Assessment of Missed Nursing Care In Intensive Care Units At Mansoura University Hospital

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ABSTRACT

Background: In all healthcare settings across the world, missed nursing care is a problem that regularly leads to serious incidents that reduce the level of care. ***Aim:*** The aim of the study was to evaluate nurses' knowledge and practice regarding missed nursing care. ***Subjects and Methods: Design:*** A descriptive design ***Setting:*** study was used in the intensive care units at Mansoura University Hospital. **Subjects:** Study subjects included all nurses employed in the selected units at the time of the study, with a total of 98 nurses. **Tools of Data Collection:** Two tools were used to collect the data of the study; a Missed nursing care Knowledge questionnaire, and an observational checklist for nurses ' skills about missed nursing care. ***Results****:* The study revealed that 54% of the nurses in the study sample had low knowledge and 63% of them of the studied nurses had unsatisfactory skills regarding missed nursing care. ***Conclusion***: The nurses in the study setting have low knowledge and unsatisfactory skills regarding missed nursing care. ***Recommendations****:* Nursing managers need to develop an educational program regarding missed nursing care for all nursing staff.

Keywords*:* Intensive care units, knowledge, missed nursing care, nurses' skills.

INTRODUCTION

Missed nursing care (MNC) is a concern for nurses and nurse managers all around the world. Nursing staff can decrease missed care and ensure continuity of care for patients by evaluating the basics that cause missing care activities (Diab & Ebrahim, 2019). The term "MNC" refers to nursing care that is either delayed, only partially done, or never completed (Foster, 2022). According to the Agency for Healthcare Research and Quality (2019) internationally, patient safety and quality of care are being threatened by missed nursing care. Since missed nursing care is closely related to patient outcomes including mortality and patient safety issues, medical institutions, in particular nurse managers, have been paying great attention to this issue (Min, Yoon, Hong & Kim, 2020).

The key duties of nurses in critical care units include monitoring patient progress, assisting physicians with procedures, performing diagnostic tests, observing a patient's diet and fluid intake, overseeing physical activity levels, administering medications, managing wounds, managing pain and sedation in patients, providing life support and Ensuring all ICU equipment works in addition (Młynarska, Krawuczka, Kolarczyk, & Uchmanowicz, 2020). The term "nursing care" refers to duties performed by nursing staff members, such as administering medications, assisting patients with ambulation and turning, changing their positions, washing them, caring for their mouths, taking their vital signs, documenting their intake and output, offering nutrition counseling, and getting them ready to leave the hospital (Diab & Ebrahim, 2019).

The missed of nursing care had poor and negative outcomes for patients and was associated with many reasons such as physical resources, human relationships, and communication factors. Additionally, the nurse work environment and its effects on missing nursing care have become more important determining variables (Gabr & El-Shaer, 2020). Human resources are the key factors that increase the likelihood of missed nursing care, such as unanticipated increases in patient acuities as admissions, discharges, equipment shortages or sudden illnesses, insufficient resources, and understaffing. Additionally, research discovered that the intricacy of the job may put nurses in a position to make challenging care delivery decisions. (Bragadóttir & Kalisch, 2018). Moreover, Dutra and Guirardello (2021), came to the conclusion that concluded that missing nursing

care events will decrease when healthcare organizations have enough material and human resources to promote staff group cohesion.

The indirect effects of hospital features on patient and nurse outcomes are moderated by missed care, which affects patient outcomes (Zhu, Zheng, Liu, & You, 2019). Patient outcomes include rising mortality, prescription errors, patient falls, bed sores, and nosocomial infections. Nurse outcomes include poor work conditions, staff discontent with their jobs, and burnout (White, Aiken, & McHugh, 2019). Additional issues include a lack of drugs in public health institutions, poor attitudes among staff members even in emergencies, where a deposit of money is required before treatment begins, and inadequate information technology. These issues are all present in the backdrop of other major obstacles. The chance of errors and unfavorable events in the area's healthcare is increased by all of these factors (Ente & Ukpe, 2022).

