

Assessment of Nurses' Knowledge and practices regarding Asthmatic Attacks in children in Al-Najaf Governorate

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ABSTRACT:

Background: Asthma is a disease characterized by episodic bronchospasm and airway obstruction leading to breathlessness, wheezing and excessive coughing. Robson, Asthma is considered a reactive airway disease caused by some allergens e.g. pollens, nutrients, dust mites and animal dander which irritate the airway and irritate bronchoconstriction also asthma triggered in the time of temperature changes, cold air, viral infections, exercise and contact to cigarette smoke.

Aims of the study: To assess of nurses` knowledge , practice toward asthmatic attacks in children at Al-Najaf Governorate and to find out the association between nurses` knowledge and their demographic characteristic including (gender, age, level of education, years of experience, and number of training courses and reading article about asthmatic attacks.

Methodology: A Descriptive cross-sectional design The period of the study is from The study was carried out from 20th November 2019 up to march 28th, 2020. A Non-probability (purposive) sample of (79) nurses who are working in the emergency units in (Al-Zahra Hospital, AL-Forat general Hospital Al-Hakeem general Hospital) are included in the study sample. The data are collected through using a well-designed questionnaire that consist of (3) parts: Part I: Demographic data. This part consists of (8) items, including age, gender, Marital Status, years of experience, Level of education, Economic state, Residency, Training course in Asthmatic Attacks ,and number of training courses. Part 2: Information of the Nurses Knowledge toward asthmatic attacks in children : This part of the questionnaire is consisting of (35) questions . part 3 consist (10) questioners about nurses practice regarding care of asthma in hospitals .the validity through (10) experts from different specialties (Face Validity) for reviewing the study instrument. The data was analyzed through using of the descriptive and inferential statistical analysis approaches

Results: there is a non-significant association ($P>0.05$) between the overall assessment of nurses' knowledge regarding Asthmatic attacks in children and their demographic data ; except for age, marital status, educational level , years of experience and training courses about asthmatic attacks in children in which there was significant association ($P<0.05$) with nurses' knowledge regarding asthmatic attacks in children. And there is a non-significant association ($P>0.05$) between the overall assessment of nurses' practice regarding asthmatic attacks in children and their demographic data ; except for age, educational level , years of experience and training courses about asthmatic attacks in children in which there was significant association ($P<0.05$) with nurses' practice regarding asthmatic attacks in children

Conclusion: There is a great need of introducing periodic and routine Asthmatic attacks training programs that may improve the skills of nursing personnel working in emergency units

Recommendations: that there is needed for an orientation program for all new nurses, and a need for implementing activities, skills training to all nurses and Emphasizing on the importance of participating them in training sessions outside or inside of Iraq related to the asthma.

Keywords: Assessment, Nurses', Knowledge, practices , Asthmatic, Attacks, children

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INTRODUCTION

Childhood asthma as an allergic disease remains the common cause of hospitalization for children and is a disease characterized by episodic bronchospasm and airway obstruction leading to breathlessness, wheezing and excessive coughing. Robson, Asthma is considered a reactive airway disease caused by some allergens such as pollens, foods, dust mites and animal dander which irritate the airway and irritate bronchoconstriction also asthma triggered in the time of temperature changes, cold air, viral infections, exercise and exposure to cigarette smoke⁽¹⁾.

Asthma affects 1 to 3 school-age children and is a leading cause of emergency and hospitalization visit, school absenteeism, the mortality increases and takes around 5500 fatalities annually. The death rate of asthma continuous to increase affecting school and work, attendance, occupational choices, physical activity and quality of life in general. In many countries, the prevalence of asthma is increasing, particularly in the second decade of life where this disease affects 10-15% of the population ^{(2) (3)}.

