

Improving Nurses' Proficiency in Providing Nursing Care for Pediatric Tonsillectomy

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ABSTRACT:

Objective: Tonsillectomy is the most common surgery in the field of ENT. Pain is the most common post tonsillectomy complaint. Considering the importance of nursing cares in relieving post-surgery pain in general and post-tonsillectomy pain in particular, this study is conducted To assess Nurses knowledge towards nursing care of tonsillectomy in children and To find out the relationship between the Nurses knowledge and their selected demographic variables of age ,gender, level of education, years of experience, and training session.

Methods: A Non-probability purposive sample of (120) nurses who are working in the operation rooms, surgical units and Ear, nose and throat units in these hospitals .The study was carried out from January 1st, 2023 up to April 28th, 2023.

Conclusion: there are high significant relationship between the nurses' age, hospital and their knowledge related to nursing care of children with tonsillectomy and there is a non-significant relationship with the remaining demographic and clinical data.

KEY WORDS: knowledge, tonsillectomy, children.

INTRODUCTION

Tonsillectomy involves the removal of the lymphatic tissue of the tonsils, which are located in the lateral walls of the pharynx. This operation is one of the most widespread and successful Operations in the world The tonsils are one of the most important organs of the body, as they represent the first line Of defense that works to protect the body from germs, by fighting any germs or viruses that may attack the body through the upper part of the body, as they are located in the two Cavities on both sides of the pharynx (1)

A pediatric tonsillectomy is frequently performed to treat adenoid hypertrophy and persistent tonsillitis. Inside the mouth are the tonsils. The surrounding area is full of blood vessels and nerves. In severe circumstances, a tonsillectomy might have an impact on a child's food, life, communication, or psychological state in addition to causing pain at the operation site (2)

The causes of tonsillectomy tonsillitis flare-up that returns together with a fever (over 38°C). a mass surrounding the tonsils. The possibility or development of further heart, renal, and arthritis-related problems, respiratory difficulties, or shortness of breath while snoring at night. foul-breath carcinoma of the tonsils. severe tonsil swelling that makes swallowing challenging. accumulation of pus near the tonsil (2)

Tonsil hypertrophy in kids who have repeated acute respiratory infections is likely to have a negative impact on their health and development. Study examined the effects of acute respiratory infection prevention programs on self-care practices and particular health outcomes, including the frequency of respiratory infections and tonsil enlargement in kids aged 10 to 12 years old (3)

Despite the importance of nursing care in relieving post-surgery pain in general, and children's post tonsillectomy pain in particular; there is a lack of coherent studies for nurses to survey and assess different mental, psychological, and physical dimensions of a child, as well as to perform some pain-relieving measures. This study is being conducted to reduce the loss of acceptable nursing care opportunities and to achieve appropriate results in children's nursing cares following tonsillectomy, with the goal of presenting nursing effective metrics in alleviating post tonsillectomy pain (4)

METHODS

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The study was conducted at Al-Najaf Health Directorate in 4 teaching hospitals (Al-Zahra Hospital, AL-Forat general Hospital Al-Hakeem general Hospital and Al- Manathera hospital), the study instrument, data collection, statistical data analysis and validity of the questionnaire. A Non-probability (purposive) sample of (120) nurses who are working in the operation rooms, surgical units and Ear, nose and throat units in these hospitals

Design of the study: The current study used A descriptive cross-sectional design was adopted in the current study to achieve the early stated objectives.

Setting of the study: The study was conducted at Al-Najaf Health Directorate in 4 teaching hospitals (Al-Zahra Hospital, AL-Forat general Hospital Al-Hakeem general Hospital and Al- Manathera hospital) Governorate.

The sample of the study: Sample of study (120), Nurses who work in these hospitals' operating rooms, surgical units, and ear, nose, and throat units have tonsillectomy pain male and female.

Statistical analysis

Statistical analysis was done by using SPSS 26 program. It was determined at $P < 0.05$ and the results were shown as mean $\pm$ SD. ANOVA test was used to determine significant difference in the means of scores in nurses' proficiency in according to their socio-demographic characteristics (5).

RESULTS

Table 1. The Socio-Demographic Data related to the Study Sample (N: 120)

Socio-Demographic Data	Rating and Interval	Freq.	%
Hospital name	Al-Zahraa H	22	18.3
	Al-Hakeem H	29	24.2
	Al-Forat H	11	9.2
	Al-Manathera H	21	17.5
	Al-Sader	37	30.8
Gender	Female	75	62.5
	Male	45	37.5
Age	≤ 25	75	62.5
	26 - 31	31	25.8
	32+	14	11.7
Marital Status	Married	43	35.8
	Single	69	57.5
	Divorced	7	5.8
	Widow	1	0.8
Years of experience	≤ 3	73	60.8
	4 - 7	36	30.0
	8+	11	9.2
Level of education	Secondary nursing school or less	18	15.0
	Institute of Nursing	54	45.0
	College of Nursing	46	38.3
	Master of Nursing	2	1.7
Socioeconomic Status	Sufficient	68	56.7
	Barely sufficient	46	38.3
	Insufficient	6	5.0
Residency	Urban	90	75.0
	Rural	30	25.0
Did you receive training programs regarding nurses' knowledge Nursing Care about Pre/Post Tonsillectomy?	Yes	47	39.2

