

ASSESSMENT OF BREAST FEEDING AMONG CHILDREN WITH ASTHMATIC IN MEDICAL CITY / BAGHDAD

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ABSTRACT

Background: Breast feeding is the ideal method for infant's nutrition, is considered as the first immunization dose which can protect the infant from several diseases. It is reducing the incidence of allergies such as asthma and eczema because contain a large amount of immunoglobulin and it is antibodies gave greater immunity. **Aim of the Study:** to describe the association for breastfeeding and children with asthmatic at the age 2 - 5 years age old. **Methods:** a descriptive cross-sectional study was conducted in Medical city in Baghdad for six months started from the 1st February till the end of July 2018. The data were collected from the out patients and in- patients of departments Medicine city in Baghdad. one hundred and thirty cases randomized convenient sampling procedure by using a special questionnaire design by the researcher, it included information about the demographic characteristic (Age, Gender, Family history), disease duration, smoking status in family, animals live with patient, etc...). in addition, its filled by direct interview for previously diagnosed children with asthma attending the outpatient and inpatient departments of medicine city in Baghdad. the data analysis by the STATA version 14. we used the frequency and percentage, chi square and value to find any association between the variables on the p= value 0.05. **Results:** One hundred and thirty cases with the mean age 3.5 and SD 0.095 (95% CI 3.3267, 3.7040). The higher rate was 56.1% in the age groups (4-5) years, the number of male cases 68.5% more than female cases. Also, 36.2% of mothers had intermediate education, 35.4% of fathers had university education, 83.8% were housewives and 55.4% were gainer. **Conclusions:** we conclude that the mixed feeding is a popular in this study. then, the cat was the most type of animal which is living with them. Most cases living in smoker environment. also, there was highly significant relationship have been found between age groups, presence of animals in the house with the type of feeding P. value <0.001. we need to evolved caregiving patterns and the role of others in feeding practice will enhance public health outreach. Avoidance of tobacco smoker exposure and food allergies during the first 4 months of life and feeding.

KEYWORD: Child, Breastfeeding, Asthma, Cats, Baghdad.

INTRODUCTION

Breast feeding is the ideal method for infant's nutrition, is considered as the first immunization dose which can protect the infant from several diseases. It is reducing the incidence of allergies such as asthma and eczema because contain a large amount of immunoglobulin and it is antibodies gave greater immunity.^[1,2]

Asthma is associated with episodes of wheezes or chest tightness, varying from severity over time, but usually worse in the morning and often waking the patient overnight there may be history of childhood wheeze or rhinitis provoked by pollens, dust, household pets or occupation allergens.^[3] In exercise-induced asthma, variability of peak flow within and between days and reversal of FEV1 to normal by bronchodilators are typical findings on investigation.^[3]

About one in IS people has asthma, a chronic condition whose symptoms is attacks of wheezing, breathlessness, chest tightness and coughing. There is no cure for asthma, but most people can control the condition and lead normal, active lives.^[4] Allergy is one of the most widespread diseases of the modern world. More than 25% of the population of industrialized countries suffers from allergies.^[5] Every individual has his or her own immune system; the stronger the immune system, the healthier will be the person. Allergies, also known as hypersensitive reactions, occur when the immune system overreacts to substances that do not affect most people.^[1] These substances, also known as allergens, could be pollen, animal dander, chemicals, fungi, dust mites, or foods such as nuts, eggs, shellfish, fish, and milk. Different people show different symptoms of allergies, which can be mild (runny nose) to severe (anaphylaxis).^[3] Symptoms generally depend upon the

part of body contacted by the allergen, e.g., pollens from the air enter the respiratory tract via the nose and cause respiratory symptoms such as cough, itchy and runny nose, nasal congestion, sneezing, and wheezing. Food allergy related symptoms include vomiting, Nausea, abdominal pain, and diarrhea. Skin allergy symptoms are lesions, rashes, blisters, redness and itchiness.^[5] The aimed of this study to describe the association for breastfeeding and children with asthma at the age 2 - 5 year's age old.

