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Knowledge and Attitude of Pediatric Residents And Pediatric Nursing Staff in Regard to Nonatal Pain at Salahaldin General Hospital

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pain , pediatrics , KAP
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ABSTRACT

Introduction: Pain management is an important aspect of healthcare workers daily life, those who treat pain on everyday basis. Spotting pain should be a part of a regular practice, and this has led the American Pain Society (APS) to classify pain as the “fifth vital sign”. ignorance of how to deal with special groups of patients such as children led to insufficient or even zero treatment of pain in such cases. ignored pain among hospitalized children is everywhere happening which addressed by researchers for decades as a cause of suffering and low quality of life.

The aim of this study was to determine children healthcare workers' level in knowledge and attitudes towards pediatric pain management in Salahalddin general hospital.

Methods: A cross sectional study conducted at Salahalddin general hospital , Tikrit , the center city of Salahaldin province ,IRAQ to the duration from February 6th 2022 till April 6th 2022.The tool used to achieve the study objectives was a questionnaire developed by the researcher after reviewing relevant literature and consulting specialist doctors with sufficient Knowledge of the subject. Data analysis was done using descriptive statistics and Chi square test. Data entry and analysis was done using SPSS software version 20.alfa level was set at 0.05.

Results: sample size was 55 .The majority of the studied sample were females(83%) and having children (78%) and with previous training in neonatal ward(78%) , more than half of them were married, Having university degree was the most common finding among them. (89%) that most of the participant passed the knowledge test with acceptable score.

Conclusion : Nursing staff knowledge toward pediatric pain scored below satisfaction level for a professional health workers

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INTRODUCTION

Pain is defined as: “ an unpleasant sensory and emotional experience associated with actual or potential tissue damage or describe in terms of such damage ” . Pain perception is an inherent quality of Life that appears early in development to serve as a signaling system for tissue damage. Neonates might not have previous experience with injury or pain. Untreated and chronic pain in neonates can “ in short course” cause a lot of complication(1).

Neonates experience numerous painful events as early as the first days of life. Hospitalized newborns could be exposed to painful procedures including diagnostic and therapeutic intervention in addition to diseases process. Neonates are unable for self-reporting , so it's essential to use other methods for the assessment of pain(2,3,4). Subsequent to the assessment of pain , the nursing team must act therapeutically, using non pharmacological measures (5) as reduction in light levels, reduction of noise , swaddling (wrapping in a blanket), containment (facilitated tucking), non-nutritive sucking, glucose and grouping of the care measures (6) .

Many factors influence the practice for the management and assessment of pain in the neonates, such as lack of knowledge and attitudes of nursing staff ,work overload, and professional and personal experience. The success of the transference of knowledge and practice depends on the quality of the evidence, a context which is receptive to changes (7).

MATERIAL

A cross- sectional study carried at pediatric department at Salahaldeen general hospital including the pediatric resident and nursing staff at pediatric department.

The study was carried out in Salahalddin general Hospital for the duration from Feb 6th 2022, to April 6th 2022.

Sample size was (55) persons including all resident doctors and nursing staff who worked at the pediatrics department at the time of the study.

No sampling method was carried out , all the target population was invited to fill the study questionnaire and the response rate was 100% .

Inclusion Criteria :Pediatrics residents and nursing staff who worked at pediatrics department for more than one month at least. Exclusion Criteria: Pediatrics residents and nursing staff who worked at pediatrics department for less than one month.

The questionnaire was developed by the researcher after in depth review of the relevant literatures and discussions with the supervisor.

The participated population were asked to fill the questionnaire, attached in Appendix (A).

Among the 18 neonatal pain questions, question number 17,18 were reported as frequency . question 1-16 , were coded as follow: 1 score for correct answer , 0.5 for I don't know answer and 0 score wrong answer. After that , the scores were classified into two grades “ depending on the median cut off point “ , as following : If the score of the participant was between 8-16 it was graded as PASSED , and if the score of the population was less than 8 was graded as NOT PASSED .

Data analysis was done in terms of percentage of total score. The variable were analyzed either by mean &SD (for quantitative variable) or by percentage & chi-square test (for qualitative variable & their possible relations)& showed by special figures & tables.

P value <0.05 was considered to be significant.

RESULTS

As shown in Table 4.1; The majority of the studied sample were females(83%) and having children (78%) and with previoud

training in neonatal ward(78%) , more than half of them were married, Having university degree was the most common finding among them.