In recent years, a great deal of focus and work has been put on evaluating missing nursing care in various healthcare contexts. This is not shocking considering that the frequency of missed nursing care is a crucial determinant of the caliber of nursing care and patient safety. Therefore, evaluating and solving this significant issue with healthcare delivery is crucial to raising the standard of care overall and improving patient outcomes in hospitals and other healthcare facilities (Albsoul, FitzGerald, Finucane & Borkoles, 2019).

Significance of the study

Negative events and threats to patient outcome are caused by missed nursing care, which is a widespread problem (Duffy, Culp, & Padrutt, 2018; Smith et al., 2018). According to, (Sheykhsaran et al., 2022) found that the death rates from urinary tract infection, surgical site infection, blood stream infection, and pneumonia were 30.8%, 89.0%, 23.8-50%, and 14.8-71%, respectively.

In intensive care units missed nursing care takes many forms as medication errors, nosocomial infections; patients fall with injury and perceive a decrease in the quality of nursing care. It's crucial to determine how often nursing care is skipped in order to reduce this practice. Give a sense of the problem's size by evaluating its incidence. With an estimated 10% prevalence of adverse events in hospitalized patients, unsafe treatment is one of the top 10 global causes of disability and death, resulting in an annual global total

of about 43 million adverse events during hospitalization (Longhini, 2020). So this study aimed to assess nurses' knowledge and their skills regarding missed nursing care in intensive care units at Mansoura University Hospital.

AIM OF THE STUDY

The purpose of the study was to assess nurses' knowledge and skills regarding missed nursing care in intensive care units at Mansoura University Hospital. Through objectives;

- Assessment of nurses' knowledge regarding missed nursing care in intensive care units at Mansoura University Hospital.
- Assessment of nurses' skills regarding missed nursing care in intensive care units at Mansoura University Hospital.
- Finding out the relation between nurses' knowledge and their demographic characteristics regarding missed nursing care in intensive care units at Mansoura University Hospital.
- Finding out the relation between nurses' skills and their demographic characteristics regarding missed nursing care in intensive care units at Mansoura University Hospital.

Research Question

1. What is the level of nurse's knowledge regarding missed nursing care in intensive care units at Mansoura University Hospital?
2. What is the level of nurses' missed nursing care skills in intensive care units at Mansoura University Hospital?
3. Is there a relation between nurses' knowledge and their demographic characteristics regarding missed nursing care in intensive care units at Mansoura University Hospital?
4. Is there a relation between nurses' skills and their demographic characteristics regarding missed nursing care in intensive care units at Mansoura University Hospital?

SUBJECTS AND METHOD

A. Technical design

This design comprises a description of the subjects, setting, research design, and data collection tools.

Research design

This study was carried out using a descriptive design.

Study setting

The study was conducted in Mansoura University Hospital's intensive care units, which included the anesthesia unit, neurology unit, surgical unit, medical unit, and gynecological unit. **Study sample:**

All nurses, totaling 98, who were employed in the study setting during the study period, provided direct patient care, had at least six months of professional experience, and were willing to engage in the study, were the study's subject. Their nurse staffing was as follows: the anesthesia unit had 29, the neurology unit had 20, the surgical unit had 25, the medical unit had 11, and the gynecological unit had 13

Data collection tools

Two tools were employed to gather the data. The researchers updated the tools, had them translated into Arabic, and then verified their accuracy and usefulness.

Tool 1: Missed nursing care questionnaire: It consists of three parts:

Part 1: Personal and job characteristics:

This part was created by the researchers. It included nurses' personal data and job characteristics such as age, work unit, qualifications, and years of experience in the nursing field.