Methodology: a descriptive cross-sectional study was conducted in Medical city in Baghdad for six months started from the 1st February till the end of July 2018. The ethical clearance was obtained from the Ministry of Health and from each participants before conduct the study and give them opportunity to leave the study at any time without any pressure on them. The data were collected from the out patients and in- patients of departments Medicine city in Baghdad. one hundred and thirty cases randomized convenient sampling procedure by using a special questionnaire design by the researcher, it included information about the demographic characteristic (Age, Gender, Family history), disease duration, smoking status in family, animals live with patient, etc...). also, it's filled by direct interview for previously diagnosed children with asthma attending the outpatient and inpatient departments of medicine city in Baghdad. the data analysis by the STATA version 14. we used the frequency and percentage, chi square and value to find any association between the variables on the p-value 0.05.

RESULTS

One hundred and thirty cases with the mean age 3.5 and SD 0.095 (95% CI 3.3267, 3.7040). The higher rate was 56.1% in the age groups (4-5) years, the number of male cases 68.5% more than female cases. Also, 36.2% of mothers had intermediate education, 35.4% of fathers had university education. then, 83.8% of mothers were housewives and 55.4% of fathers were gainer [table 1]. Concerning to the residence area, the higher rate was 83.9% living in urban area and 16.1% were living in rural area. 60.8% of cases were using the mixed method of feeding, 53.1% of cases were living with animal and the type of animal 24.6% were cats. 39.2% of cases had a family history of disease. Also 96.2% of cases living with smoker persons. 14.6 % of cases was follow the schedule of vaccines in the fixed time[table2]. Regarding to the relation between the type of feeding and some variables. there are a highly significant have been found between the age groups, presence animal in the house and type of feeding $P < 0.001$, 0.002 . Also, there are not significant have been found between the gender, vaccine schedule, Period of asthmatic illness and type of feeding $P < 0.157$, 0.191 , 0.116 [Table 3]. For the period of asthmatic illness, the higher frequency 64 during the range 6-12 months, followed by 55 in less than 6 months, then 8 in the range 18-24 months and the less frequency 3 in the range 12-18 months[Figure1].

Table. (1): Characteristics of Study Sample.

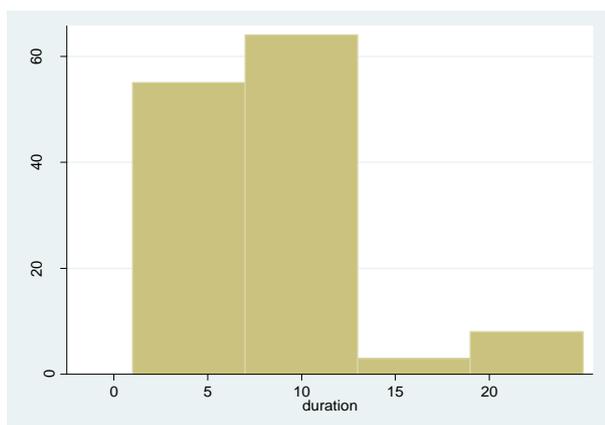
Variable	Frequency	Percent
Age groups years(child)		
2-3	57	43.9
4-5	73	56.1
Gender (child)		
Male	89	68.5
Female	41	31.5
Mother Education		
Illiterate	11	8.5
Primary	29	22.3
Intermediate	47	36.2
Secondary	36	27.7
University and higher	7	5.3
Father Education		
Illiterate	-	-
Primary	9	6.9
Intermediate	32	24.6
Secondary	43	33.1
University and higher	46	35.4
Mother Occupation		
Housewives	109	83.8
Student	10	7.7
Employer	11	8.5
Father Occupation		
Employed	58	44.6
Gainer	72	55.4

Table. (2): Distribution of study sample according to variables.

Residence	Frequency	Percent
Urban	109	83.9
Rural	21	16.1
Types of feeding		
Breast feeding	23	17.7
Artificial feeding	28	21.5
Mixed	79	60.8
Presence of animals in the house		
Yes	69	53.1
No	61	46.9
Type of animals		
Cats	32	24.6
poultry	21	16.2
Livestock	3	2.3
Birds	13	10
Family history of disease		
Yes	51	39.2
No	79	60.8
Child living with smokers		
Yes	125	96.2
No	5	3.8
Vaccine schedule		
Yes	19	14.6
No	111	85.4

Table (3): Distribution of studied sample according to type of feeding and variables.

