

Relationship between Ethical Climate and Missed Nursing Care at Teaching Hospitals in Cairo

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Abstract

Background: The impact of the ethical climate on missed nursing care is crucial for healthcare organizations to identify factors that hinder the provision of optimal nursing care. **Aim:** The study aims to investigate the relationship between ethical climate and missed nursing care at teaching hospitals in Cairo. **Method:** A descriptive correlational design was used. **Sample:** Random sampling technique was used to collect data from 128 staff nurses. **Instruments:** Demographic questionnaire, Hospital Ethical Climate Survey, and MISSCARE Survey to assess missed nursing care. **Results:** The hospital's ethical climate was generally positive, missed nursing care was rated moderate ($M=63.54$, $SD=25.48$). with the highest mean scores observed in the relationships with other disciplines ($M=28.63$, $SD=8.24$). Missed nursing care was significantly positively correlated to the hospital's ethical climate. **Conclusion:** This study emphasizes the significance of ethical climate assessment in healthcare organizations to tackle missed nursing care. **Recommendations:** Develop and implement ethics training programs for all nurses to increase their awareness and knowledge of ethical issues and principles in healthcare settings. Establish a system for reporting and addressing missed nursing care incidents to identify patterns and implement solutions to prevent them from occurring in the future.

Keywords: Hospital Ethical Climate, Missed Nursing Care, and Health Care Setting

Introduction

Nurses are the most health care team who are working 24 hours 7 days a week providing patient care. To provide high-quality and safe patient care, nurses' perception of the healthcare environment and work context is vital. Work environments include ethical issues that constitute the hospital's ethical climate with patients, nurses, physicians, nurse managers, and administrators (Khoshakhlagh, Khatooni, Akbarzadeh, Yazdanirad, & Sheidaei, 2019; National Academies of Sciences & Medicine, 2016). Hospital ethical climate refers to the shared values, beliefs, and behaviors that guide ethical decision-making and behaviors within the

hospital environment (Ozdoba, Dziurka, Pilewska-Kozak, & Dobrowolska, 2022). Hospital ethical climate reflects nurses' perceptions of the healthcare organization and how this organization deals with ethical issues that affect their attitudes and behaviors (Cerit & Özveren, 2019). In healthcare organizations, nursing leaders challenge the requirements of providing high-quality care to ensure patient safety (Farokhzadian, Dehghan Nayeri, & Borhani, 2018). Investigating the hospital's ethical climate is crucial to improve the quality of patient care.

Missed nursing care is defined as a phenomenon where nurses fail to provide necessary patient care activities. It is a significant problem that can have adverse

effects on patient outcomes and nursing job satisfaction (**Gustafsson, Leino-Kilpi, Prga, Suhonen, & Stolt, 2020**). Nursing care is a critical aspect of healthcare delivery, and its quality can significantly impact patient outcomes. However, several factors may hinder the provision of optimal nursing care, including an inadequate ethical climate in healthcare organizations (**Hassan, 2020**). Previous study suggested that an unfavorable ethical climate may lead to increased incidents of missed nursing care (**Albejaidi, 2021**). In a hospital setting in Egypt, the relationship between ethical climate and missed nursing care remains an area of interest for researchers and healthcare nurses. Nurses often face challenges in providing quality care due to various factors such as high patient acuity levels, limited resources, and increased workload (**Cranage & Foster, 2022**). A poor ethical climate in healthcare organizations may be a factor in the rise in cases of missed nursing care.

The hospital's ethical climate is an important factor that can influence missed nursing care in healthcare settings. studies have shown that a positive ethical climate is associated with lower levels of missed nursing care (**Hefny, 2021**). Nurses also have a responsibility to promote ethical behavior by reporting unethical behavior and advocating for patient care (**Aloustani et al., 2020**). Healthcare organizations should prioritize creating and maintaining a positive ethical climate to promote ethical behavior and reduce missed nursing care, ultimately leading to better patient outcomes.

