Opinions and attitudes of pediatric nurses for missed nursing care in Türkiye

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Abstract

This study aimed to determine the attitudes of nurses working in the pediatric clinics located in the northern region of Turkey towards missed care needs. This was a descriptive study. It was carried out in the pediatric clinics of a university and a research and training hospital providing service Turkey between January 131, 2022. The sample of the study consists of 121 nurses. A Personal Information Form and Missed Nursing Care Survey-Pediatric Version were used to collect data in the study. The data were analyzed using SPSS 21.0. It was found that 40.5% of the nurses were providing care to more than 6 patients per nurse and the number of nurses were insufficient in the units where 86.8% of the nurses were working. The most common missed care needs were identified as "administration of drug 30 minutes before or after the specified time" at a ratio of 53.8%, "providing oral care" at a ratio of 34.7% and "providing emotional support to the child and/or family" at a ratio of 33.9%. It was found that mean total Missed Nursing Care Survey-Pediatric Version score of the participants was 2.35±0.68. Mean scores of the subscales were found to be 2.75±0.79 in Labor Resources, 2.12±0.74 for Material Resources and 2.05±0.77 in Communication/Teamwork, respectively. This study has shown that the most common reason of missed nursing care was workload and the least common one was communication. missed nursing care is an important problem that needs to be overcome in order to create patient safety culture and to ensure the quality of nursing care. Therefore, it is highly crucial to recognize missed nursing care clearly.

Keywords: missed nursing care, pediatric, nurse, patient safety

1. Introduction

Nursing care determines the quality of healthcare services. Nursing care, that is required in some situations, may be ignored in daily practice; and some situations that may put patient safety at risk may ocur (1). Inadequate nursing care reveals the concept of missed nursing care (MNC) needs (2). While neglecting or delaying some or all of the care that patients need has been described as "missed nursing care", this arising situation is evaluated as negligence error which affect patient and nurses in a negative way (3,4). The Agency for Healthcare Research and Quality (AHRQ) points out that negligence errors are quantitatively much more, recognized more difficultly and they are bigger and devastating problems in reality compared to the practical errors (5). Although missed care, that is accepted as negligence error, is directly correlational with health outputs such as quality of care and patient safety, it has been indicated that these type of errors remain confidential and overlooked unless investigated (6). However, missed care is an important nursing problem requiring emphasis and solution due to the reasons such as threatening quality of care and patient safety. Besides affecting the health of patients and nurses, this situation indirectly leads to an increase in the number of hospitalization days, and the use of supplemental treatments causes a significant increase in

the cost allocated to care services (4). International literature include many studies regarding the most common missed nursing care and its causes. The results have shown that the most common missed care activities include mobilization of the patients, oral care, missed or delayed drug applications, provision of patient's mobility inside the bed, nutrition and excretion, planning discharge, providing emotional support, hygiene applications and integration of patients' acquaintances into the care (7-12). Emergence of missed care has been associated with individual characteristics of the nurse, institutional structure, working conditions and team communication (9,13-14). The number of nurses, adequacy of the sources and their effective use and the number of patients are the institutional factors affecting provision of care (7, 9,13,15,16). Missed care has negative effects on providers and recipients of the service as well as the institution. Patient falls, drug errors, nasocomial infections, pressure ulcers, accidents, mortality and repeated hospitalizations have been indicated as adverse patient outcomes (8,13,17,18). Besides affecting patient outcomes and quality indicators in a negative way, missed nursing care also arises some unwanted outcomes including nurse experiences such as spending a huge energy to hide the negligence error, intense stress and low self-esteem.

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Although nurses promote themselves with continuous trainings, it has been indicated that they experience conflicting feelings due to neglecting or delaying the needs of their patients and this leads to stress among the nurses and a decrese in their job satisfaction (5,19). It has been observed that there is a limited number of studies in the literature and a quite few studies performed in our country regarding the opinions and attitudes of pediatric nurses for MNC.

This study was carried out to determine the attitudes of nurses working in the pediatric clinics located in the northern region of Turkey towards missed care needs.

Answers were sought for the following questions in accordance with this purpose:

What is the level of nurses' attitudes towards missed care needs?

What are the most common missed care needs of the nurses?