Figure 4.1 showed that the majority of the study participant were of female gender(83%).

As shown in Figure 4.2 ; the majority of the participants were married(76%)

Figure 4.3 had shown that minority of the sample (10%) were secondary school graduates.

Figure 4-4 had shown that minority of the sample (21%) not having children.

Figure 4.5 had shown that minority of the sample (21%) were with no previous training in the neonatal ward.

Fig 4.6 concluded that most of the participant (89%) passed the knowledge test with acceptable score .

As shown in Table 4.2 ; Chi square test has shown significant level between age of the participant and their score level (P=0.048361).

Table 4.3 has shown that using Chi square test no significant level between score level and gender of the participant (P=0.98304).

Table 4.4 has shown that by using Chi square test there was significant level between score level and marital status of the participant (P=0.000747).

As shown in table 4. 5 , there was a significant association(P=0.000109) between score level and Educational level of the participant using Chi square test.

Table 4.6 clearly showed highly significant association between score level and having child or not of the participant using Chi square test (P<0.00001).

Table4. 7 showed significant association between between score level and past neonatal training of the participant using Chi square test (p<0.00001).

Table4. 8 showed no significant association between score level and period of

experience of the participant using Chi square test(p+0.887267).

DISCUSSION

All of the medical doctors(N=20) achieved successful score , It is no wonder that doctors are highly educated in the medical literature so their result came at no surprise , this is in agreement with a study from Jordon which concluded that The level of knowledge was the best among physicians,. Nurses scored the lowest for knowledge of pain assessment and management (8).

In a clear disparity with this result ; A study from Sudan in in 2017 concluded that Sudanese paediatric residents in training had poor knowledge and training in paediatric pain assessment and treatment, however, the majority of them recognized the importance of pain control in children.[9] this disparity in result could be attributed to different training curriculum and study courses between Iraq and Sudan.

Another study from Ethiopia also found poor knowledge and attitude pediatric and pediatric surgical residents.[10] six of the Nursing staff scored below 8 which is considered below the level of successful score.

This difference between the scoring level of Doctors versus scoring level of nurses is comparable to other studies (**Kong et al.**) [11,12,]and the reason for this low grade among nursing staff could be attributed to limited study time and insufficient clinical training programs [13].

A study from Rwanda(N=66) concluded that The majority (74.2%) of nurses had a low level of knowledge related topain management in neonates.[14]It is noteworthy to mention that other studies(**McCorkle et al**) disagree with our study as it showed that nurses scored better than doctors at pain assessment questionnaire [15]This difference in result could be attributed to long experience of the

nurses in comparable to doctors in the field of the studies article abovementioned.

In this study , the majority of the studies sample (83.6 %) were female , this result could be attributed to the fact that conform to cultural habit of Iraq in allocating female nurses whenever in patient care attendants were also females .

Age in this study was not found to be a factor in determining the score level of the participant because it may be due to study years and intensity (as it should be in their curriculum) is far more elaborate and specific than experience that can be gained from the years of life or worse from others advice(which might not be true) during their life or work experience.

Gender in this study was not crucial factor in passing or not in this assessment ; a good reason for that beside the low sample size of male (N =9) to end up a robust statistical result , all of them (both gender) were medical professionals that deal with

daily cases in regard to pain and already had background knowledge on the topic .

Marital status was determinant factor; however ,the research her believe that marital status due to limited sample size cannot be declared a true factor in this regard as education level is far more important which came at no surprise in this study(P= 0.000109).

Having child or not was significant in this research ; the obvious explanation could be true daily experience with child needs and emotions over many years so spotting painful attack became daily routine.

This study found that work duration is not a significant determinant in score level as it mentioned above that education level is far too much important than daily practice in the researcher opinion.

Having past training in pain management in pediatrics was significant fact (P<0.000001) as knowledge and attitude are conveyed during training course witch focus on specific subject and specific aims.

Table 4.1 : Sociodemographic characteristics of the studied sample

Variable	Frequency	Percent	
Gender	Male	9	16.3
	Female	46	83.6
Total	55	100	
Marital Status	Single	12	21.8
	Married	37	67.2
	Divorced	2	3.6
	Widowed	2	3.6
	Unspecified	2	3.6
Total	55	100	
Educational status	Secondary school	6	10.9
	Institute	24	43.6
	University	25	45.4
	Others	0	0
Total	55	100	
Having Children	Yes	43	78.1
	No	12	21.8
Previous training in Neonatal ward	Yes	43	78.1
	No	12	21.8
Total	55	100	

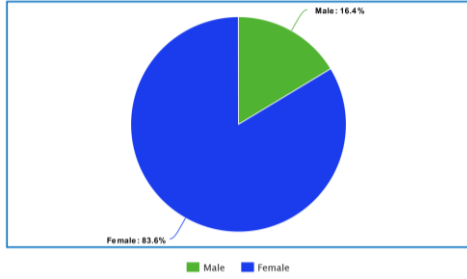


Figure 4.1 : Distribution of the gender of the participants.