Ethical climate perceptions of nurses were assessed by **Constantina, Papastavrou, and Charalambous (2019)** who evaluated the ethical climate perceptions of 235 nurses in cancer care settings in Greece and Cyprus, they found that nurses in Greece exhibited a more positive perception of the ethical climate

compared to those in Cyprus. Other studies done by **Vryonides et al. (2018)**, discovered that a positive ethical climate correlated with reduced missed nursing care. Likewise, a study in a South Korean university hospital revealed associations between missed nursing care, nursing work environment, and patient safety culture (**Kim, Yoo, & Seo, 2018**). Implying the necessity of exploring the relationship between ethical climate and missed nursing care in diverse settings and identifying additional factors that impact both phenomena.

Theoretical Framework

Social learning theory explains the relationship between hospital ethical climate and missed nursing care and suggests that individuals learn from observing others' behavior and the consequences of that behavior. In the hospital environment, nurses learn ethical behavior from their colleagues, leaders, and organizational culture. A positive ethical climate can promote ethical behavior by providing clear ethical guidelines, promoting ethical decision-making, and enforcing ethical behavior. Alternatively, an unfavorable moral environment can lead to unethical behavior when ethical guidelines are ambiguous, there are minimal consequences for unethical acts, and a lenient attitude or even support for unethical conduct prevails, (**Bandura & Wessels, 1994; McLeod, 2011**). This study aimed to investigate the relationship between ethical climate and missed nursing care at teaching hospitals in Cairo.

Significance

Nurses play a crucial role in delivering care to patients, and understanding the relationship between ethical climate and missed nursing care can guide the interventions that support nurses in providing the best possible care. According

to **Park, Hanchett, and Ma (2018)**, the majority of nurses (84.1%) reported skipping at least one of the 15 essential care tasks during their shifts. In addition, the ethical climate in hospitals scored on average at 88.97, which is a favorable level (**Bayat, Shahriari, & Keshvari, 2019**). This study highlights the importance of a hospital's ethical climate in promoting ethical behavior and reducing missed nursing care in healthcare settings. The study also sheds light on the importance of cultivating a positive ethical climate which can contribute to adhering to nursing care standards and creating a favorable work environment. The study's results will aid healthcare policymakers in formulating strategies to enrich the hospital's ethical climate, emphasizing patient safety and outcomes. These findings may guide the development of interventions and programs that enhance nursing practice, and ethical decision-making, and ultimately improve patient outcomes.

Methods

Study Aim

The current study aimed to investigate the relationship between ethical climate and missed nursing care at teaching hospitals in Cairo.

Research Questions

1. What are the levels of ethical climate and missed nursing care as perceived by nurses at teaching hospitals in Cairo?
2. Is there a relationship between ethical climate and missed nursing care at teaching hospitals in Cairo?
3. Is there a relationship between ethical climate and nurses' demographics?

4. Is there a relationship between missed nursing care and nurses' demographics?

Study Design

A descriptive correlational research design was utilized for conducting the current study. A descriptive correlational study describes the variables and the relationships that occur naturally between and among them. This type of research can be used to describe characteristics that exist in a specific health setting and test relationships.

Sampling

A random sampling technique was used to collect data from staff nurses. A G*power analysis (**Faul, Erdfelder, Buchner, & Lang, 2009**) was conducted to determine the appropriate sample size for the study. With the consideration of a medium effect size for the correlation analysis, a significance level (α error) of 0.05, and a desired power ($1-\beta$ error) of 95%, the estimated sample size was determined to be 12 nurses.

Study Setting

The present study was conducted in teaching hospitals in Cairo governorate which is a multispecialty that provides free services to their patients. Data were collected from medical-surgical wards and intensive care units to provide a diverse range of patients with varying medical conditions and acuity levels. This diversity enhances the generalizability of research findings and allows for a more comprehensive understanding of healthcare practices and outcomes.

