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ASSESSMENT OF KNOWLEDGE, ATTITUDES, AND PRACTICES CONCERNING ASTHMA AMONG PATIENTS IN LIBYA

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ABSTRACT

One of the most prevalent respiratory disorders that can be fatal is asthma, which obstructs the airways in the lungs. The aim of the study: To evaluate asthmatic patients' knowledge, attitudes, and practices and focusing on the population awareness of asthma and the effectiveness of asthma control measure. Materials and methods: This study was conducted for two months in September and October 2024 in Libya. Data was collected from patients with asthma. The sample size consisted of 100 participants from both hospitals and private clinics to assess the knowledge, attitude, and practices among patients with asthma. Results: This study involved 100 patients with asthma. These patients were interviewed and asked questions about the disease, symptoms, and related information obtained from previous studies or validated sources. Conclusion: We found all the patients didn't have knowledge among asthma disease causes and pathophysiology of asthma, but they had a good attitude and practice related to asthma symptoms. They had to go to the hospital or pharmacy for most patients.

KEYWORDS: Asthma, knowledge, attitudes, patients, and practice**.**

INTRODUCTION

A history of respiratory symptoms, including wheezing fits, shortness of breath, chest tightness, and coughing fits the definition of asthma, which is a chronic illness.

Over time, the severity of these symptoms changes.[1] One of the most prevalent respiratory disorders that can be fatal is asthma, which obstructs the airways in the lungs. Patients, families, and healthcare systems are all heavily impacted socially and financially by asthma.[1] According to recent studies, compared to African and Asian nations where the frequency is continually rising, the prevalence of childhood asthma in Western nations has plateaued.[2] With a reported frequency of 5–10%, bronchial asthma is one of the most prevalent chronic respiratory conditions affecting people of all ages. Research from several nations maintaining accurate data over the past few decades has shown a marked increase in asthma morbidity and mortality.[3]

There are two categories of asthmatics: Deniers deny that they are "asthmatic" or suffer from a chronic condition. People in this group typically don't take preventative medicine. They may end up "over-using" B-adrenoceptor agonists because they fear dependency and a perceived lack of control over their sickness. Acceptors are more likely to follow prophylactic measures and use short-acting B-adrenoceptor agonists only in the event of an acute attack since they are aware of the chronic nature of asthma.[3] When written self-management action plans were distributed as part of the intervention, the results were most pronounced. Avoiding obesity and maintaining a regular, balanced diet are important aspects of lifestyle modification. Limiting physical activity is not a good idea. Instead, asthmatics ought to be urged to engage in physical activity. For patients with exercise-induced asthma, short-acting beta-2 agonists should be taken before activity to reduce symptoms. An essential component of managing asthma is raising awareness of the condition.[4] Also some patients used a medicinal herb called delphinium alkaloids is used to treat asthma.[5]

Asthma prevalence in the general population in Nigeria varies from 10.7% in children, 14.2% in adolescents, and 5.1 to 7.5% in adults. According to earlier research, a lack of understanding about asthma has been linked to poor illness treatment and higher morbidity. If pharmacy students don't know enough about asthma, they might not be interested in practicing in asthma settings. Pharmacists have not actively promoted asthma patients' self-management and have shown a lack of understanding regarding inhaler strategies.[6] Although

the exact causes of the rising incidence of childhood asthma in developing nations are unknown, the large differences in asthma prevalence, even among genetically identical groups, point to the potential influence of environmental factors. Some potential causes and risk factors for the development of asthma, as well as disease control, include changes in air pollution, the infectious burden in early childhood, family history of asthma or allergy, obesity, and exposure to tobacco smoke.[7] Furthermore, smoking has been linked to a number of other chronic inflammatory disorders, such as Crohn's disease, rheumatoid arthritis, systemic lupus erythematous, and chronic obstructive pulmonary disease.[8]

The aim of the study

To evaluate asthmatic patients' knowledge, attitudes, and practices and focusing on the population awareness of asthma and the effectiveness of asthma control measure.

MATERIALS AND METHODS

This study was conducted for two months in September and October 2024 in Libya. Data was collected from selected asthma patients. The sample size consisted of 100 participants that the target number from both hospitals and private clinics to assess the knowledge, attitude, and practices among asthma patients.

CASE STUDY

This study involved 100 asthma patients. These patients were interviewed and asked questions about the disease, symptoms, and related information obtained from previous studies or validated sources. We used simple statistics.

The questions consist of many parts related to demographic data of patients and several sections on asthma disease. The demographic data of patients include age, education, employment, smoking habits, and the primary sources of asthma education and practices, table 1.