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	No	73	60.8
number of training courses	0	73	60.8
	1	47	39.2
Site of Training	No Training	73	60.8
	In Iraq	44	36.7
	Outside of Iraq	3	2.5

Table (1) represents the statistical summary of the study sample demographic data. The results of the study showed that most of the study sample (30.8%) are from Al-Sadr Teaching Hospital, (62.5%) females, (62.5%) under the age of 25, (57.5%) married, (60.8%) with work experience of less than 3 years. In addition, most of the study sample (45%) graduated from the nursing institute, (56.7%) have sufficient socioeconomic status, (75%) live in urban areas, (60.8%) did not receive training programs regarding nurses' knowledge nursing care about Pre/Post tonsillectomy. As for those who received training courses (39.2%), they received one training course, and most of them (36.7%) trained inside Iraq.

Table 2. Assessment of Nurses' Proficiency in Providing Nursing Care for Pediatric Tonsillectomy

No.	Items	Levels	Freq.	%	Ms.	Asses.
1	Definition of Tonsil	Incorrect	65	54.2	1.92	Moderate
		Correct	55	45.8		
2	Function	Incorrect	45	37.5	2.25	Moderate
		Correct	75	62.5		
3	Clinical significance	Incorrect	72	60.0	1.80	Moderate
		Correct	48	40.0		
4	Causes of Tonsillitis	Incorrect	57	47.5	2.05	Moderate
		Correct	63	52.5		
5	Symptoms of tonsillitis	Incorrect	55	45.8	2.08	Moderate
		Correct	65	54.2		
6	Treatments for Tonsillitis	Incorrect	66	55.0	1.90	Moderate
		Correct	54	45.0		
7	If the tonsillitis is caused by a virus, antibiotics won't work and your body will fight off the infection on its own.....	Incorrect	65	54.2	1.92	Moderate
		Correct	55	45.8		
8	Tonsillectomy	Incorrect	62	51.7	1.97	Moderate
		Correct	58	48.3		
9	Medical uses	Incorrect	66	55.0	1.90	Moderate
		Correct	54	45.0		
10	Tonsillectomy can also treat other medical problems, including	Incorrect	67	55.8	1.88	Moderate
		Correct	53	44.2		
11	Effectiveness of Tonsillectomy	Incorrect	84	70.0	1.60	Poor
		Correct	36	30.0		
12	Surgical procedure	Incorrect	94	78.3	1.43	Poor
		Correct	26	21.7		
13	Methods: The scalpel is the preferred surgical instrument of many ear, nose, and throat specialists....	Incorrect	75	62.5	1.75	Moderate
		Correct	45	37.5		
14	Before surgery	Incorrect	91	75.8	1.48	Poor

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		Correct	29	24.2		
15	During surgery	Incorrect	83	69.2	1.62	Poor
		Correct	37	30.8		
16	Post-operative care	Incorrect	77	64.2	1.72	Moderate
		Correct	43	35.8		
17	General instructions and follow-up care:	Incorrect	74	61.7	1.77	Moderate
		Correct	46	38.3		
18	Complications	Incorrect	84	70.0	1.60	Poor
		Correct	36	30.0		
19	Risks during a tonsillectomy: A tonsillectomy is a very common, routine procedure.	Incorrect	75	62.5	1.75	Moderate
		Correct	45	37.5		
20	Impact on patient after surgery	Incorrect	71	59.2	1.82	Moderate
		Correct	49	40.8		
21	Nursing care plan pre and post tonsillectomy: Nursing Diagnoses for Tonsillectomy	Incorrect	76	63.3	1.73	Moderate
		Correct	44	36.7		

Freq: Frequency; MS: Mean of Scores; Poor: MS = 1 - 1.66; Moderate: MS = 1.67 - 2.33; Good: MS 2.34 – 3

Table (2) reveals that the Nurses' knowledge regarding nursing care of tonsillectomy domain is moderate in all items except at the items numbers (11, 12, 14, 15, and 18) their knowledge is Poor.

Table 3. Overall Assessment of Nurses' Proficiency in Providing Nursing Care for Pediatric Tonsillectomy

Levels	Freq.	%	Ms.	Asses.
Incorrect	88	73.3	1.81	Moderate
Correct	32	26.7		

Freq : Frequency ; MS : Mean of Scores ; Poor: MS = 1 - 1.66;
Moderate: MS = 1.67 - 2.33 ; Good: MS 2.34 – 3

Table (3.3) show that the overall Nurses' knowledge regarding nursing care of tonsillectomy domain are moderate at mean score (1.81).

