

Evaluation of Nurses' Practices toward Caring of Children with Febrile Convulsion

تقويم ممارسات الممرضين تجاه رعاية الأطفال المصابين بالاختلاجات الحرارية

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المستخلص:

الاهداف: لتقويم ممارسات الممرضين تجاه رعاية الأطفال المصابين بالاختلاجات الحرارية. **منهجية البحث:** تم استخدام البحث الكمي وتصميم التقويم الوصفي في هذه الدراسة، وأجريت الدراسة على الممرضات العاملات في مستشفى الديوانية التعليمي للأُم والطفل في الفترة من 12 سبتمبر 2021 إلى 10 أكتوبر 2022. تم تطبيق العينة للحصول على أهداف الدراسة. وبلغت عينة الدراسة (21) ممرضاً شاركوا في الدراسة. **النتائج:** أظهر النتيجة (100.0%) من الممرضات أظهرن انخفاضاً في متوسط درجات الممارسات $M (\pm SD) = 1.147 (\pm 0970)$ فيما يتعلق برعاية الأطفال المصابين بالتشنج الحموي. قبل التشنج أن المتوسط الحسابي $(\pm) = 1.120 (\pm .1250)$ منهم عند مستوى منخفض، أثناء التشنج الذي تسبب به $MS. (\pm SD) = 1.174 (\pm 2210)$ منهم عادةً عند مستوى منخفض، وأيضاً بعد التشنج يكون $MS. (\pm SD) = 1.156 (\pm 1340)$ منهم منخفضة.

الاستنتاجات: كانت ممارسات الممرضين لرعاية الأطفال المصابين بالاختلاجات الحرارية منخفضة. **التوصيات:** يوصي الباحث ببرنامج تدريبي دوري ومحاضرات منتظمة للممرضين من أجل تحديث معارفهم وممارساتهم فيما يتعلق برعاية الأطفال المشخصين بالاختلاجات. **الكلمات المفتاحية:** تقييم، ممارسات الممرضين، الأطفال المصابين.

Abstract

Objective(s): To evaluate the nurses` practices for children who diagnosed with febrile convulsion.

Methodology: A quantitative research, descriptive evaluation design was used in this study, the study conducted on nurses who work in Al-Dewaniyah Pediatrics Teaching Hospital-Iraq for Maternal and Children period from 12th September 2021 to 10th October 2022. A non- probability (convenience) sample has been applied to obtain the study goals. The study sample was (21) nurses who participate in the study.

Results: The table (2) showed the result (100.0%) of nurses exhibited low in mean of score practices $M (\pm SD) = 1.147 (\pm 0970)$ with regard care of children with febrile convulsion. Before convulsion that $M.S. (\pm SD) = 1.120 (\pm .1250)$ of them at low, during convulsion that $M.S. (\pm SD) = 1.174 (\pm .2210)$ of them usually at low, and also after convulsion are $M.S. (\pm SD) = 1.156 (\pm .1340)$ of them low.

Conclusion: Nurses' practice about care of children with febrile convulsion was low.

Recommendations: Researcher recommendations periodic in-service training program and regular lectures should be provided to nursing staff in order updating their knowledge and practice about care of children with febrile convulsion.

Keywords: Assessment, Nurses Practices, Febrile Convulsion Children

Introduction

A febrile seizure is a convulsion in a child brought on by a fever, which is frequently the result of an infection. Young, healthy children with normal development and no history of neurological problems can experience febrile seizures. When the children experience a febrile seizure, it might be scary. The worldwide total number of under 5 deaths has declined from 12.6 million in 1990 to 5.4 million in 2017, 16,000 died every day and 64.0% of them were attributable to infectious causes. While, In Iraq, by reviewing the statistical data of ministry health, in the year 2021 was 75497 children less than 5 year age. Fortunately, febrile seizures are normally benign, only last a few minutes, and seldom signify a major medical condition. Furthermore, a child experiencing a febrile seizure does not necessarily have epilepsy because that condition is defined by recurrent seizures that are not brought on by temperature. But research indicates that this does not lessen the likelihood of experiencing another febrile seizure⁽¹⁾.

