.

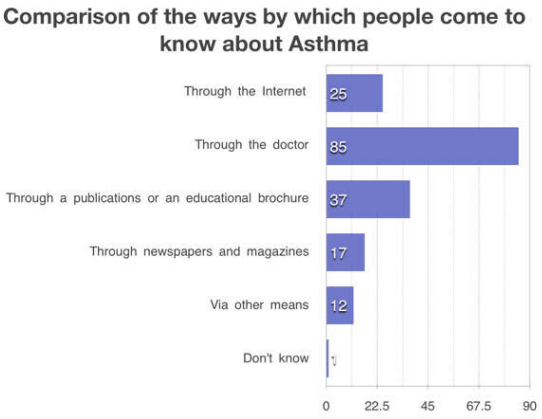
About 50% thought that infectious respiratory diseases increase the chances of asthma progression and about 63% thought that direct or indirect exposure to cigarette smoke, perfumes, incense, or paint fumes could lead to asthma progression, 64% thought that the exposure to sudden changes in environment increase the progression of asthma. 54% thought that asthmatic children should not avoid certain foods, such as fish, eggs, and bananas. 62% thought that an asthmatic child should not avoid sports activities and physical education classes. Concerning patient's health care; around 65% of the sample acknowledged that an asthmatic patient should constantly follow-up with a physician who should inform him or her about the symptoms of asthma and how to handle them by avoiding triggers, in accordance with a preset plan. They also agreed that the patient should be educated about how to manage an acute bronchial asthma attack.

58% of the patients thought that "the frequent use of antibiotics helps in diminishing the complications of asthma" and 53% of parents thought that "the patient can stop taking medication after an acute asthma attack," which is true in the case of systemic steroids and short-acting beta-agonist but not in all cases. 61% thought that asthma in children younger than 6 years of age needs treatment. 67% of the sample agreed that one patient's asthma medication shouldn't be used by another asthmatic, without referral to a doctor. About 60% thought that; asthma's prophylactic treatment would cause a dangerous side effect. An asthmatic patient can be treated with a general practitioner without referral to a pulmonology clinic, since it is a common disease when the patient is more than 5 years old. 66% of the sample answered that the inhaled medication for asthma doesn't cause addiction. Fig. 1 above shows the overall asthma awareness.

Regarding "educative and awareness programs for asthma", 62% of the sample states that for better treatment of Asthma, specialisedcentres are required to provide education and awareness to the patients and the community. 45% see that there is a need for including scientific content about asthma in school and 67% see that there is a need for creating educative programs for schools, aiming to increase awareness about bronchial asthma.

Self-education





About 25% read through the internet, 85% through the doctor, 37% via reading a publication or an educational brochure, 17% through newspapers and magazines, and 12% via other means. As for the preferred way to get medical information about asthma; 53% agreed that it should be through health workers, 64% through reading on the internet, 32% via reading a publication or an educational brochure, 22% through newspapers and magazines, and 7% via other means.

DISCUSSION

In this study, from the results people are aware of the disease (65% of the sample) however, there are many misconceptions regarding asthma. Previous studies that were conducted on parents with asthmatic children have also shown low asthma knowledge results, which was 50% of the total score [11]. There was a higher score in another study, with the parents with asthmatic children who were admitted to New Castle Mater Hospital and John Hunter Hospital[12]. In addition, in another study, parents scored 19.9 in the Royal Children Hospital, Australia[13].

The majority of the sample in this study knows the disease and its predisposing factors, however only a few can differentiate between asthma and other respiratory disorders. Moreover, about 50% don't know its correct symptoms. Concerning the medications for asthma, a low percentage of the people thought and comprehend the medications for asthma in mild and severe cases according to the asthma severity index (mild, moderate, or severe respiratory distress) and the Initiative for Asthma guidelines. Regarding the myths about asthma, the majority of the population thinks that some inhaled medication for asthma can cause addiction, that asthma's prophylactic treatment can cause dangerous side effect if used without an acute asthma attack, steam inhalation for the treatment of asthma is better than mask or tube, and that there is no need for using a mask if the patient is older than 5 years of age. Thus, people are having both misconceptions and unawareness regarding the topic.

The asthma awareness questionnaire showed that the people are somewhat aware and unaware, and people are having misconceptions. The main misconceptions were that asthma and chest diseases in children are the same, that the frequent use of antibiotics helps in diminishing the complications of asthma, exposure of sudden changes in the environment doesn't affect the progression of asthma and that asthmatic children should avoid sport activities and certain foods such as fish, eggs, and bananas. It is correct that there is a close

link between asthma and allergy, allergens are common asthma triggers; however not all asthma is caused by allergens (nonallergic asthma).