Part 2: Missed nursing care Knowledge questionnaire:

This part was developed by Zelenikova, Gurkova, and Jarosova (2019); to measure the level of nurses' knowledge about missed nursing care. This tool consists of 92 items under 13 domains included: patient assessment: it consists of 13 items, 8 of which are under two subdomains Vital signs (4 items), and focused reassessments according to patient health condition (4 items), nursing Process: it consists of 9 items, 5 of which are under a subdomain (patient assessment), blood sample taking and diagnostic examination: it consists of 3 items, medication administration: it consists of 10 items, 5 of them are under a subdomain (ensure patients' rights), avoiding bed scores: it consists of 7 items, Avoid falling: it consists of 9 items, 3 of which are under a subdomain (assessment of patient vulnerability to the risk of falls using the Morse fall scale or other scale), feeding patient: it consists of 3 items, hygiene items: it consists of 7 items, 4 of them are under the subdomain (hand washing), respond to patient health needs: it consists of 2 items, health education: it consists of 9 items, 8 of them are under two subdomains, emotional support to patient and/or family (4 items), and patient teaching about his/ her health condition, ensuring discharge planning (4 items), professional ethics in maintaining patient privacy: it consists of 8 items, 3 of which are under a subdomain (physical privacy), and 5 items under subdomain (information privacy), communication: it consists of 4 items, and documentation: it consists of 8 items, 7 of them are under two subdomains follow good documentation characteristics (3 items), and make incident reports in the unit (4 items).

Scoring: Responses were on a 5-point Likert scale ranging from (1) always missed to (5) never missed.

Part 3: Reasons of missed nursing care:

This part was developed by Zelenikova, Gurkova, and Jarosova (2019). It includes reasons for missed nursing care, to measure nurses' opinion about missed nursing care. It consists of 20 items under four domains: communication problems (eight items), material resources items (three items), Labor resources (five items), and training items (four items).

Scoring: Responses will be scored on a 4-point Likert scale ranging from (1) not a reason for unmet nursing care to (4) significant factor.

Scoring System for Knowledge questionnaire: For each knowledge item, the sums of the individual item scores were divided by the total number of items to arrive at the part's mean score. These ratings were transformed into a % rating. A score was regarded as high if the percentage score was 60% or more and low if it was less than 60% (Attia, Abdeen, & El-Sayed, 2014).

Tool II: Observational checklist for nurses about missed nursing care:

The researchers prepared this observational checklist based on related literature (Kiekkas, Tsekoura, Fligou, &Tzenalis 2021; Ahmed, Abdelhamid, Abd Esalam, 2017). This tool was intended to measure nurses' skills in missed nursing care. 94 items on the checklist needed to be checked. "Done" or "Not done". This tool consists of 92 items under 13 domains included: Patient assessment: it consists of 13 items, 8 of which are under two subdomains Vital signs (4 items), and focused reassessments according to patient health condition (4 items), Nursing Process: it consists of 9 items, 5 of which are under a subdomain (patient assessment), Blood sample taking and diagnostic examination: it consists of 3 items, Medication administration: it consists of 10 items, 5 of them are under a subdomain (ensure patient's rights), Avoiding bed scores: it consists of 7 items, Avoid falling: it consists of 9 items, 3 of which are under a subdomain (assessment of patient vulnerability to the risk of falls using the Morse fall scale or other scale), Feeding patient: it consists of 3 items, Hygiene items: it consists of 7 items, 4 of them are under the subdomain (hand washing), Respond to patient health needs: it consists of 2 items, Health education: it consists of 9 items, 8 of them are under two subdomains, emotional support to patient and/or family (4 items), and patient teaching about his/ her health condition, ensuring discharge planning (4 items), Professional ethics in maintaining patient privacy: it consists of 8 items, 3 of which are under a subdomain (physical privacy), and 5 items under subdomain (information privacy), Communication: it consists of 4 items, and Documentation: it consists of 8 items, 7 of them are under two subdomains follow good documentation characteristics (3 items), and make incident reports in the unit (4 items).

Scoring: The tool items were ranged as "not done" and "done" and were scored "0" and "1", respectively. All questions were measured and divided by the number of questions to obtain the mean practice of each nurse. Below 75% was considered

unsatisfactory while those equal to or above 75% were considered satisfactory (Fuzzed, 2016).

B- Operational design

The following phases were used to conduct the study area of work:

Preparation phase

It involves reviewing the pertinent and recent literature related to the research topic, various studies, and theoretical knowledge of various aspects of the problems using all official websites like PUBMED, GOOGLE SCHOLAR, MEDLINE database, CINAHL, EBSCO Cochrane Database, and Scopus. This helps the researchers better understand the subject and develop the tools for data collection.