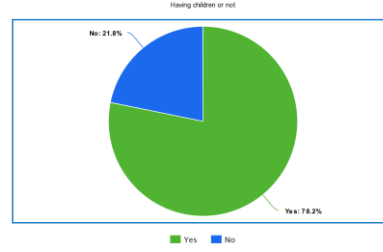


Figure 4.4 : Distribution in regard to having children or not of the participants.

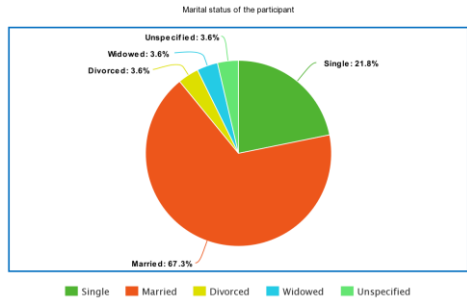


Figure 4.2 : Distribution of the participants in regard to marital status.

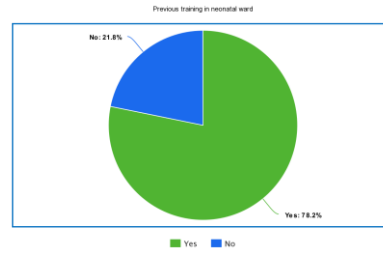


Figure 4.5 : Distribution in regard to previous training in the neonatal ward of the participants.

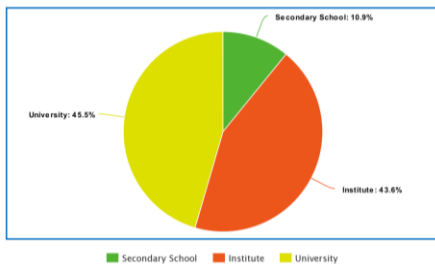


Figure 4- 3 : Distribution in regard to Educational level of the participants.

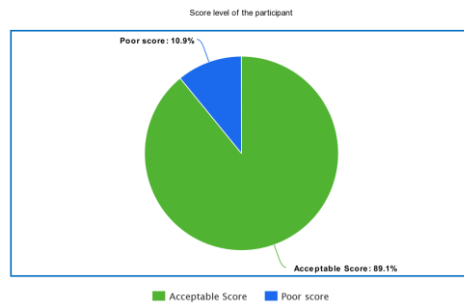


Figure 4.6 : Distribution of the Scoring level of the participants.

Table 4.2 : The association between score level and age of the participant using Chi square test

	Age category		Total
	Less than 30 years old	30 years old and more	
Acceptable score	20	29	49
Poor score	5	1	6
Total	25	30	55

The chi-square statistic is 3.8974. The p-value is .048361. Significant at $p < .05$. not significant

Table 4.3 : Association between score level and gender of the participant using Chi square test

	Sex		Total
	Male	Female	
Acceptable score	8	41	49
Poor score	1	5	6
Total	9	46	55

The chi-square statistic is 0.0005. The p-value is .98304. Not significant at $p < .05$.

Table 4.4 : The association between score level and marital status of the participant using Chi square test

		Marital status		Total
		Single	Married	
Score level	Acceptable score	7	32	40
	Poor score	5	1	6
Total		12	33	45

The chi-square statistic is 11.368. The p-value is .000747. Significant at $p < .05$.

Table 4.5 : The association between score level and Educational level of the participant using Chi square test

		Educational status			Total
		Secondary school	Institute	University	
Score level	Acceptable level	2	22	25	49
	Poor score	4	2	0	6
Total		6	24	25	55

The chi-square statistic is 18.2564. The p-value is .000109. The result is significant at $p < .05$.

Table 4.6 : Association between score level and having child or not of the participant using Chi square test

		Having child or not		Total
		Yes	No	
Score level	Acceptable level	43	6	49
	Poor score	0	6	6
Total		43	12	55

The chi-square statistic is 19.6364. The p-value is < 0.00001 . Significant at $p < .05$.