Table 2 displayed the following sections: 1) etiology of asthma, 2) pathophysiology of asthma, symptoms, and severity, 3) asthma medications, and 4) beliefs and attitudes. What do you think patients should do if they experience symptoms of asthma?" with response options of yes, no, and I don't know. We used simple statistics.

RESULTS

A total of 100 asthma patients were interviewed in this study. Among them, 63% were aged 18-30 years old, followed by 20% aged 18 years or younger, 9% aged over 40, and 8% aged 30-40 years old. In terms of education level, 71% had a bachelor's degree, 17% had a high school diploma, 11% had completed primary school, and only 1% had no formal education. In regards to employment status, 31% were employed and 69% were not employed. When it came to smoking habits, 86% were smokers and 14% were non-smokers. The primary sources of asthma education and practices were healthcare professionals (doctors, nurses) for 63% of the participants, the internet for 24%, friends for 8%, books or leaflets for 3%, and TV for 2%. (Table 1).

Table 1: Demographic Data of Asthma Patients.

Variables	N (%)
Age	
18 <	20
18-30	63
30-40	8
>40	9
Education	
Primary school	11
High School	17
Bachelor	71
No education	1
Employment	
Employed	31
Not employed	69
Smoking	
Smoker	86
Non smoker	14
What are the primary sources of your asthma education and practices?	
TV	2
Books or leaflets	3
Healthcare professionals (doctors, nurses)	63
Internet	24
Friends	8

Table 2 showed that in part one, the etiology of asthma includes symptoms that may arise from allergies, air pollution, or any other type of irritant (such as dust or fumes). 45% of patients said yes to experiencing symptoms from these causes, while 55% said no. 12% of patients reported symptoms from a common cold or exercise, while 88% said no. Symptoms from living with a person who has asthma were experienced by 5% of patients, while 57%

said no, and 38% I don't know. Symptoms from without obvious reasons; 16% said yes, and 84% I don't know. When asked if asthma is a genetic disease inherited from a previous generation, 23% said yes, 3% said no, and 74% said I don't know.

Part two, pathophysiology of asthma (symptoms and severity). In asthma, the breathing tubes also become narrow due to muscle tightening and mucous collection; 19% said yes, 3% said no, and 78% said I don't know. Symptoms of asthma are breathing difficulty with a wheezing or whistling sound; 25% said yes, 2% said no, and 78% said I don't know. I can judge how severe asthma is; 63% said yes, 1% said no, and 36% said I don't know.

Part three, asthma medications: asthma medicines can be given as tablets, syrups, or inhalers; 85% said yes, 13% said no, and 2% said I don't know. The best way to take asthma medicines is by inhalation; 87% said yes, and 13% said no. Medicine for asthma has to be taken while the symptoms persist and then can be stopped; 45% said yes, and 55% said no.

Part four, beliefs and attitudes, asthma cannot be cured; 57% said yes, 41% said no, and 2% said I don't know. Patients with asthma should avoid exposure to environmental tobacco smoke; 98% said yes, 1% said no, and 1% said I don't know. Asthma inhalers can cause addiction and cannot be stopped; 51% said yes, 48% said no, and 1% said I don't know.

Patients think they should do if they have symptoms of asthma; 88% of patients go to hospitals, 8% to pharmacies, and 15% have self-treatment options (herbs, etc.).

Table 2: Section 1, A etiology of asthma.

Symptoms of asthma may result from	**Yes (N%)**	**No (N%)**	**I don't know (N%)**
Allergy, air pollution, or any other type of irritant (dust, fumes, etc.)	45	55	0
A common cold or exercise.	12	88	0
Living with a person who has asthma.	5	57	38
Without obvious reasons.	16	0	84
Asthma is a genetic disease (from a previous generation that already has asthma).	23	3	74

Section 2: Pathophysiology of asthma / Symptoms and severity.

In asthma, the breathing tubes also become narrow due to muscle tightening and mucous collection.	19	3	78
Symptoms of asthma are breathing difficulty with a wheezing or whistling sound	25	2	73
I can judge how severe asthma is.	63	1	36

Section 3: Asthma Medications.