Instruments

To achieve the aim of the current study the following tools were used:

1. **The demographic sheet** aimed to collect data about staff nurses' age, gender, years of experience in the nursing career, years of experience in the hospital, years of experience in the department, qualifications, marital status, and ethical course attendance.
2. **The MISSCARE Survey** is used to assess the frequency of missed nursing care activities in the past 24 hours (**Kalisch & Williams, 2009**). The survey consists of 25 items including emotional support, hygiene, basic activities of daily living, patient monitoring, medication administration, and communication on a 5-point Likert scale (1=never missed, 2=rarely missed, 3=occasionally missed, 4=frequently missed, and 5=always missed). The scores ranged from 25 to 125; higher scores indicate more missed care.
3. **Hospital Ethical Climate Survey (HECS) (Claeys et al., 2013)** used to assess nurses' perceptions of the ethical climate of healthcare organizations which consists of 27 items that measure five dimensions of ethical climate: relationships with other disciplines (9 items), managers (6 items), peers (4 items), patients (5 items), and the hospital (3 items). Each item is scored on a 5-point scale of the Likert type from 1 (almost never true) to 5 (almost always true). The total score for the HECS ranges from 27 to 135, with higher scores indicating a more positive ethical climate.

Validity and Reliability

The HECS survey was developed and tested by a jury committee (three experts from the nursing administration department) for content validity, clarity, relevance, applicability, and understanding. Cronbach's

alpha coefficient for reliability was calculated to assess the reliability through its internal consistency. Cronbach's α was 0.86 for the HECS total and ranged from 0.71 to 0.85 for the five dimensions (**Claeys et al., 2013**). In the current study, reliability was assessed through internal consistency analysis. The HECS (relationships with other disciplines, relationships with managers, relationships with peers, relationships with patients, and relationships with the hospital) exhibited high internal consistency, with Cronbach's alpha coefficients 0.92, 0.95, 0.93, 0.89, and 0.92 respectively and the total Cronbach's alpha coefficient was 0.96.

The MISSCARE Survey was reported to be valid and reliable in previous studies and the internal consistency coefficient of the survey was 0.92 (**Kalisch & Williams, 2009**). In the current study, reliability was assessed through internal consistency analysis. The missed nursing care tool Cronbach's alpha coefficient was 0.97 which demonstrated good internal consistency in the healthcare setting.

Ethical Considerations

To achieve the aim of the current study ethical approval was obtained from the hospital general managers and nursing directors after explaining the purpose and nature of the current study. They have been allowed to accept or refuse participation in the study. Involuntary withdrawal from the study at any time was accepted. They were assured that their information will be under confidentially and used for the present study purpose only.

Field Work

Prior to data collection, the purpose and the nature of the current study were explained to the general director of the selected hospitals to get permission to

collect data from their staff. The aim and significance of the study had been explained to the staff nurses that were included in the study sample to get their acceptance to contribute to the study and oral consent was obtained.

Data were collected using a self-administered survey. During data collection, the researchers distributed the questionnaire sheets individually and clarified the questionnaire to the nurses in their wards/units. The time spent filling out the questionnaire ranged between 15 to 25 minutes. The researchers collected the completed questionnaires on the same day. Due to the heavy workload and time constraints faced by some staff nurses in ICUs, the researchers rescheduled the data collection for another time. All sheets were collected and checked; incomplete sheets were discarded.

Data Analysis

Data sheets were coded, analyzed, and tabulated using the appropriate statistical tests for the statistical package of social science (SPSS version 22). Descriptive statistics were used to describe the characteristics of the nurses and the distribution of the variables. Inferential statistics, such as t-test, ANOVA, and correlation were used to examine the relationship between nurses' characteristics, hospital ethical climate, and missed nursing care with a statistical significance considered at $P\text{-value} \leq 0.05$.

Results

As shown in **Table 1** 76.6% of nurses were female and 60.9% were working in the Medical Surgical department, 54.7% were married, 57.5% held an associate degree. 80.3% of nurses worked rotating shifts and 57.0% attended ethics course attendance. Nurses' ages range from 21 to 49 years, with

a mean of 29.38 years with an average of 8.55 years of experience in the nursing profession, 7.19 years of experience in the hospital, and 5.66 years of experience in the department.

Table 2 revealed that the reported level of missed nursing care among nurses had a mean value of 63.54, indicating a moderate level of missed nursing care. The highest mean score for the hospital ethical climate was 28.63, which was observed in the relationships with other disciplines. This was followed by the relationships with managers ($M=23.02$). On the other hand, the lowest mean score was found in the relationships with the hospital ($M=10.45$). The total mean score for the hospital's ethical climate was 100.23.