Tools validity

The tools were examined for clarity, relevance, comprehensiveness, and understanding applicability by a jury of seven experts from the nursing administration and medical-surgical nursing departments from the nursing faculties in Mansoura, Ain Shams, Cairo, and Port Said. The jury's comments and suggestions were taken into account, and the necessary revisions, updates, and clarifications of the items were made in accordance.

Tool reliability

The internal consistency of the study's instruments was evaluated using Cronbach's alpha, and the results are as follows: tool 1 ("Missed nursing care") received a reliability score of 0.825; tool 2 ("Observational Checklist") received a score of 0.766.

Pilot study

A pilot study was carried out on 10% (10 nurses) of the sample selected from the above-mentioned setting to evaluate the tool's clarity, viability, and feasibility as well as to determine the appropriate interview duration needed. Appropriate modifications were made according to the results of the pilot study and they were excluded from the original sample.

Fieldwork

The researchers met with nurses working in the intensive care units at Mansoura University Hospital to gather data after gaining official consent from the hospital director and the directors of the intensive care units. Then, the study's goals and procedures were explained to the nurses and their agreement to participate in the study was acquired. The researchers met (8-10) nurses per day in the afternoon shift three days per week; Filling out the questionnaires took between 10 and 15 minutes. The questionnaires were filled out in front of the researchers to help with any ambiguities. After the questionnaires were finished, the researchers verified that all the information was provided, and all the data were collected over one month period from 1 January to 30 January 2023.

Following that, the procedure of nurse observation began. The nurses' observational checklist for missed nursing care was watched by the researchers, and each nurse's compliance with nursing care standards was evaluated. Three times a week for a month, the nurses were evaluated during the morning and afternoon shifts, the researchers noticed staff nurses' actual skills in action. The observation period ran from 8:00 AM to 6:00 PM, the researchers observed 7-8 staff nurses in their actual work settings each day. The information was gathered over one month period, From 1 February to 28 February 2023.

C- Administrative design

The director of the study setting Mansoura University Hospital was issued an official letter from the dean of the nursing faculty at Port Said University requesting their clearance for data collection at the study setting. The letter included the title and objectives of the study.

Ethical considerations

Prior to the study, the dean of the nursing faculty at Port Said University handed an official letter to the head of Mansoura University Hospital. The research consent was obtained from the scientific research ethics committee of the faculty of nursing, at Port Said University with code number NUR (6/8/2023) (28). After outlining the study's goals and gaining each nurse's consent to participate, the critical care unit directors of the

hospital officially approved the study's execution. Anonymous and the freedom to withdraw at any moment without being forced was guaranteed.

D. Statistical design

The collected data will be sorted, tabulated, and evaluated based on the kind of data. Data entry and statistical analysis were done using the statistical program SPSS 20.0. Means, standard deviations, and medians were utilized to present the data using descriptive statistics for qualitative and quantitative variables, respectively. Percentage and number were used to summarize the demographic data. Study variables were described using numbers and percentages. Results from the research variables were compared using the T-test and the Chi-square test. The Cronbach alpha coefficient was used to assess the created scale's internal consistency and reliability. Data were investigated throughout the assessment period. During the assessment period, data were examined. At a p-value of 0.05, statistical significance was taken into account.

RESULTS

Table (1): The present study included all nurses working in intensive care units at Mansoura university hospital; their age ranged between 23 – 36 years old with a mean (26.4 ± 2.8). The highest percentage (62.2 %) of them were female while (37.8%) were male nurses. More than half (54.1%) of them were married and had technical nursing institute respectively. The majority of nurses (89.8%) had 1-5 years of nursing experience, only (10.2%) had 6-10 years of nursing experience with mean (3.4 ± 2.0). Meanwhile, (29.6%) of nurses worked in the anesthesia unit while 13.3% worked in the gynecology unit.

Table (2) demonstrates that the nurses had low knowledge regarding missed nursing items including health education, response to patient health needs, and patient assessment. While they had higher knowledge regarding blood sample taken, hygiene items, communication, and avoiding bed sores.