Variables	Type of feeding						Total		Chi2, p. value
	Breast feeding		Artificial feeding		Mixed				
	F.	%	F.	%	F.	%	F.	%	
Age groups years									X ² = 14.3 P< 0.001
2-3	17	73.9	15	53.6	25	31.6	57	43.9	
4-5	6	26.1	13	46.4	54	68.4	73	56.1	
Gender									X ² = 1.32 P< 0.517
Male	18	78.3	18	64.3	53	67.1	89	68.5	
Female	5	21.7	10	35.7	26	32.9	41	31.5	
Presence of animals in the house									X ² = 12.2 P< 0.002
Yes	7	30.4	22	78.6	40	50.6	69	53.1	
No	16	69.6	6	21.4	39	49.4	61	46.9	
Vaccine schedule									X ² = 3.31 P< 0.191
Yes	2	8.7	7	25	10	12.7	19	14.6	
No	21	91.3	21	75	69	87.3	111	85.4	
Period of asthmatic illness									Fisher X ² =10.2 P< 0.116
<6 months	11	47.8	10	35.7	34	43.0	55	42.3	
6-12 months	7	30.4	16	57.2	41	51.9	64	49.2	
12-18 months	2	8.8	-	-	1	1.3	3	2.3	
18-24 months	3	13.0	2	7.1	3	3.8	8	6.2	

**Figure. 1: period of asthmatic illness among children by months.**

DISCUSSION

Breastfeeding was the rule of ancient times for to recent human history, and babies carried with the mother and fed as required.^[6] In this study, 56.1% of cases still in the age groups 4-5 years. Agreement with the results found in Iraq^[7], the authors found the 59.2% of cases still in the same age group and the same in Iran^[8], this might be too similar customs and tradition between the countries. As well, there is a highly significant relationship has been found between age groups and type of feeding P. value <0.001. Also, in this study found that the 68.5% of cases were male, compared with other results in Sweden^[9], they mentioned the male cases was 42.1%, the reason for the difference is due to the different of living style between the countries. In our study found none significant relationships have been found between gender and type of feeding on the P. value <0.517. Furthermore, level of education and occupation impact upon a mother's choice, and the serialization of the female breast can lead to embarrassment when mothers breastfeed

outside the home.^[10] 36.2% of mothers were intermediate education, 83.8% were housewives & 35.4% of fathers were university and higher education levels, 55.4% were gainer, another results found in Turkey^[11] the authors found the 17.9%, 22.1%, 57.7%, 11.6% respectively, The reason for the difference is due to the wars experienced by people in addition to the deteriorating economic situation in the country, which led to most of the mothers leave the schools and their inability to complete their studies. In addition, in this study shows that 60.8% of mothers fed their children complementary food, compared with other result found in Nepal^[12], the authors found 56.8% of mothers fed their children complementary food. This refer to the mothers knowing the import of child nutrition. Cats can suffer from a range of health problems, including infectious diseases, parasites, injuries and chronic disease. In this study 24.6% families are raising cats' animals indoors, other results found in Australia^[13] 89.9%, this might to the nature of the life of the West and their relationship with animals and conversely the Arabs avoid raising cats for fear of disease transmission. Thus, there is a highly significant relationship have been found between presence animals in the house and type of feeding P. value <0.002. As well, in our study shows 39.2% of cases had a family history of disease, other results found in Brazil^[14], the authors found only 7.9%, This explains the different lifestyle and dietary habits between the two countries. Also, found that 49.2% of cases has a period of illness 6-12 months, other result found in Taiwan^[15], the researcher found that the 21.7%, this might to differ of environments area between the countries and lack awareness of mothers about period of illness. Babies and children, when they exposed to cigarette smoke which has a higher incidence of pneumonia, asthma, ear-infections, bronchitis^[16], sinus infections, eye irritation, and croup. In this study show that 96.2% of cases were

living with individual's smokers, other result found by Di Napoli^[10] the researcher found that only 2.7 %, Babies are expecting to receive more antibodies following their mother's Vaccination.^[17] 14.6% of cases were complete vaccine schedules and other results found in US^[18] 86.9%, this difference is due to the different level of culture and education between the two countries.

CONCLUSIONS AND RECOMMENDATIONS

we concluded that the mixed feeding is a popular in this study. then, the cat was the most type of animal which is living with them. Most cases living in smoker environment. also, there was highly significant relationship have been found between age groups, presence of animals in the house with the type of feeding P. value <0.001. we need to evolved caregiver's patterns and the role of others in feeding practice will enhance public health outreach. Avoidance of tobacco smoke exposure and food allergies during the first 4 months of life and feeding. Improving mothers' awareness of the recommendation and strengthening their intention to breastfeed could lead to increased breastfeeding initiation and duration. in addition, avoid breeding animals such as cats inside the house.

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