Table 3 showed that age, years of experience in the nursing profession, and years of experience in the department had significant positive correlations with missed nursing care and the hospital's ethical climate. Furthermore, there were significant positive correlations between years of experience in the hospital and three dimensions of the hospital's ethical climate, namely relationships with managers, peers, and patients. Missed nursing care was significantly and positively correlated with the dimensions and total of the hospital's ethical climate.

Table 4 indicate several significant differences among different groups of nurses. Firstly, female nurses reported significantly lower mean scores for missed nursing care compared to males. However, no significant differences were found between female and male nurses regarding the dimensions of the hospital's ethical climate, as shown in **Figure 1**. Secondly, Married nurses scored significantly higher mean values ($M=11.13$) than single nurses ($M=9.62$) in the hospital's ethical climate dimension regarding their

relationships with the hospital ($t=-2.33$, $p=0.02$).

Thirdly, nurses on rotating shifts reported significantly lower mean scores for missed nursing care compared to those on fixed shifts, whereas nurses on fixed shifts significantly had higher mean scores for the relationships with the hospital.

Furthermore, nurses who attended an ethics course had significantly lower mean scores for missed nursing care, while those

who did not attend had higher mean scores for relationships with the hospital.

Regarding the education level, nurses with associate degrees had significantly higher mean scores than those with other education levels in relationships with other disciplines and hospital ethical climate total. Lastly, nurses in the Medical-surgical department reported lower mean scores for missed nursing care compared to those in intensive care units. However, nurses in ICU reported higher mean scores regarding the hospital's ethical climate (**Figure 2**).

Table 1: Descriptive Statistics of Nurses' Demographics (N=128)

	<i>Variable</i>	<i>N</i>	<i>%</i>		
Gender	Female	98	76.6		
	Male	30	23.4		
Department	Medical Surgical	78	60.9		
	ICU	50	39.1		
Marital Status	Single	58	45.3		
	Married	70	54.7		
Education Level	Diploma Nursing	18	14.2		
	Associate degree	73	57.5		
	BSN	36	28.3		
Shift	Fixed Shift	25	19.16		
	Rotating Shifts	102	80.3		
Ethics Course Attendance	No	55	43.0		
	Yes	73	57.0		
	<i>Variable</i>	<i>Mini.</i>	<i>Max.</i>	<i>Mean</i>	<i>SD</i>
Age		21.00	49.00	29.38	6.14
Years of Experience in the Nursing Profession		0.70	30.00	8.55	6.64
Years of Experience in the Hospital		0.40	27.00	7.19	5.92
Years of Experience in the Department		0.10	25.00	5.66	4.63

Table 2: Descriptive Statistics for Missed Nursing Care, and Hospital Ethical Climate Levels

<i>Variable</i>	<i>Mini.</i>	<i>Max.</i>	<i>Mean</i>	<i>SD</i>
Missed Nursing Care	27.00	114.00	63.54	25.48
Hospital Ethical Climate				
Relationships with other disciplines	11.00	40.00	28.63	8.24
Relationships with Managers	6.00	30.00	23.02	6.61
Relationships with Peers	4.00	20.00	15.51	4.34
Relationships with Patients	5.00	25.00	19.26	5.00
Relationships with Hospital	3.00	15.00	10.45	3.69
Hospital Ethical Climate Total	44.00	135.00	100.23	24.16

Table 3: Correlation Matrix Among Nurses' Age, Years of Experience, Missed Nursing Care, and Hospital Ethical Climate

<i>Variable</i>	1	2	3	4	5	6	7	8	9	10
1. Age	-									
2. Years of Experience in the Nursing Profession	.96**	-								
3. Years of Experience in the Hospital	.85**	.90**	-							
4. Years of Experience in the Department	.76**	.79**	.84**	-						
5. Missed Nursing Care	.22*	.21*	.06	.22*	-					
Hospital Ethical Climate										
6. Relationships with other disciplines	.27**	.28**	.16	.24**	.30**	-				
7. Relationships with Managers	.31**	.30**	.23*	.23**	.22*	.68**	-			
8. Relationships with Peers	.29**	.27**	.23**	.23*	.18*	.60**	.72**	-		
9. Relationships with Patients	.25**	.25**	.22*	.29**	.31**	.64**	.71**	.74**	-	
10. Relationships with Hospital	.29**	.29**	.17	.28**	.50**	.54**	.47**	.57**	.55**	-
11. Hospital Ethical Climate Total	.33**	.33**	.23*	.29**	.36**	0.1	.33**	.41**	.87**	.87**