Simple febrile seizures, complex febrile seizures, and febrile status epilepticus are the three categories under which it is classified. The majority of children experience straightforward febrile convulsions, and their risk of recurring febrile seizures is minimal. While those who experienced complex febrile convulsions are more likely to experience repeated febrile seizures⁽²⁾.

As a result of any kind of infection, fever is one of the most prevalent symptoms that might appear. Children's fever episodes can be harmful since they often come on suddenly and with a very high temperature. The wide range for normal temperatures has been discovered; fever is generally considered to be present if the elevated temperature is brought on by a raised set point, and the following criteria are met: anus (rectum/rectal) temperature over 37.5-38.3 c, oral temperature over 37.7 c, axillary temperature under the

arm, and tympanic membrane temperature over 37.2 c.⁽³⁾

The National Institutes of Health defined febrile seizures as an event in childhood or infancy that typically occurs between the ages of three months and five years in the twentieth century as "an event in childhood or infancy associated with fever but without evidence of intracranial infection or defined cause"⁽⁴⁾.

Methodology

Study Design

A descriptive study is conducted from the period of May 11th, 2022 to 29th June, 2022. Carried out in the emergency department at Al-Al-Dewaniyah Hospital for Mothers and Children.

Study Sample

A non-probability (convenient) sample of (21) nurses about care of children with febrile convulsion, participate from emergency department in Al Dewaniyah Mother and Children Hospital.

Ethical Considerations

Prior to data collection, ethical approval was obtained from the Scientific Research Ethics Committee of the Baghdad College of Nursing and hospitals participating in the study.

Study Instrument

The study tool was constructed through intensive review of related literatures and previous studies, it includes:

Part I: Socio-demographic data: nurses' age, gender, years of hospital service, years of emergency room experience, and training.

Part II: Evaluation nurses' practice about caring for children with febrile seizures

This tool was constructed by the researcher after thorough review of related and recent literature. The first area focuses on the practice of nurses in the care of children with febrile convulsion (before convulsion). The second section focuses on nurse's practices in caring for children with febrile convulsion (during convulsion). The third section focuses on

nurse's practices in care of children with febrile convulsion (after convulsion). It consists of (42) multiple-choice questions with three choices: Always, Sometimes, Never.

Validity of the Study

Content validity is determined by a panel of (15) experts were from Nursing Faculty / Baghdad University, Babylon University, Alexandria University, medicine Faculty / Al-Diwaniyah University and expert from Pediatric Nutrition Research Institute in Baghdad.

Reliability of the Study

Internal consistency reliability has been employed through the application of split half technique for the study instrument. Cronbach alpha correlation coefficient is computed. The result showed acceptable reliability depending on the value of the coefficients test which was (0.780).

Data Collection

The constructed program was carried out in the AL-Diwaniyah Maternity and Pediatric Hospital/ Emergency Department throughout the period from (11/5/2022to 29/8/2022).

The following were included in the program's implementation, which was presented to the study; each nurse in the study completed a demographic data form. Observational Checklist about care of children with febrile convulsion to evaluate the nurse's practices about care of children with febrile convulsion to observe and check for correct or incorrect practices which are performed during either the morning or the afternoon shift.

Data Analysis

The statistical package for social sciences (SPSS version 23) was utilized for both data presentation and statistical analysis of the results.