2. Material and Methods
2.1. Type of the study
This was a descriptive study.

2.2. The sample and universe of the study
It was carried out in the pediatric clinics of a university and a research and training hospital providing service in a big city located in the northern region of Turkey between January 1-31, 2022. 228 nurses who were working in these clinics and who met the inclusion criteria (a working experience for at least one year, working as a clinic nurse and working in pediatric clinics outside the emergency, outpatient clinic and daily treatment areas) constituted the universe of the study. No sample was selected; it was tried to attain whole universe and finally, 121 nurses constituted the sample.

2.3. Data collection instruments
A Personal Information Form which was generated by the researchers in line with the literature and Missed Nursing Care Survey-Pediatric Version (MISSCARE) were used to collect data in the study.

Personal Information Form: It was composed of 12 questions regarding sociodemographic and professional characteristics of the nurses.

Missed Nursing Care Survey - Pediatric Version (MISSCARE): This scale was developed by Tubbs-Cooley et al. (2015) in order to measure the attitudes of nurses towards missed nursing care; and validity and reliability of its Turkish version were analyzed by Calikusu Incekar et al. (2020) (20,21). There are a total of 29 items of 5-likert type (5=always, 1=never and unapplicable) in the part A of the scale listing nursing activities. Data in this part are assessed with the sum of percentage values given to the scale statements. Part B consists of 17 items and three subscales including possible reasons of missed nursing care (labor resources, communication and material resources) and these items are

graded as 4-likert type (4=important, 1=not important). Cronbach alpha coefficient of the scale is $\alpha = 0.91$. It was found to be 0.94 in this study.

2.4. Data collection
Data were collected by the researchers through face-to-face interviews in the nurse rooms of pediatric nurses working in the pediatric clinics of a university and public hospital within daily shift hours when they are available on January 2022. The completion of the data collection forms lasted for 10-15 minutes.

2.5. Assessment of data
Data were assessed by SPSS 21.0 statistical package program. Number, percentage, mean, standard deviation and median tests and Cronbach alpha coefficient test were used for descriptive statistics.

2.6. Ethical aspect of the study
The study was conducted after obtaining formal permissions for the study from Social Sciences and Humanities Research and Publication Ethics Committee (No:2021/900, Date: 11.26.2021). The nurses were informed about the purpose of the study, their questions were answered and their consents were taken. The authors of the original scale were asked for permission to use it through e-mail. The study was conducted in accordance with the principles of Helsinki Declaration.

3. Results
40.5% of the nurses were aged between 31- 40 years old; 96.7% were females; 81% were married; 80.2% were undergraduates and 52.1% were working in the public hospital. It was also determined that 47.9% of the participants had a professional experience between 11-20 years, 37.2% were working in the neonatal units, 86% were working during both day and night and 66.9% were working for 40 hours per week. Moreover, it was found that 40.5% of the nurses were providing care to more than 6 patients per nurse and the number of nurses were insufficient in the units where 86.8% of the nurses were working (Table 1).

Since participants provided no responses to "never and inapplicable" and "always" options of the scale, the rates of missed nursing care needs given to the options as "rarely, sometimes and often" were shown in Table 2. According to these, the most common missed care needs were identified as "administration of drug 30 minutes before or after the specified time" at a ratio of 53.8%, "providing oral care" at a ratio of 34.7% and "providing emotional support to the child and/or family" at a ratio of 33.9% (Table 2).

It was found that mean total MISSCARE score of the participants was 2.35±0.68, median value was 2.37, the lowest score was 1 and the highest score was 4. Mean scores of the subscales were found to be 2.75±0.79 in Labor Resources, 2.12±0.74 for Material Resources and

2.05±0.77 in Communication/Teamwork, respectively (Table 3).