Table (3) demonstrates that more than four-fifths of the studied nurses in the ICU had higher knowledge regarding reasons for the missed nursing care included: training, communication defects, labor resources, and material resources constituted 93.9%, 87.8%, 84.7%, 86.7%. respectively.

Figure (1) shows that roughly more than half (54%) of the nurses who participated in the study had low knowledge about missed nursing care.

Table (4) clarifies that there was a statistically significant relation between missed nursing care knowledge of the studied nurses and their demographic characteristics regarding age, marital status, educational level, and job title (p= 0.023, p=0.000, p=0.050, p=0.026) respectively.

Table (5) demonstrates that the nurses' skill domains regarding missed nursing care showed that the studied nurses had low scores regarding; response to patient health needs, patient assessment items, health education, and nursing process. While they have high scores regarding; avoiding bed scores, blood samples taken and diagnostic examinations, hygiene items, and communication.

Figure (2) displays that, more than two-thirds (63%) of the studied nurses had unsatisfactory total skills of missed nursing care.

Table (6) presents that; there was no statistically significant relation between studied nurses' skills and their demographic characteristics (p=>0.05).

Table (1): Personal characteristics of the study sample (N=98 nurses).

Items	Frequency	Percent
Age group (Years)		
• 23≤26	51	52
• 26-36	47	48
Mean age ± SD	26.428 ± 2.832	
Min-Max.	23-36	
Gender		
• Male	37	37.8
• Female	61	62.2
Marital status		
• Married	53	54.1
• Single	39	39.8
• Widow	6	6.1
Educational level		
• Diploma	2	2
• Technical nursing institute	53	54.1
• Bachelor	43	43.9
Unit experience (Years)		
1. 1≤6	88	89.8
2. 6-10	10	10.2
Mean unit experience ± SD	2.673 ± 2.232	
Min-Max.	1-10	
Unit	29	29.6
• Anesthesia	20	20.4
• Neurology	25	25.5
• Surgery	11	11.2
• Medical	13	13.3
• Gynecology		
Note: All nurses reported they had not received missed nursing knowledge and training before.		

Table (2): Distribution of nurses' knowledge domains regarding missed nursing care (n=98).

Domains	Low		High	
	No	%	No	%
Patient assessment items	52	53.1	46	46.9
Nursing Process	48	49	50	51
Blood sample taking and diagnostic examinations	23	23.5	75	76.5
Medication administration	41	41.8	57	58.2
Avoiding bed sores	30	30.6	68	69.4
Avoid falling	46	46.9	52	53.1
Feeding patient	43	43.9	55	56.1
Hygiene items	27	27.6	71	72.4
Respond to patient health needs	55	56.1	43	43.9
Health education	57	58.2	41	41.8
Professional ethics in maintaining patient privacy.	44	44.9	54	55.1
Communication	29	29.6	69	70.4
Documentation	43	43.9	55	56.1

Table (3): Distribution of nurses' knowledge regarding reasons for missed nursing (n=98).

Domains	Low		High	
	No	%	No	%
Communication defects	12	12.2	86	87.8
Material Resources	15	15.3	83	84.7
Labor resources	13	13.3	85	86.7
Training	6	6.1	92	93.9

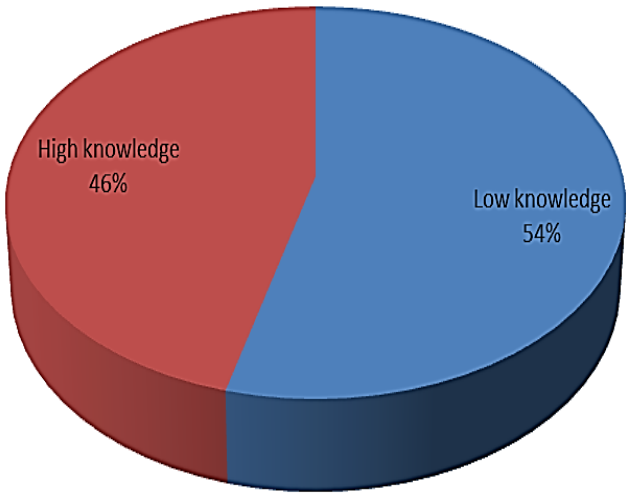

Figure (1): Total nurses' knowledge about missed nursing care level

Table (4): Significant differences between missed nursing care knowledge & demographic characteristics (98).