Results

Table (1): Distribution of Study Sample by Socio-demographic Characteristic (n= 21)

Demographic Characteristic	Study Sample	
	Freq.	%
Age Years		
≤ 24	2	9.5
25-29	7	33.3
33-34	7	33.3
≥ 35	5	23.8
Mean± SD	31.48 ± 5.428	
Gender		
Male	17	81
Female	4	19
Marital Status		
Single	12	57.1
Married	9	42.9
Residency		
Urban	16	76.1
Rural	5	23.9
Education Level		
High School Nursing	8	38.1
Institute nursing	8	38.1
College	5	23.8
Experience Years in General Hospital		
<5 years	12	57.1
5-10	4	19
11-15	4	19
> 15	1	4.8
Experience Years in Emergency Department		
<5 years	17	81
5-10	4	19
> 10	0	0.0

The results show the age of the participants, the average age of the nurses included in the study sample was 31.48 years, with ages (25-29) and (33-34) having the highest. Regarding gender, male nurses predominated in 81.0% of the study sample. While, the majority of the study sample, 76.1 (16), were urban (86.7%). As for the level of education, it refers to education. Results were less than half (38.1%) high school nursing. In terms of years of experience, the results showed that those with less than 5 years of experience

accounted for the highest percentage of the sample studies (57.1%). Less than 5 years of experience in emergency department the majority, with 81.0% being the highest percentage among sample studied.

Table (2): Summary Statistics of the Mean of Score Items on Nurses' Practices n= (21)

Main Studied Domains	Rating	Statistical Parameter				Evaluation
		F	%	M.S.	SD	
Before Convulsion	Never	21	100	1.120	0.125	Low
	Some Time	0	0			
	Always	0	0			
During Convulsion	Never	20	95.2	1.174	0.221	low
	Some Time	1	4.8			
	Always	0	0			
After Convulsion	Never	21	100	1.156	0.134	low
	Some Time	0	0			
	Always	0	0			
Overall Practices	Never	21	100	1.147	0.097	Low
	Some Time	0	0			
	Always	0	0			

The table (2) showed the result (100.0%) of nurses exhibited low in mean of score practices (\pm SD)= 1.147 (\pm 0.097) with regard care of children with febrile convulsion. Before convulsion that M.S. (\pm SD)= 1.120(\pm .1250) of them at low, during convulsion that M.S. (\pm SD)= 1.174 (\pm .2210) of them usually at low, and also after convulsion are M.S. (\pm SD)= 1.156 (\pm .1340) of them low.

Discussion

Through the data analysis distribution of demographic variables, the percentage distribution of participants according to their age groups of this study group reveals that the majority of nurses (n=21) were within thirty years of age, with the average age of the nurses being (33.3%) (25-29) years and (33-34) for the study group sample and control group being (38.1); this suggests that the majority of nurses is from the youth category, and this may be a cause for concern. According to the researchers' perspective, the hospital policy favors hiring active nurses (26–30 years old) in the emergency department because the department needs active, efficient nurses to deal with the different patient admitted to emergency department. who can meet the unique professional needs of the emergency department. These results are consistent with a study of pediatric emergency department nurses in Australia, where the majority of participants (n = 51; 43.1%) were younger than her 30 years. Furthermore, these results were consistent with a study conducted at the Emergency Department Teaching Hospital of Al Nasiriyah City. The results of this study showed that the majority of participants (n = 100; 76%) were younger than her 30 years. Moreover, these results corroborate the Indonesian study, in which the majority of subjects (n=40; 95%) showed the same results as that study⁽⁷⁾.

Although the male-to-female ratio was relatively similar from the researchers' perspective, working in the emergency room required patience and perseverance, and the rest of the participants in the study were female. indicated that the distribution of the sex variable was different between the two groups, as the study group had a higher proportion of males, accounting for more than three-quarters (81%) of the study sample. The remaining study participants were female. This result is consistent with previous observational studies⁽⁸⁾.

An evaluation of the impact of

planning, education and programs (PTP) on the understanding of seizures among health workers and how they are managed in several rural areas of Kolhapur, Baghdad. Participants (nurses) were male and the rest were female. Furthermore, the results of this study differed from those of a study conducted at the Emergency Department Teaching Hospital of AL-Nasiriya city, where the majority of participants (n=17; 17%) were male⁽⁶⁾. There was a high percentage of women in the study sample, which made up more than half of the control group (52%), and a study conducted in Iraq found that the majority of the study sample consisted of women (83%)⁽⁶⁾.

