



## **ANALYSIS OF THE EFFECTS OF ASTHMA ON CHILDREN AGED 9 TO 14 YEARS IN IRAQ.**

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### **Article history:**

**Received:** January 1<sup>st</sup> 2022  
**Accepted:** February 1<sup>st</sup> 2022  
**Published:** March 8<sup>th</sup> 2022

### **Abstract:**

This study aims to know the prevalence and impact of asthma among children aged 9-14 years.  
Fifty patients were collected from Children's Hospital, Kirkuk, Iraq.  
This study aimed at the effect and prevalence of asthma in children aged 9-14 years. The patients were divided into 35 BOYS 15 GIRLS.  
As the airways narrow during an asthma attack, the child has difficulty breathing, chest tightness, and coughing, and these problems are usually accompanied by wheezing.  
The mechanism of development of the disease differs from person to person, as episodes of shortness of breath disappear after the end of childhood in most people, while in another group, they last for long periods.  
Scientific studies have proven that there are some diseases that are an indicator of exposure to another disease, and the link is either in that the first disease caused damage that caused the second, or that there are genetic disorders or bad health behaviors that lead to this disease and another disease follows and among these diseases Asthma as an indicator of anxiety and depression disorders.

**Keywords:** Asthma, children, chronic anxiety.

### **INTRODUCTION**

It is a chronic inflammatory respiratory disease that affects the airways, which during an asthma attack become inflamed, swollen, and convulsive, making it difficult for air to enter [1,2].

Asthma occurs in 10-15% of males and 7-10% of females, and 80-90% of children with asthma begin before the age of 4-5 years [3,4].

Although asthma can occur at any age, it often begins in childhood, especially in the first five years of life. In some children, the condition persists into adulthood, while other children recover from asthma. Children who doctors think have asthma, another disorder that has caused similar symptoms

Asthma is a pressing problem in pediatrics, despite advances in diagnosis and treatment that have reduced the number of hospitalizations and deaths.

Taking into account the fact that the disease is characterized by clinical diversity [5,6,7]

And one of the first predictive models published and presented in international and local documents for the prevention and treatment of bronchial asthma, which is the asthma index (Asthma Predictive Index - API), which allows

In 70-77% of previous studies predicting the risk of developing bronchial asthma at school age despite the increasing interest of researchers in this problem, there are currently no domestic scientific papers devoted to studying the likelihood of developing asthma in children with a low asthma predisposition index (API), Which sets the goal [8,9,10].

The strongest risk factor for exacerbation of asthma is a combination of genetic predisposition with environmental exposure to inhalants and particles that



may provoke allergic reactions or irritate the airways [11,12,13].

During an asthma attack, the lining of the bronchial tubes swells, narrowing the airways and reducing air flow into and out of the lungs. Recurrent asthma symptoms often cause insomnia, daytime fatigue, and decreased activity levels [14,15,16].

**MATERIAL AND METHOD**

**Patient sample**

Fifty patients were collected from Children Hospital, Kirkuk, Iraq.

This study aimed at the effect and prevalence of asthma in children aged 9-14 years. The patients were divided into 35 BOYS, 15 GIRLS

**Study design**

A cross-sectional study was conducted on children aged between 9-14 years in order to know the

**RESULTS**

prevalence of asthma in children. Information and demographic data for patients were collected, which consisted of age, gender, and the nature of symptoms generated by them. The statistical analysis program SPSS SOFT 20 was also used. In addition, the program was used MS excel In analyzing the data and the results that were evaluated

**Study period**

The duration of this study consisted of 16 months, including examinations and analyzes, in addition to analyzing the results of patients based on the results of the meta-analysis.

**AIM OF STUDY**

This study aims to know the prevalence and impact of asthma among children aged 9-14 years.

**Table 1- frequency of patients according to age**

VAR0002					
		V	%	VP	CP
V	9.00	5	10.0	10.0	10.0
	10.00	5	10.0	10.0	20.0
	11.00	10	20.0	20.0	40.0
	12.00	10	20.0	20.0	60.0
	13.00	10	20.0	20.0	80.0
	14.00	10	20.0	20.0	100.0
	Total	50	100.0	100.0	