Asthma medicines can be given as tablets /syrup/ inhalers.	85	13	2
The best way to take asthma medicines is by inhalation.	87	13	0
Medicine for asthma has to be taken while the symptoms persist and then can be stopped.	45	55	0
Section 4, Beliefs and Attitudes			
Asthma cannot be cured.	57	41	2
Patients with asthma should avoid exposure to environmental tobacco smoke.	98	1	1
Asthma inhalers can cause addiction and cannot be stopped.	51	48	1
What do you think patients should do if they have symptoms of asthma?			
Go to a hospital facility	88%		
Go to a pharmacy	8%		
Self-treatment options (herbs, etc).	15%		

DISCUSSION

In this study, we looked at the knowledge about the causes, or pathophysiology, of asthma and asthma medication, attitude, and practice of asthma among 100 asthma patients. All patients were diagnosed in general hospitals and private clinics in Libya with asthma symptoms. The majority of the study patients were 18-30 years old and 18<. According to another study, adults with allergic asthma had significantly younger onset and diagnosis ages than adults without the condition, but the median time between the onset of symptoms and diagnosis for allergic and non-allergic asthma was the same.[9]

The majority of patients were bachelors, not employed, and 86% were smokers. All factors related to the increase of asthma symptoms are because patients may go to some places to increase allergen to asthma, during the night, or to smoke more than employed places to work. Compared to other groups of people, we discovered that full-time employees had less asthma symptoms overall and in their free time. Additionally, our findings demonstrated that experiencing frequent asthma symptoms or overnight wake-ups due to asthma is linked to unemployment and job disability even controlling for age, gender, smoking, and professional position. This suggests that the severity of asthma may have a greater impact on coping in the workplace than particular circumstances that can exacerbate asthma symptoms there.[10]

The major primary sources of your asthma education and practices of participants were healthcare professionals (doctors, nurses), which means they got symptoms of asthma when they went to the hospital where diagnosis was made. 24% from the, internet there were good social media to get more information. In this study, had good knowledge among asthma. In other studies, slightly more than half of participants knew enough about asthma. Healthcare

professionals, such as physicians and nurses, were cited by 39.9% of participants as their main source of knowledge; Of those surveyed, 24.1% reported using the internet to find information.[1]

A etiology of asthma, the symptoms of asthma may result from a lot of causes. For this study, we found 45% of patients the causes of symptoms from allergy, air pollution, or any other type of irritant (dust, fumes, etc.), 12% from a common cold or exercise, 5% from living with a person who has asthma, 16% without obvious reasons, and 23% asthma is a genetic disease (from a previous generation that already has asthma). We found in this study most the patients had poor knowledge of asthma causes, may because they don't update their knowledge of asthma, and some patients were children. Like earlier studies, this one also found that parents of children with asthma did not know enough about how to treat their condition. The primary cause is inaccurate information or understanding of the disease process, which results in a number of issues in managing asthma. Given the high incidence of asthma in children and adolescents, urbanization and air pollution were cited as the main causes.[11] Patients with asthma and those who care for them require additional information regarding the etiology, management, and course of therapy of the condition. Raising knowledge of the illness and its treatment methods should help combat this.[11]

Pathophysiology of asthma (symptoms and severity): 19% said yes, for in asthma, the breathing tubes also become narrow due to muscle tightening and mucous collection. 25% for symptoms of asthma are breathing difficulty with a wheezing or whistling sound, and 63% they can judge how severe asthma is. We found most the participants didn't have good knowledge of symptoms of asthma. The behaviours of patients and the ability of medical personnel to effectively communicate appropriate asthma treatment components are closely linked to the success of patients' self-management.[12]

Asthma medications, the patients had good knowledge about asthma medicine; 85% said yes, for asthma medicines, they can be given as tablets, syrups, or inhalers; 87% said the best way for inhalation medicines; and most of them know the medicine for asthma has to be taken and then can be stopped. This study explained why patients clearly followed the hospital or pharmacy when they got symptoms. Where pharmacists asked patients questions, gave them advice, and prescribed the drug.[13]

Beliefs and attitudes in this study had a good attitude toward asthma disease; 57% said yes, asthma cannot be cured; 98% of patients with asthma should avoid exposure to environmental tobacco smoke; and 51% said asthma inhalers can cause addiction and cannot be stopped. Despite having a good attitude toward asthma, the majority of patients were smokers because they don't employ that to be more addicted to tobacco. The smokers have higher expression of interleukin in the respiratory epithelium as compared with non-smokers, so that interleukin increases to increase to hypertension.[14]

While quick-relief (reliever) or rescue treatments rapidly alleviate symptoms that may emerge immediately, asthma management therapies lower airway inflammation and help avoid asthma symptoms. Inhaled corticosteroids (ICS) remain the backbone in the treatment of asthma. Among these, short-acting beta-agonists (SABAs) cause the smooth muscles in the airways to relax by quickly reducing airway bronchoconstriction.[15]

CONCLUSION

We found all the patients didn't have knowledge among asthma disease causes and pathophysiology of asthma, but they had a good attitude and practice related to asthma symptoms. They had to go to the hospital or pharmacy for most patients.

The results of this investigation have significant ramifications for doctors interacting with the patient's understanding, dispositions, and behaviors around asthma treatment and requires health planners to embrace tactics to address and carry out treatment plans, education, and approaches to increase patient, family, and career awareness.

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