Table 1: Descriptive characteristics of the nurses

X̄±Sd (Min-Max) Duration of experience in the institution: 12.88±7.86 (1-30) Duration of experience in the pediatric clinic: 12.29±7.79 (1-30)			
Characteristics		**Number (n)**	**Percentage (%)**
Age X̄±Sd (Min-Max) 37.52±7.73 (23-57)	20-30 years old	32	26.4
	31- 40 years old	49	40.5
	41 years old and more	40	33.1
Sex	Female	117	96.7
	Male	4	3.3
Marital status	Married	98	81.0
	Single	23	19.0
Educational status	Associate degree	13	10.7
	Undergraduate	97	80.2
	Master degree	11	9.1
Working institution	Public Hospital	63	52.1
	University Hospital	58	47.9
Duration of professional experience X̄±Sd (Min-Max) 16.02±8.28 (2-35)	1- 10 years	36	29.8
	11- 20 years	58	47.9
	21 years and more	27	22.3
Current working unit	Neonatal units	45	37.3
	Pediatric services	52	42.9
	Pediatric intensive care units	24	19.8
Working pattern	Only day	17	14.0
	Mixed (day+night)	104	86.0
Average weekly working hours	40 hours per week	81	66.9
	More than 40 hours per week	40	33.1
The number of patients per nurse in the current working unit	3-4 patients	44	36.4
	4-5 patients	28	23.1
	More than 6 patients	49	40.5
The status of the number of nurses working in the current unit	Sufficient	16	13.2
	Insufficient	105	86.8

Table 2: The reports of the nurses for the frequency of missed care during the last shift

	Rarely		Sometimes		Often	
	n	%	n	%	n	%
1. Attending daily bedside visits	26	21.5	8	6.6		
2. Raising and walking a child for three times a day if clinical conditions allow or in line with the nursing care plan	29	24.0	11	9.1		
3. Evaluating the efficacy of drugs administered	25	20.7	3	2.5		
4. Passive mobilization of the child every two hours or on request	26	21.5	14	11.6		
5. Providing oral care	29	24.0	13	10.7		
6. Including parents in the child's care	30	24.8	10	8.3		
7. Patient and family training	21	17.4	7	5.8		
8. The interview with the child and family regarding discharge plan and care at home	14	11.6	4	3.3		
9. Supporting neuro-evolutionary development of the baby based on age and clinical condition (for instance; neonatal care, cognitive and relational development of the child and adolescent)	24	19.8	13	10.7	2	1.7
10. Managing pain with pharmacological or non-pharmacological care approaches based on the protocol	21	17.4	5	4.1	1	0.8
11. Making drug requests within fifteen minutes	15	12.4	18	14.9		
12. Recording all required nursing data completely	10	8.3	8	6.6		
13. Forwarding all relevant information during shift change or handover	11	9.1	6	5.0	1	0.8

Item						
14. Meeting nutritional needs of the children according to their clinical conditions (eg. supporting oral feeding and/or nutrition according to newborn's request, encouraging proper feeding according to personal taste)	11	9.1	4	3.3		
15. Administering the drug 30 minutes before and after the specified time (eg. administration between 7.30 and 8.30 pm while specified time is 8.00 pm)	40	33.1	25	20.7		
16. Helping the child, who needs to go to toilet, within five minutes when he/she requests (eg. going to toilet with the baby or providing suitable instruments if bed-bound)	17	14.0	13	10.7	1	0.8
17. Responding to call light, request for intervention or alarm within five minutes (eg. monitor, infusion pump, ventilator)	9	7.4	5	4.1		
18. Providing emotional support to the child and/or family	29	24.0	12	9.9		
19. Taking biological samples on request	9	7.4	7	5.8	1	0.8
20. Body hygiene and skin care	12	9.9	5	4.1		
21. Checking central and peripheral catheter site according to the protocol	8	6.6	7	5.8		
22. Central and peripheral catheter care according to the protocol	6	5.0	4	3.3		
23. Taking necessary measures for infection control according to the protocol (Personal Protective Equipment, disinfection of the equipment, isolation, correct disposal of waste)	6	5.5	2	1.7		
24. Follow-up of solid and liquid input-output	7	5.8	6	5.0		
25. Evaluating vital findings according to nursing care plan	8	6.6	3	2.5		
26. Making repeated assessments as focused during the shift in order to evaluate improvement or worsening in the condition of child	11	9.1	4	3.3		
27. Washing hands	8	6.6	1	0.8		
28. Evaluating practices made by the accompanying person	20	16.5	12	9.9	1	0.8
29. Checking safety and hygiene of bedside equipment once in every shift or according to the protocol (eg. bed, bedside table, devices)	5	4.1	9	7.4		

Table 3: Descriptive statistics of total MISSCARE and its subscales

Subscales and items	X̄	S.d.	Median	Min	Max.
Communication/ Teamwork- 7 items	2.05	0.77	2.14	1	4
Labor Resources-6 items	2.75	0.79	2.80	1	4
Material Resources-4 items	2.12	0.74	2.25	1	4
MISSCARE Total	2.35	0.68	2.37	1	4