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Table 4: Nurses' Demographics, Missed Nursing Care, and Hospital Ethical Climate

<i>Gender</i>	<i>Female</i>		<i>Male</i>		<i>t-Test</i>	<i>P-Value</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Missed Nursing Care	60.78	25.11	72.53	25.00	-2.25	.03*
Hospital Ethical Climate						
Relationships with other disciplines	28.88	8.34	27.83	8.01	.61	.55
Relationships with Managers	23.37	6.76	21.87	6.08	1.09	.28
Relationships with Peers	15.48	4.36	15.60	4.34	-.13	.90
Relationships with Patients	19.15	5.15	19.60	4.54	-.43	.67
Relationships with Hospital	10.11	3.88	11.53	2.76	-1.87	.06
Hospital Ethical Climate Total	100.4	24.64	99.6	22.881	-1.85	.07
<i>Marital Status</i>	<i>Single</i>		<i>Married</i>		<i>t-Test</i>	<i>P-Value</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Missed Nursing Care	59.88	24.05	66.27	26.47	-1.41	0.16
Hospital Ethical Climate						
Relationships with other disciplines	27.17	8.11	29.88	8.26	-1.86	0.07
Relationships with Managers	22.03	6.83	23.84	6.41	-1.54	0.13
Relationships with Peers	14.97	4.26	15.97	4.41	-1.30	0.20
Relationships with Patients	18.90	4.83	19.61	5.18	-0.80	0.43
Relationships with Hospital	9.62	3.51	11.13	3.74	-2.33	0.02*
Hospital Ethical Climate Total	95.97	23.11	103.89	24.76	-1.85	.07
<i>Shift</i>	<i>Fixed</i>		<i>Rotating</i>		<i>t-Test</i>	<i>P-Value</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Missed Nursing Care	73.56	26.66	24.26	2.40	2.35	0.02*
Hospital Ethical Climate						
Relationships with other disciplines	31.16	8.17	8.21	0.81	1.74	0.09
Relationships with Managers	24.44	6.42	6.68	0.66	1.21	0.23
Relationships with Peers	16.36	4.10	4.41	0.44	1.10	0.28
Relationships with Patients	20.00	4.88	5.06	0.50	0.83	0.41

Relationships with Hospital	11.72	3.36	3.72	0.37	1.96	0.05*		
Hospital Ethical Climate Total	107.28	25.06	98.42	23.84	1.65	0.10		
<i>Attend Ethical Course</i>	<i>No</i>		<i>Yes</i>		<i>t-Test</i>	<i>P-Value</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Missed Nursing Care	75.52	23.06	23.54	2.76	5.04	0.00**		
Hospital Ethical Climate								
Relationships with other disciplines	33.55	10.12	30.84	8.41	1.66	0.10		
Relationships with Managers	23.55	7.28	22.62	6.09	0.79	0.43		
Relationships with Peers	15.73	4.65	15.34	4.11	0.50	0.62		
Relationships with Patients	19.55	5.35	19.04	4.75	0.56	0.57		
Relationships with Hospital	11.36	4.01	9.75	3.29	2.50	0.01**		
Hospital Ethical Climate Total	103.73	26.94	97.59	21.65	1.43	0.16		
<i>Educational Level</i>	<i>Diploma</i>		<i>Associate</i>		<i>BSN</i>		<i>F</i>	<i>P-Value</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Missed Nursing Care	65.67	23.36	66.31	27.93	56.56	20.37	1.86	0.16
Hospital Ethical Climate								
Relationships with other disciplines	28.22	7.60	30.45	8.23	25.31	7.72	5.01	0.01**
Relationships with Managers	22.22	5.85	24.10	6.89	21.31	6.21	2.34	0.10
Relationships with Peers	15.89	3.50	15.95	4.57	14.39	4.20	1.64	0.20
Relationships with Patients	18.78	2.94	19.90	5.48	18.17	4.75	1.55	0.22
Relationships with Hospital	10.17	3.50	10.97	3.97	9.56	3.07	1.86	0.16
Hospital Ethical Climate Total	98.61	16.57	105	25.92	91.59	21.78	3.92	.02*
<i>Department</i>	<i>Medical-Surgical</i>		<i>ICU</i>		<i>t-Test</i>	<i>P-Value</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Missed Nursing Care	46.72	16.49	74.31	24.43	-7.02	.000**		
Relationships with other disciplines	34.09	9.07	28.74	8.49	-3.34	.001**		
Relationships with Managers	24.04	6.55	21.42	6.46	-2.22	.028*		
Relationships with Peers	16.18	4.17	14.46	4.43	-2.22	.028*		
Relationships with Patients	20.05	4.67	18.02	5.30	-2.28	.024*		