Figure 1- distribution of patient according to age

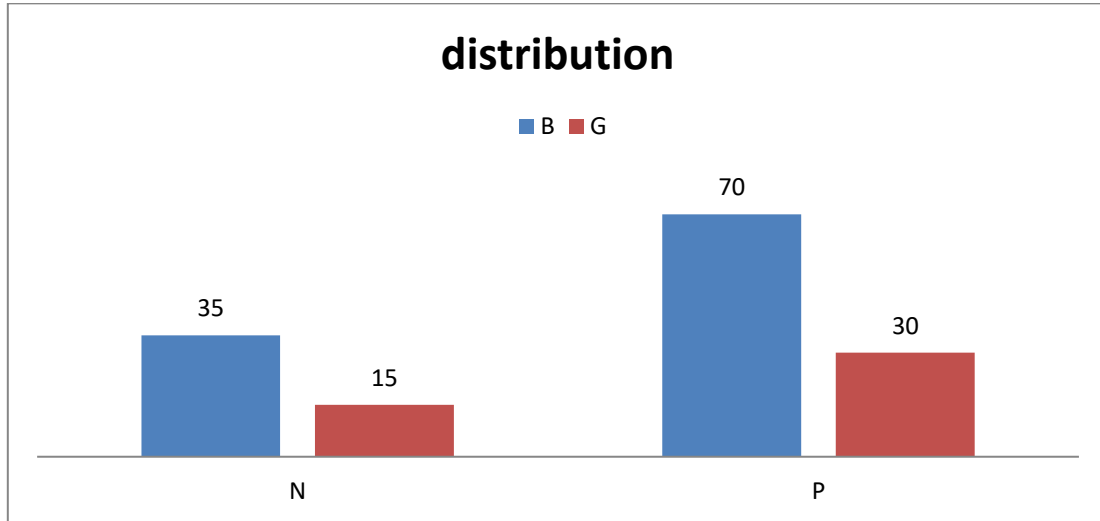


Table 2- Syndrome Crosstabulation of patients

age * Syndrome Crosstabulation							
Count		Syndrome					Total
		Dry cough	Exercise wheezing	Sleep disturbance	Wheezing	Wheezing attack	
Age	9	0	1	1	2	1	5
	10	1	1	0	2	1	5
	11	4	4	0	2	0	10
	12	5	2	1	2	0	10
	13	3	3	1	2	1	10
	14	2	4	1	2	1	10
Total		15	15	4	12	4	50

Figure 2 - rhinitis symptoms

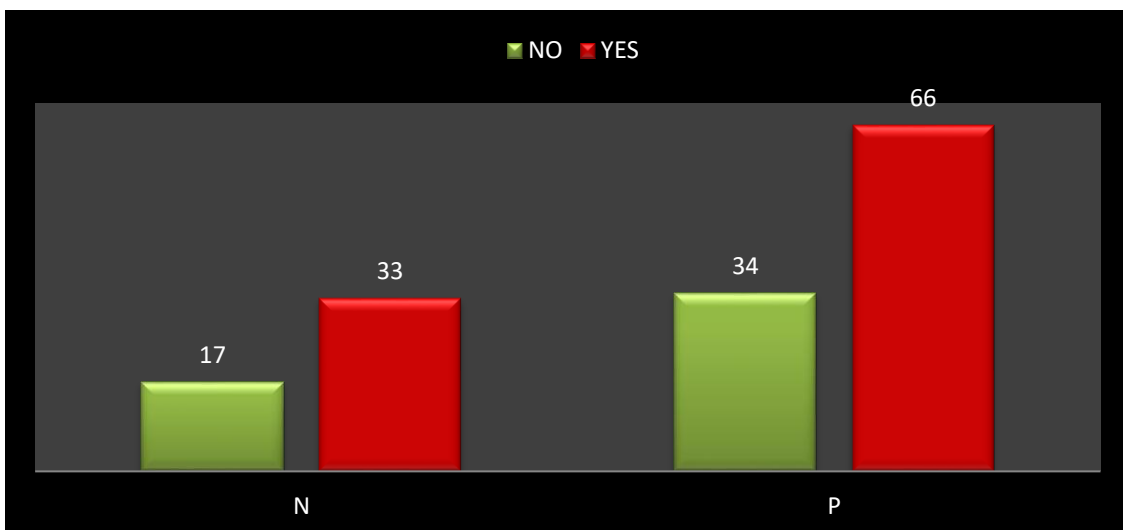




Table 3- distribution of patients according to rhinitis symptoms

<b>age * rhinitis Crosstabulation</b>							
Count							
		VAR00007					Total
		Hay fever	Itchy eyes in the past 12 m	NON	Rhinitis in the past 12 months	Rhinitis interfering with dail	
Age	9	0	2	1	2	0	5
	10	0	3	2	0	0	5
	11	2	1	4	1	2	10
	12	2	1	4	1	2	10
	13	1	1	4	2	2	10
	14	1	2	3	2	2	10
Total		6	10	18	8	8	50

Table 4- The effect of asthma on the psychological state of children

<b>Correlations</b>			
		Asthma	psychological
Asthma	PC	1	.157
	Sig		0.006
	N	50	50
psychological	PC	.157	1
	Sig	0.006	
	N	50	50

## DISCUSSION

Fifty patients were collected in order to determine the symptoms and prevalence of asthma in children. Statistical analysis was used as a means of knowing the type of prevalence in addition to determining the extent of the effect present. It was noted that asthma was more frequent in the ages between 12-14 years, and the ages of patients ranged between 9-14 years. It was more prevalent in boys, 70%, and in girls, 30%, as shown in the figure and table 1 for patient data. In Table 2, we find that the symptoms that were more prevalent in patients are dry cough (15 patients)

Exercise wheezing (15 patients), in second place, wheezing (12 patients), as for rhinitis symptoms It was found in 33 patients.

In Table 4, which shows the effect of asthma on the psychological state of children, a direct relationship was found between asthma and psychological factors to patients, where a statistically significant relationship was found between the two groups, and it was Sig. (2-tailed) (0.006)

A group of genetic and environmental factors are allied to cause a person to develop asthma. Asthma is an inflammation that affects the airway and leads to the emergence of some pathological symptoms, such as feeling short of breath and severe coughing. Asthma is



a chronic disease, as it recurs in the form of bouts of wheezing and a feeling of lack of breath. The ability to breathe, the lung's production of antibody crystals, which leads to the accumulation of sputum.

Asthma attacks intensify during the early morning or when exposed to cold air, so doctors believe that the best way to avoid the disease is to avoid exposure to stimuli. Sleep and asthma patients suffer from problems related to the nature of the disease, such as insomnia

### CONCLUSION

This study showed that the prevalence of asthma was significantly in children between the ages of 12-14 years, and the most common symptoms were dry cough exercise wheezing.

A statistically significant relationship was found between asthma and psychological factors for children sig (0.006).

### RECOMMENDATION

1. Commit to taking the medications prescribed by the doctor in the correct doses and times.
2. Determine the causes of asthma in the patient and try to avoid them as much as possible.
3. Be alert and respond quickly when an attack occurs to avoid its exacerbation.

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