A study conducted in Turkey found that the majority of the study sample consisted of women (85.4%). These results were also consistent with a study conducted in Egypt that found a high proportion of nurses to be female (85.4%). and the rest were men⁽⁹⁾.

According to the findings of the current study, high school nurses and institute nurses made up the majority of the sample in the study group (38.1%). This finding is in line with a study conducted in Iraq at the Emergency Unit Teaching Hospital in the city of Al-Nasiriyah, which showed that the majority of participants (n=32; 32%) had graduated from high school as a nurse⁽⁶⁾.

The results of a different survey conducted in Egypt's Menoufia University College of Nursing which found that the majority of participants (n=22; 45.8%) possessed diplomas, were in agreement with the findings of the current study⁽¹¹⁾.

Additionally, these results were in line with a research conducted in Alexandria, Egypt, that found the highest percentage of participants (n=24, or 33.8%) have a diploma in nursing⁽¹²⁾. The majority of the sample in the control group (52.4%) were nursing institute members, in contrast to a study conducted in that found the high majority of the sample (45.8%) to be nursing institute members⁽¹⁰⁾.

Additionally, it is supported in medical wards of a metropolitan pediatric hospital⁽⁵⁾,

which found the majority of the sample (58.8%) to be nursing institute members, while these in Korea which was in conducted that shows the majority of the sample 94 (43.5) were 2-Year. The researcher's opinion in these results is the percentage of those whose educational level is a secondary nursing school and nursing institute is more than the college of nursing, masters or PhD, because number of the nursing schools and institutes, more than the number of the nursing colleges in Iraq⁽¹¹⁾.

The study showed that the highest proportion of participants (n=12; 57.1%) corresponded to more than half or 5 years of nursing experience. The results of this study were consistent with those of a study that found that participants (n = 21;47.7%) had worked as a nurse in Egypt for less than 5 years⁽¹²⁾. The results of the current study were also consistent with a study conducted at the emergency department / Teaching Hospital in He Al-Nasiriyah. Additionally, the study group's findings were consistent with a Korean Trusted Source who found that the majority of participants had less than 5 years of experience with her. Furthermore, this conclusion is consistent with a study conducted in Sudan, which showed that the majority of participants (N=75 (35.0%) achieved the same results⁽¹³⁾. This result is in contrast to a study conducted in Turkey, which found that the majority (n = 20; 41.6%) had worked as a nurse for more than her 10 years⁽¹⁴⁾.

Moreover, it differs from another cross-sectional study conducted in Sydney, Australia. This study found that the largest proportion of participants (n = 25; 12.44%) had been in nursing for more than her 5 years⁽¹⁵⁾.

The results are consistent with a study conducted in Australia, which showed that the majority (56%) of the sample was (1-5) years old.^(17,18,19).

Regarding nurse's practices care of children with febrile convulsion statistical demonstrated the mean of score on all items where low at (1.147). From the researcher point of view, the reason for this result as being low practice

levels could be caused by a lack of training. It is need more training courses and workshops related to febrile convulsion and assessment of factors affecting nurse's practices.

These findings of the study are supported by⁽¹²⁾ a study conducted in Korean to assess nurses' practices for the early management of febrile convulsion in children took part in the study had unsatisfactory practice levels (mean practice 35.0%)⁽¹¹⁾.

Also, the results of the present study are supported by⁽¹³⁾ to evaluate nurses' performance (knowledge, practice, and attitude) for patients with acute organophosphate poisoning, 54% of the nurses who participated in the study had incompetent practice when it came to treating these patients.

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Conclusion

The study showed the result (100.0%) of nurses practice exhibited low in mean of score (1.147), standard deviation (± 0.970).

Recommendations

Further research can be done using large samples in different parts of Iraq to improve nurses' practices in caring for children with febrile seizures. Investigator Recommendation Regular in-service training and regular lectures should be provided to nurses to update their knowledge and practice in caring for children with febrile seizures.

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