4. Discussion

In the study, nurses working in pediatric and neonatal fields indicated the most common MNC activities as failure to administer drug on time and providing emotional support to the parents. Similarly, failing to administer drug on specified time was reported as the first one among their care activities missed at last shift in a study conducted with pediatric nurses in Turkey (21). In a systematic review including fourteen studies on missed care in pediatric and neonatal units, the most common MNC activities were observed as oral care, preparation for discharge and parent training (22). In their study including pediatric nurses working in the USA, Lake et al. (2017) found that more than half of the nurses did not fulfill at least one nursing care in the previous shift and the most common missed care activities were developing a care plan and providing emotional support to the patient (23). Gathara et al. (2020) determined in their study with neonatal nurses that MNC activities were identified as examination of the newborn, cord care and changing the position and assessing the skin of the baby undergoing phototherapy (24). In the study by Tubbs-Cooley et al. (2019), the most common MNC activities were found as oral hygiene for babies undergoing mechanical ventilation, routine baby care such as bathing and parent training about nutrition and care in the neonatal intensive care units (25). Also in another study performed in the neonatal units, nurses stated MNC activities as preparation of the baby and family for discharge and pain management (26). In addition, Lake et al. (2020) reported that 36% of the nurses working in the neonatal intensive care units in the USA could not fulfill at least one nursing intervention in the previous shift and among these, the most common ones were relaxing/consulting the patient and parent training (27). Again in their study with the nurses working in the neonatal intensive care units, Tubbs-Cooley, Pickler, Younger et al. (2015) indicated that continuing daily care routine, oral care, bathing, including parents in the care and parent training were missed (20). Moreover, in a study conducted with nurse groups working in the adult units, MNC acitivities were identified as ensuring mobilization of the patient and providing emotional support to the patient and acquaintances (2). In another study with the nurses working in the adult units in the UK, most of the participants (86%) reported that they missed one or more care due to the inadequacy of time in their last shifts and the most common MNC activities were relaxing the patients, communicating with them and training them (14). The results of this study were found to be compliant with the relevant data in the literature; and it can be interpreted as nurses give priority to time-sensitive care interventions (drug management, oral

care, etc.). Again in the study, their failure to provide emotional support to the child and parents may show that family-centered care can not be given adequately due to the presence of high number of patients per nurse.

In the study, the most common reason of MNC was workload and the least common one was communication. Similarly in many national and international studies, the reasons of MNC were found to be associated with workload (7,19,27-29). In the study by Lake, Staiger, Cramer, et al. (2020), high workload in NICU, high dependency level of the patient and bad working environment were found to be possible reasons of missed care (27). In a review, nurse-patient ratios, insufficient number of nurses and individual subjective nurse workload were found to be effective as MNC reasons (22). Furthermore, a study performed in the neonatal field determined the most common reasons of MNC as frequent interruptions experienced during the shift, emergency patients and unexpected increases in the number of patients (25). Lake et al. (2017) have reported that MNC are observed among more than half of the pediatric nurses; their working environment affects this fact; the possibility of missed nursing care is 40% lower in better working environments and each additional patient increases the probability of missed nursing care by 70% (23). Tubbs-Cooley, Pickler, Younger et al. (2015) indicated the most common missed nursing care activities in the neonatal intensive care units as interruption of care, emergency patient, unexpected increase in the number of patients and density in the working unit (20). Srulovici and Drach-Zahavy (2017) found that the number of patients and personal characteristics of the nurse affected the frequency of missed care (30). Also in another research carried out in Turkey, the reasons of MNC needs of the nurses were indicated as the inadequacy in the number of staff working in labor resources (2).

The study was based on self-reports of the pediatric and neonatal nurses; and direct observation or health records were not used to identify MNC.

Pediatric nurses reported administration of drug on time, oral care and providing emotional support to the child and parent as their missed care. They stated the reason of these missed care activities as their workload.

MNC is an important problem that needs to be overcome in order to create patient safety culture and to ensure the quality of nursing care. Therefore, it is highly crucial to recognize MNC clearly; and it is important to identify its reasons by using MISSCARE scale, reporting its results quickly and honestly, sharing them with the nurses and using root analysis method. Providing the necessary improvements by decreasing the workload of pediatric nurses and the number of patients per nurse in our country will reduce MNC activities by affecting the quality of both working environment of the nurse and patient care in a positive way.

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