Relationships with Hospital	11.31	3.78	9.10	3.11	-3.44	.001**
Hospital Ethical Climate Total	105.67	24.00	91.74	22.06	-3.30	.001**

*Significant at the 0.05 level (2-tailed). ** at the 0.01 level.

Figure 1

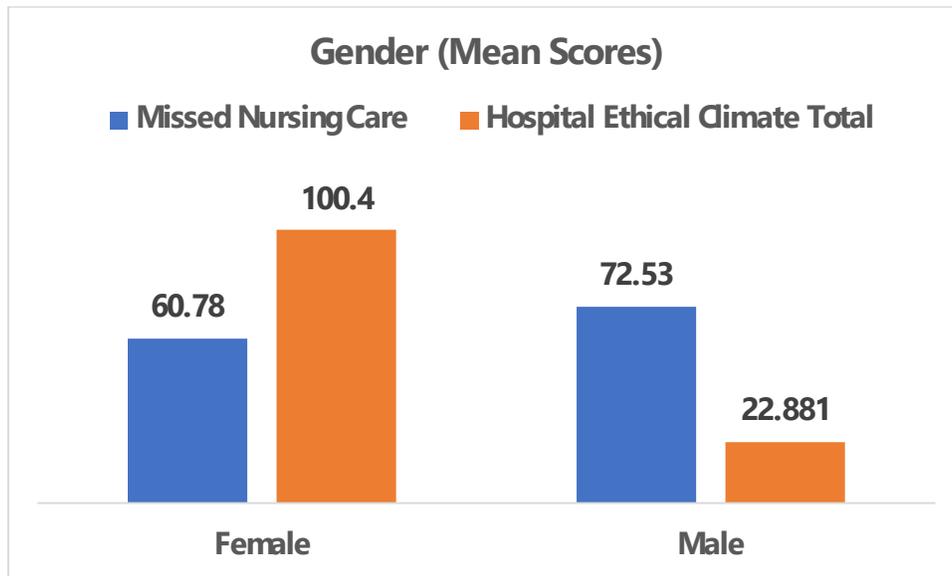
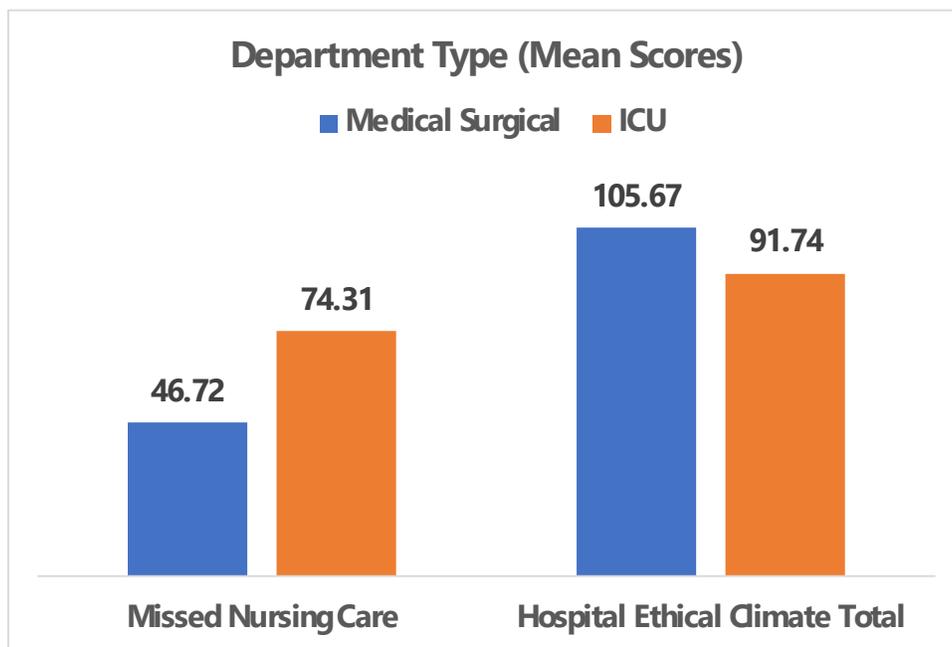