The questions regarding the treatment of the asthma was carried out to evaluate the sample's understanding about the concept of treatment, and it has been reported that the patient can't stop taking the medication after an acute asthmatic attack but most people thought otherwise. Some of the main misconceptions is that an asthmatic patient can't be treated in a primary care clinic, that inhaled asthma medication may cause addiction and that asthma's prophylactic treatment can have dangerous side effects if used without an asthmatic attack. Prophylactic treatment should be taken according to guidelines in order to avoid any serious adverse event, however if taken by the guidelines no dangerous side effects will occur, also regarding addiction beta agonists can have tolerance so they should be taken according to the guidelines. There is a difference between unawareness and misconceptions. It is seen that there is a percentage of unawareness in each of the asthma awareness questions, however misconceptions are more hazardous since if an incorrect action is taken regarding the disease, this might be dangerous.

CONCLUSION

Hence from this study, we have understood that the asthma knowledge in the Indian population is insufficient, and efforts should be carried out to spread asthma knowledge to the people. Asthma management should include patients, parents, and public awareness regarding the disease, its symptoms, medications, and consequences. It should be taught in the schools so that the students will learn a lot in order to achieve a maximum benefits in the community regarding the knowledge level.

References

1. Blum CL. Role of chiropractice and sacro-occipital technique in asthmatreatment. *J Chiropr Med* 2002; 1:16-22.
2. Vincent SD, Toelle BG, Aroni RA, Jenkins CR, Reddel HK. Exasperations" of asthma: A qualitative study of patient language about worsening asthma. *Med J Aust* 2006; 184:451-4.
3. Masoli M, Fabian D, Holt S, Beasley R; Global Initiative for Asthma (GINA) Program. The global burden of asthma: Executive summary of the GINA Dissemination Committee report. *Allergy* 2004; 59:469-78.
4. Nasser A, Saad AS, Abdullah T. Impact of asthma educational program on asthma knowledge of general practitioners. *Ann Saudi Med* 1997; 17:550-2.
5. Stewart WF, Ricci JA, Chee E, Morganstein D. Lost productive work time costs from health conditions in the United States: Results from the American Productivity Audit. *J Occup Environ Med* 2003; 45:1234-46.
6. Al-Mobeireek A. Prescribing for asthmatic children in primary care. Are we following the guidelines? Saudi Med J 2003; 24:1274. Dashash NA, Mukhtar SH. Prescribing for asthmatic children in primary care. Are we following guidelines? *Saudi Med J* 2003; 24:507-11. Leiria Pinto P, Cordeiro M, Pinto R. Adolescents and school asthma knowledge and attitudes. *AllergolImmunopathol (Madr)* 1999; 27:245-53.
7. Peterson-Sweeney K, McMullen A, Yoos HL, Kitzman H. Parental perceptions of their child's asthma: Management and medication use. *J Pediatr Health Care* 2003; 17:118-25.
8. Warman KL. Management of asthma exacerbations: Home treatment. *J Asthma* 2000; 37:461-8.
9. Guevara JP, Wolf FM, Grum CM, Clark NM. Effects of educational interventions for self management of asthma in children and adolescents: Systematic review and meta-analysis. *BMJ* 2003; 326:1308-9.
10. Fadzil A, Norzila MZ. Parental asthma knowledge. *Med J Malaysia* 2002; 57:474-81.
11. Henry RL, Cooper DM, Halliday JA. Parental asthma knowledge: Its association with the readmission of children to the hospital. *J Paediatr Child Health* 1995; 31:95-8.
12. Norzila MZ, Hasanah I, Deng CT, Azizi BH. Asthma education: How much does it improve knowledge of childhood asthma amongst medical students and paramedics? *Med J Malaysia* 2000; 55:324-30.
13. Moosa SE, Henley LD. An evaluation of parental knowledge of childhood asthma in a family practice setting. *S Afr Med J* 1997; 87:42-5.

How to cite this article:

Ashik Ahamed A (2017) ' Knowledge About Chronic Asthma in General Population An Awareness Study', *International Journal of Current Advanced Research,* 06(04), pp. 3132-3136.
DOI: http://dx.doi.org/10.24327/ijcar.2017.3136.0202

****