Childhood asthma is the most frequent encountered pulmonary disease in children more than 50% of them present before 6 years of age. Boys are affected more than girls prior to adolescence. Risk factors coming with genetics, exposure to cigarette smoke, living in urban area, and poverty. Respiratory system disease in children is there have upper respiratory tract infection disease like respiratory syncytial virus (RSV), common cold, sinusitis, tonsillitis, otitis media, pharangitis and laryngitis. The lower respiratory tract infection is pneumonia usually caused by bacteria , viruses or fungi , respiratory tumors, T. B . It's a prolonged inflammatory disease of the air way resulting in air way hyperresponsiveness mucosal edema, and mucus productive. It is a common disease in the world affect more than 15% all over the world of the population. ⁽⁴⁾

Numerous authors have also found that the presence and force of symptoms in certain subjects did not satisfactorily correlate with the degree of air-way obstruction. Although the role of PEF measurements in the management of asthma has long been discussed, there is little objective evidence to support the adoption of widespread peak flow monitoring by patients but monitoring may have a role to play in its diagnosis⁽⁵⁾.

AIMS OF THE STUDY

To assess of nurses` knowledge , practice toward asthmatic attacks in children at Al-Najaf Governorate and to find out the relationship between nurses` knowledge and their demographic characteristic including (gender, age, level of education, years of experience, and number of training courses and reading article about asthmatic attacks.

METHODOLOGY

Study Design: A descriptive cross-sectional design was adopted in the current study to achieve the early stated objectives. The period of the study is from The study was carried out from 20th November 2019 up to march 28th, 2020

— **Study Setting:** The study was conducted at Al-Najaf Health Directorate in 4 teaching hospitals (Al-Zahra Hospital, AL-Forat general Hospital, Al-Hakeem general Hospital).

Sample of the Study: A Non-probability (purposive) sample of (79) nurses who are working in the Emergency unit in these hospitals are included in the study sample

RESULTS:

Table (1): Descriptive statistics (frequency and percentage) for the demographic data of nurses

Demographic data	Sub-groups	Frequency (N=79)	Percentage
Age / years	21-29	56	70.9
	30-38	17	21.5
	48-56	6	7.6
Gender	Male	42	53.16
	Female	37	46.84
Residence	Urban	87.34	87.34
	Rural	12.66	12.66
Marital Status	Married	43	54.43
	Single	19	24.05
	Widowed	8	10.13
	Divorced	8	10.13
	Separated	1	1.27
Economic Status	Sufficient	45	57.0
	Sufficient to some extent	16	20.3
	Insufficient	18	22.8
Educational Status	Secondary nursing school	6	7.6
	Institute of Nursing	26	32.9
	College of Nursing	40	50.6
	Postgraduate	7	8.9
Training about asthmatic attacks	Yes	18	22.8
	No	61	77.2
No. of Training Courses	0	61	77.2
	1	16	20.3
	2	2	2.5
Years of Experience	1-7	51	64.6
	8-14	15	19.0
	15-21	7	8.9
	22-28	6	7.6
Hospital	Al-Zahraa	33	41.8
	Al-Hakeem	23	29.1
	Al-Forat	23	29.1

Table (1) this table shows that the majority of the study subgroups are : male nurses (53.16%) ; those with ages ranging between (21-29) years (70.9%) ; those who live in urban area (87.34%); married nurses (54.43%) ; those with roughly sufficient monthly income (57%) ; those that are college graduated (50.6%) ; those that have no training courses (77.2%); those that have one training courses (20.3%) ; those with (1-7) year of experience (64.6%) ; and finally those that are working in Al-Zahraa hospital (41.8%) .

Table (2): (Association between the overall Assessment of Nurses' Knowledge Regarding Asthmatic attacks in children and their demographic data

Demographic data	Chi Square	df	P value	Sig.
Gender	2.53	2	0.28	NS
Age / Years	11.33	6	0.04	S
Residence	1.61	2	0.44	NS
Educational Level	6.73	6	0.03	S
Marital Status	1.64	6	0.24	NS
Economic Status	1.01	2	0.46	NS
Year of Experience	14.95	6	0.03	S
Training Courses about asthmatic attacks in children	5.32	2	0.05	S
Hospital	1.33	4	0.43	NS

*df= degree of freedom ; NS : Non-significant at P value >0.05 ; S : Significant at P value <0.05

Table (2) represents the association between the overall assessment of nurses' knowledge regarding asthmatic attacks in children and their demographic data, it shows that there is a non-significant association ($P > 0.05$) between the overall assessment of nurses' knowledge regarding Asthmatic attacks in children and their demographic data ; except for age, marital status, educational level , years of experience and training courses about asthmatic attacks in children in which there was significant association ($P < 0.05$) with nurses' knowledge regarding asthmatic attacks in children