Table 4.7 : Association between score level and past neonatal training of the participant using Chi square test

		Having past training in neonatology or not		Total
		Yes	No	
Score level	Acceptable level	43	6	49
	Poor score	0	6	6
Total		43	12	55

The chi-square statistic is 19.6364. The p-value is < 0.00001. Significant at $p < .05$.

Table 4.8 : Association between score level and period of experience of the participant using Chi square test.

		Experience period		Total
		Less than 2 years	2 years and more	
Score level	Acceptable level	26	23	49
	Poor score	3	3	6
Total		29	26	55

The chi-square statistic is 0.0201. The p-value is .887267. Not significant at $p < .05$.

CONCLUSION

Nursing staff knowledge toward pediatric pain scored below satisfaction level for a professional medical workers.

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REFERENCES

- 1-Nimbalkar A, Dongara A, Phatak A. Knowledge and Attitudes Regarding Neonatal Pain Among Nursing Staff of Pediatric Department: An Indian Experience. Pain Management Nursing. 2014;15(3):69-75.
- 2-Blackburn S. Environmental impact of the NICU on developmental outcomes). *PediatrNurs*. 1998;13(5):279-89.
- 3- Frank LS, Greenberg C, Stevens B. Pain Assessment in Infants and Children.

Pediatric Clinics of North America. Volume 47, Issue 3, 1 June 2000, Pages 487-512

4- Costa T, Rossato LM, Bueno M, Secco IL, Sposito NPB, Harrison D, et al. Nurses' knowledge and practices regarding pain management in newborns. *Revista Escola Enfermagem USP*. 2017;51:e03210.

5- Alavi A, Namnabati M, Abdeyzadeh Z, Parvin N, Akbari N, Samipoor V and et al, Pediatric pain management by nurses in educational hospitals of Shahrekord, *Jhahrekord Univ Med Sci*, 10 (2), 2006, 59-65.

6- Elcigil A, Maltepe H, Mutafoglu K, Nurses' perceived barriers to assessment and management of pain in a university hospital, *J Pediatr Hematol Oncol*, 33, 2011, 33-38.

7- Reiman MT, Gordon M, Marvin JM, Pediatric nurses' knowledge and attitudes regarding pain: A competency tool modification, *PediatrNurs*, 33, 2007, 303-6.

- 8-Nuseir, K., Kassab, M. and Almomani, B., 2016. Healthcare Providers' Knowledge and Current Practice of Pain Assessment and Management: How Much Progress Have We Made?. *Pain Research and Management*, 2016, pp.17.
9. Alhassan MAA, Ahmed FE, Bannaga AA. Pain assessment and management: The knowledge, attitude and practice of Sudanese Paediatric Residents. *Sudan J Paediatr*. 2017;17(1):25-29.
10. Dana, Degefu&Tefera, Muluwork. Original Article Knowledge, attitude, and practice of pain assessment and management in children among pediatric and pediatric surgical residents in TikurAnbessa Specialized Hospital. *Ethiop. J. Health Dev*.2021; 35(3)
- 11-H. J. Jho, Y. Kim, K. A. Kong et al., "Knowledge, practices, and perceived barriers regarding cancer pain management among physicians and nurses in Korea: A Nationwide Multicenter Survey," *PLoS ONE*, vol. 9, no. 8, article e105900, 2014.
- 12- L. Lalonde, V. Leroux-Lapointe, M. Choinière et al., "Knowledge, attitudes and beliefs about chronic noncancer pain in primary care: a Canadian survey of physicians and pharmacists," *Pain Research and Management*, vol. 19, no. 5, pp. 241–250, 2014.
- 13- Muteteli c. knowledge, attitudes and practices of nurses and midwives regarding neonatal pain management in two hospital neonatal wards in kigali, rwanda,2017 , rwanda .master degree dissertation.
- 14-M. S. Abdalrahim, S. A. Majali, M. W. Stomberg, and I. Bergbom, "The effect of postoperative pain management program on improving nurses' knowledge and attitudes toward pain," *Nurse Education in Practice*, vol. 11, no. 4, pp. 250–255, 2011.
- 15-Y. Xue, D. Schulman-Green, C. Czaplinski, D. Harris, and R. McCorkle, "Pain attitudes and knowledge among RNs, pharmacists, and physicians on an inpatient oncology service," *Clinical Journal of Oncology Nursing*, vol. 11, no. 5, pp. 687–695, 2007.