Demographic characteristics	Knowledge level			
	Low N=53		High N=45	
	No	%	No	%
Age group (Years)				
• 23 ≤ 26	33	33.7	18	18.4
• 26 – 36	20	20.4	27	27.6
Significance	X^2 = 4.833, *p*=0.023*			
Gender				
• Male	16	16.3	21	21.4
• Female	37	37.8	24	24.5
Significance	X^2 =2.812 , *p*=0.071			
Marital status				
• Married	38	38.8	15	15.3
• Single	15	15.3	24	24.5
• Widow	0	0	6	6.1
Significance	X^2 =17.522 , *p*=0.000**			
Educational level				
• Diploma	2	2	0	0
• Technical nursing institute	33	33.7	20	20.4
• Bachelor	18	18.4	25	25.5
Significance	X^2 =5.713 , *p*=0.050*			
Unit experience (Years)				
• 1≤ 6	46	46.9	42	42.9
• 6-10	7	7.1	3	3.1
Significance	X^2 = 1.136, *p*=0.234			
Unit				
• Anesthesia	15	15.3	14	14.3
• Neurology	14	14.3	6	6.1
• Surgery	12	12.2	13	13.3
• Medical	8	8.2	3	3.1
• Gynecology	4	4.1	9	9.2
Significance	X^2 = 6.863, *p*=0.143			

Table (5): Distribution of nurses' skill domains regarding missed nursing care (n=98).

Domains	Unsatisfactory		Satisfactory	
	No	%	No	%
Patient assessment items	54	55.1	44	44.9
Nursing Process	51	52	47	48
Blood sample taking and diagnostic examinations	26	26.5	72	73.5
Medication administration	44	44.9	54	55.1
Avoiding bed scores	25	25.5	73	74.5
Avoid falling	42	42.9	56	57.1
Feeding patient	41	41.8	57	58.2
Hygiene items	30	30.6	68	69.4
Respond to patient health needs	58	59.2	40	40.8
Health education	53	54.1	45	45.9
Professional ethics	47	48	51	52
Communication	33	33.7	65	66.3
Documentation	48	49	50	51

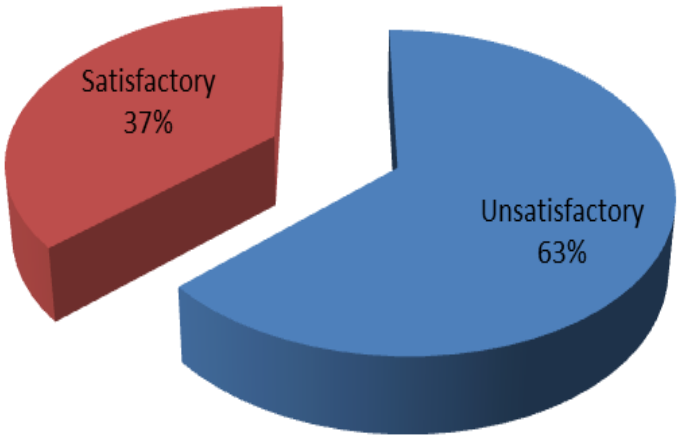

Figure (2): Total nurses' skills regarding missed nursing care in the study sample (n=98)

Table (6): Significant differences between nurses' skills & demographic characteristics (98).