Table (3): Association between the overall Assessment of Nurses' practice regarding asthmatic attacks in children and their demographic data

Demographic data	Chi Square	df	P value	Sig.
Gender	1.62	2	0.44	NS
Age / Years	12.22	6	0.001	HS
Residence	3.11	2	0.13	NS
Educational Level	11.87	6	0.002	HS
Marital Status	0.36	6	0.84	NS
Economic Status	0.74	2	0.66	NS
Year of Experience	25.23	6	0.000	HS
Training Courses about asthmatic attacks in children	10.10	2	0.006	HS
Hospital	1.21	4	0.42	NS

*df= degree of freedom ; NS : Non-significant at P value >0.05 ; S : Significant at P value <0.05 ; HS : High Significant at P value <0.01

Table (3) represents the association between the overall assessment of nurses 'practice regarding asthmatic attacks in children and their demographic data , it shows that there is a non-significant association ($P>0.05$) between the overall assessment of nurses' practice regarding asthmatic attacks in children and their demographic data ; except for age, educational level , years of experience and training courses about asthmatic attacks in children in which there was significant association ($P<0.05$) with nurses' practice regarding asthmatic attacks in children.

DISCUSSION

Table (1) .Through the course of present study, it has been noticed that the age , show that the (56%) among nurses of sample study are within (21-29), this result agrees with the results done by Alrasheed , et .al (2011) who concluded in their results that the dominant age of the study sample are (20-60) years old. ⁽⁶⁾ .

Regarding gender the majority of nurses (53.16 %) of the study sample were males and remaining were female. Because the staff in the emergency wards is more male than female(the researcher). Regarding Residency, the current study results show that most of the sample (87.34%) is live who at urban areas. Concerning the Martial status, the majority of subjects (54.43%) are married. this result agrees with the results done by a Aziz, (2018) in this study they found that the most of the sample of their study samples were married nurses(5).Concerning the education status the higher percentage (50.6%) are collage of nursing . This result is an agreement with the results which are obtained from Alrasheed , et .al (2011).They found that the majority of study subjects are completed bachelor degree.

Furthermore, the majority of sample (57.%)were more than five years of experience in hospitals. This result agrees with the study done with Aziz,(2011). Also, (22.8%) of nurses had opportunity to be involved in training sessions in asthmatic attacks, and(77.2%) of them had opportunity to be involved in training sessions and say that they are not able to be read any articles about asthmatic attacks. ⁽⁷⁾.

Table (2) show that there is a significant relationship between the nurses knowledge and their (age , education level , year of experience , and training course), while there is a non-significant relationship with other demographic and clinical data

These study results are supported by Forero , (2000) and Ahmed ,(2016) these indicated that there is a significant relationship between nurses knowledge and demographic data. ⁽⁸⁾ ⁽⁹⁾.

Table (3) present study show there is high significant relationship between the nurses practice and their (age , education level , year of experience , and training course), while there is a non-significant relationship between (gender, residence, marital status, economic status and hospital). Status asthmatics is a medical emergency that can result in respiratory failure and death if untreated so the staff nurses must perform care in Asthma episodes at a high level of professional competence and thus, the staff nurses must be trained regarding proper skills and technique of routine care ⁽¹⁰⁾.

CONCLUSIONS

The study found out that more than half of the study is male. The study indicates that there is a non-significant association ($P>0.05$) between the overall assessment of nurses' knowledge regarding Asthmatic attacks in children and their demographic data(gender, residence, marital status, economic status and name of hospital .the study showed that the association between nurses practice with some demographic data. The study indicate that shows that (6.33%) of the nurses have poor knowledge, (79.75 %) of them have moderate knowledge ; while (13.92 %) have good knowledge

RECOMMENDATIONS:

1. study recommended that there is needed for an coordination program for all new nurses and the requirement for implementing skill, practice ,activities training to all nurses .
2. Increase health education of the nurses working in the emergency units about care of attacks through regular training
3. Providing scientific booklet , publication and journal about asthmatic episodes care

Ethical Clearance: All experimental protocol was approved under the College of Nursing, University of Kufa, Iraq and all experiments were carried out in accordance with approved guidelines.

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