Table 4. the relationships between Nurses' Proficiency in Providing Nursing Care for Pediatric Tonsillectomy and different socio-demographic characteristics

Socio-Demographic Data	Rating and Interval	Mean	SD	F	Sig.
Hospital name	Al-Zahraa H	1.80	0.29	2.75	0.03
	Al-Hakeem H	1.77	0.30		
	Al-Forat H	1.89	0.39		
	Al-Manathera H	1.98	0.36		
	Al-Sader	1.71	0.28		
Gender	Female	1.80	0.30	0.15	0.70
	Male	1.82	0.36		
Age	<= 25	1.87	0.31	4.36	0.01

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	26 - 31	1.74	0.31		
	32+	1.63	0.34		
Marital Status	Married	1.79	0.28	0.22	0.88
	Single	1.82	0.34		
	Divorced	1.76	0.45		
	Widow	1.67	.		
Years of experience	<= 3	1.86	0.32	2.60	0.08
	4 - 7	1.74	0.34		
	8+	1.69	0.19		
Level of education	Secondary nursing school or less	1.75	0.20	1.01	0.39
	Institute of Nursing	1.79	0.34		
	College of Nursing	1.83	0.34		
	Master of Nursing	2.14	0.13		
Socioeconomic Status	Sufficient	1.83	0.31	0.33	0.72
	Barely sufficient	1.78	0.35		
	Insufficient	1.81	0.13		
Residency	Urban	1.82	0.29	0.32	0.58
	Rural	1.78	0.41		
Did you receive training programs regarding nurses' knowledge Nursing Care about Pre/Post Tonsillectomy	Yes	1.76	0.29	1.49	0.22
	No	1.83	0.34		
Number of training courses	0	1.83	0.34	1.49	0.22
	1	1.76	0.29		
Site of Training	No Training	1.83	0.34	0.75	0.47
	In Iraq	1.76	0.29		
	Outside of Iraq	1.73	0.36		

* Significant at $P < 0.05$

Table (4) explains that there is a significant relationship between overall scores of nurses' knowledge regarding nursing care of tonsillectomy and their hospital and age with a p-value less than 0.05, while there is a non-significant relationship with the other demographical data at p-value more than 0.05.

DISCUSSION

Through the course of present study, it has been noticed that the age show that the (56%) among nurses of sample study are within (20-25 years), this result agrees with the results done by who concluded in their results that the dominant age of the study sample are (20-40) years old (6)

Regarding gender the majority of nurses (62.5%) of the study sample were females and remaining were male. Because the staff in the surgery wards is more female than male (7)

The majority of samples (60.8%) were more than three years of experience in hospitals. This result agrees with the study done with (39.2%) of nurses had opportunity to be involved in training sessions in nursing care about pre/post Tonsillectomy, and (60.8%) of them had opportunity to be involved in training sessions and say that they are not able to be read any articles about nursing care about pre/post Tonsillectomy (8)

Concerning the education status the higher percentage (45%) are institute of nursing. This result is a Different with the results which are obtained found that the majority of study subjects are completed bachelor degree (9)

Regarding Residency, the current study results show that most of the sample (75 %) is live who at urban areas. Concerning the Martial status, the majority of subjects (57.5%) are single (10)

Presented nurse's knowledge relative to their general information about nursing care of tonsillectomy at surgical ,and the result was as concerning nurse's knowledge about definition of Tonsil (Moderate) of nurse's, Concerning nurse's knowledge about the causes of Tonsillitis (Moderate). Regarding nurses' knowledge about the function of tonsil (Moderate) of nurses'

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Nurses' knowledge about the symptoms of tonsillitis (Moderate) of nurses'. The present result agrees, showed in their study that the nurses had moderate knowledge regarding nursing care of tonsillectomy at children (11).

Assessments of overall nurses' proficiency in providing nursing regarding nursing care of tonsillectomy domain are (moderate). This result agrees with found that the nurses had moderate practice regarding nursing care of tonsillectomy. The tonsillectomy has positive therapeutic efficacy.

Patients are greatly affected by postoperative pain, particularly youngsters who are more fearful of surgery and have a lower pain threshold than adults. This might compromise the effectiveness of treatment and be detrimental to the recovery following surgery (12).

Reveals that there is a highly significant association between the overall scores of nurses' knowledge regarding nursing care of tonsillectomy and their hospital and age), while there is a non-significant relationship with the remaining demographic and clinical data these study results are supported by Soleymanifard (13)

CONCLUSIONS

The most of the research sample are female, their educational levels are Institute of Nursing and most of them have (3 years and less) experience in their work area. It was summaries that the most research sample are not received training course in their area and their overall assessment of knowledge related to nursing care of children with tonsillectomy are moderate. It is concluded that there are high significant relationship between the nurses age, hospital and their knowledge related to nursing care of children with tonsillectomy and there is a non-significant relationship with the remaining demographic and clinical data.

Nursing intervention are ensure that care is implemented in a realistic manner that meets patients' requirements by basing it on the patient's actual condition. Indicates that comprehensive nursing can optimize the standard of care for patients over the course of their treatment, enabling them to receive ongoing, all-encompassing care that genuinely addresses their unique needs and effectively supports their recuperation following surgery.

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