Demographic characteristics	Skills level			
	Unsatisfactory N=62		Satisfactory N=36	
	No	%	No	%
Age group (Years)				
• 23 ≤ 26	34	34.7	17	17.3
• 26 – 36	28	28.6	19	19.4
Significance	X^2 =0.529 , *p*=0.302			
Gender				
• Male	25	25.5	12	12.2
• Female	37	37.8	24	24.5
Significance	X^2 = 0.473, *p*=0.320			
Marital status				
• Married	31	31.6	22	22.4
• Single	27	27.6	12	12.2
• Widow	4	4.1	2	2
Significance	X^2 =1.147 , *p*=0.564			
Educational level				
• Diplome	2	2	0	0
• Technical nursing institute	31	31.6	22	22.4
• Bachelor	29	29.6	14	14.3
Significance	X^2 =2.004 , *p*=0.367			
Unit experience (Years)				
3. 1≤ 6	55	56.1	33	33.7
4. 6-10	7	7.1	3	3.1
Significance	X^2 =0.217 , *p*=0.463			
Unit				
• Anesthesia	21	21.4	8	8.2
• Neurology	10	10.2	10	10.2
• Surgery	16	16.3	9	9.2
• Medical	6	6.1	5	5.1
• Gynecology	9	9.2	4	4.1
Significance	X^2 = 3.123, *p*=0.537			

DISCUSSION

Missed nursing care has disastrous impacts on patients, nurses, organizations, and even the country, therefore identifying the causes will be crucial in eliminating it and its consequences (Andersson, Eklund, Nilsson & Bååth, 2022). Nurses may be able to limit missed care and maintain continuity of patient care by evaluating the fundamental causes of missing care activities (Diab & Ebrahim, 2019). So that, the present study aimed to assess missed nursing care among nurses in intensive care units at Mansoura University Hospital.

With respect to nurses' knowledge regarding missed nursing care domains, the nurses had low knowledge regarding missed nursing including patient assessment items;

response to patient health needs, health education, and patient assessment. This finding was in accordance with Labrague, de Los Santos, and Fronda, (2022), who conducted a study about "Factors associated with the missed nursing care and nurse assessed quality of care.", from the central region of the Philippines and reported that the majority of the studied nurses had low level of knowledge regarding domains of missed nursing care. This may be due to the fact that the studied nurses had not received prior training on missed nursing care, domains and related factors.

Furthermore, the current study findings clarified that more than four- fifths of the studied nurses in the ICU had higher knowledge regarding reasons for the missed nursing care including: communication defects, material resources, labor resources, and training. This finding did not corresponded with Diab and Ebrahim (2019), who conducted a study about "Factors Leading to Missed Nursing Care among Nurses at Selected Hospitals" and found that the most prevalent factors of missed care were "labor resources, followed by material resources, and then communication factors. This present study' finding might be due to the higher proportion of the studied nurses had work experiences for more than six years in the intensive care units which helped them to present correct knowledge about the reasons for missed nursing care.

The current results illustrated that more than half of the studied nurses had low knowledge regarding missed nursing care. The explanation of this result may be because of the studied nurse didn't have any previous training related to missed nursing care. The current findings supported by Gabr and El-Shaer (2020) who studied factors affecting missed nursing care and its relation to nurses' workflow in general medical and surgical units at Mansoura University, and revealed that the highest percentage of the studied nurses had a low perception about missed nursing care dimensions especially three dimensions namely; plan for discharge and patient health teaching, interventions of basic care, and continuing assessments with care interventions.

The present study results clarified that there was a statistically significance relation between missed nursing care knowledge and their demographic characteristics regarding age, marital status, educational level, and job title. This result in line with Diab and Ebrahim (2019) who studied factors leading to missed nursing care among nurses at selected hospitals among 240 nurses in the Intensive care Units at Menoufia University Hospital, Shebin El Kom Teaching Hospital, and Benha University Hospital, and

reported that there was significant relation between missed nursing care levels and their demographic characteristics related to age, gender, marital status, qualification, and years of experience.

Relating to nurses' skill domains regarding missed nursing care, that the studied nurses had a low score regarding; response to patient health needs, patient assessment items, health education, and nursing process. This finding was consistent with Hammad, Guirguis and Mosallam, (2021)**,** who conducted a study about "Missed nursing care, non-nursing tasks, staffing adequacy, and job satisfaction among nurses in a teaching hospital in Egypt" who portrayed that the majority of nurses had low skills scores regarding missed nursing care items including patient assessment and vital signs. The researchers illustrated that this finding might be due to nurses not remembering the ideal clinical performance for assessing patients, doing steps of the respond to patient health needs, patient assessment items, health education, and nursing process. Furthermore, the lack of clinical training and supervision might be affected negatively on their skills.

The present results revealed that more than two-thirds of the studied nurses had unsatisfactory skills regarding missed nursing care. This could be related to increased workload and nurse staff shortage in the studied intensive care units which had a negative impact on nurse team performance. In the same context, Andersson et al. (2022) found that rates of missed nursing care were significantly higher and attributed the reason for this to the increased workload and bad work environment. Also, Taskiran and Baykal (2022) reported that the mean scores of the studied nurses indicated high and frequently missed care.

Whereas, the current results presented that, there was no statistically significance relation between studied nurses' skills and their demographic characteristics. This finding disagreed with Zárate-Grajales et al. (2022) who studied Sociodemographic and work environment correlates of missed nursing care at highly specialized hospitals in Mexico, and revealed that missed nursing care practices were associated with sociodemographic and labor-related factors of nursing professionals.

Limitation of the study

The study was conducted in a teaching hospital which limits the generalization of the results to other setting such as private and Ministry of Health and Insurance settings.

Also, the heavy workload of nurses leads to delay nurses' responses to fulfill the questionnaire which requires more waiting time from the researcher.

CONCLUSION

Based on the study findings, it can be concluded that: more than half of the studied nurses in the intensive care units of Mansoura University Hospital had low knowledge regarding the missed nursing care, and more than two-thirds of the team had unsatisfactory skills.

RECOMMENDATIONS

- To advance nurses' knowledge and abilities about nursing care, staff development initiatives, and continuing nursing education are desperately needed.
- It is advised that nursing practice be continuously supervised, with helpful criticism, as well as sanctions for defaulters and prizes for successful performance.
- The hospital administrators should address the reasons why nursing care is neglected, as recognized by the nurses, and offer all necessary r solutions to resolve this issue.
- The hospital nursing trainer should place more emphasis on concerns involving missing nursing care, paying particular attention to how dangerous it is for both patients and nurses.
- It is suggested that more research be conducted to determine the effect of on-the-job training and the implementation of safe nursing care on nurses' practices.

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تأثير برنامج تعليمي بخصوص الرعاية التمريضية المفقودة على ثقافة سلامة المرضى بين الممرضين

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الخلاصة

الرعاية التمريضية المفقودة هي مشكلة موجودة في العديد من مراكز الرعاية الصحية في جميع أنحاء العالم. غالبًا ما تؤدي الرعاية التمريضية المفقودة إلى أحداث سلبية تؤثر على جودة الرعاية التمريضية. تهدف هذه الدراسة إلى تقييم معرفة الممرضين ومهارتهم فيما يتعلق بالرعاية التمريضية المفقودة في وحدات العناية المركزة في مستشفى المنصورة الجامعي باستخدام تصميم وصفي في إجراء الدراسة. وتألفت العينة من جميع الممرضين العاملات في الوحدات العناية المركزة في وقت الدراسة مع عدد إجمالي ٩٨ ممرض و ممرضة. تم استخدام أداتان لجمع البيانات الأداة الأولى: استبيان معلومات الممرضين تجاه الرعاية التمريض المفقودة ، الأداة الثانية قائمة مرجعية لملاحظة مهارات الممرضين حول الرعاية التمريض المفقودة. كشفت الدراسة أن أكثر من نصف (٥٤ ٪) من الممرضين في عينة الدراسة كان لديهم معرفة منخفضة فيما يتعلق بالرعاية التمريضية المفقودة ، أكثر من الثلثين (٦٣ ٪) لديهم مهارات غير مرضية حول الرعاية التمريضية المفقودة ، وقد استنتجت الدراسة أن الممرضين لديهم معلومات و مهارات منخفضة حول الرعاية التمريضية المفقودة. لذا يوصى بتطوير برنامج تعليمي بشأن الرعاية التمريض المفقودة لجميع الممرضين في المستشفى.

الكلمات المرشدة : الرعاية التمريضية المفقودة، المعلومات ،المهارات.