Figure 2



Discussion

This study aimed to investigate the relationship between ethical climate and missed nursing care in a hospital setting. The results indicated that higher levels of missed nursing care reported are associated with a positive ethical climate regarding relationships with other disciplines, managers, peers, patients, and the hospital. This indicates that a greater occurrence of missed nursing care is likely linked to a high level of ethical climate, which was supported by **Vryonides et al. (2018)**. However, **Okumoto, Yoneyama, Miyata, and Kinoshita (2022)** did not find a significant correlation between missed nursing care and the dimensions of hospital ethical climate. Despite the seeming contradiction, nurses with high ethical standards may report missed nursing care more frequently. However, it's crucial to consider additional factors that could lead to these incidents, such as a lack of nurses or inadequate resources.

The study found significant positive correlations between age, nurses' years of experience, and the hospital's ethical climate. These results might suggest that as nurses spend more time in the nursing profession and in particular hospitals, they develop stronger relationships and a better understanding of the ethical climate within the organization. These positive relationships can influence the nurses' perception of the hospital's ethical climate and potentially impact their behavior. Years of experience were acknowledged in the studies published in the literature as a sample characteristic, but their associations with the ethical climate in hospitals were not explored.

The findings of this study indicated that there were significant positive correlations between age, years of experience in the

nursing profession, and years of experience in the department with missed nursing care. These findings are consistent with several studies that have explored the relationship between these variables (**Fradelos et al., 2022**). A study conducted by **Zeleníková, Jarošová, Plevová, and Janíková (2020)** revealed that age and years of experience in the nursing profession and the department were positively correlated with missed nursing care. These results might be due to that nurses with greater experience and older age were more likely to report higher levels of missed nursing care. This suggests that as nurses gain more experience and become older, they may face challenges in managing their workload and meeting patient care demands, leading to increased missed care incidents. However, a study done by **Diab and Ebrahim (2019)** found no significant correlation between age or years of experience and missed nursing care.

In the present study, there were no significant differences between female and male nurses regarding hospital ethical climate dimensions, which was consistent with **Ozdoba et al. (2022)** who did not find any significant differences between the perceptions of healthcare professionals' ethical climate by gender. However, females reported lower mean scores of missed nursing care compared to males which is consistent with previous research on gender disparities in healthcare. These results might be due to the notion that women generally demonstrate a higher level of conscientiousness and commitment to patient care.

Regarding marital status, married nurses performed better on the hospital's ethical climate dimension that deals with interactions with the hospital than single nurses. It's possible that this is the case because married healthcare workers exhibit improved perceptions of the workplace's ethical climate (**Lin, Han, Huang, Chen, &**

Su, 2022; Mohamed, Abdelmonem, Abd Elhakam, & Abdelraof, 2022). Opposing research findings by **Abadiga, Namera, Hailu, and Mosisa (2019)** did not find any significant differences in perceptions of the ethical climate based on marital status among healthcare professionals. These inconsistent findings are complex and might be influenced by other factors such as cultural context, individual differences, and organizational dynamics.

Nurses working fixed shifts reported significantly higher levels of hospital ethical climate dimension about relationships with the hospital. Consistently, **Heyam, Beshar, and Nesreen (2018)** found that nurses on fixed shifts reported better relationships with the hospital administration compared to those on rotating shifts. This result could be explained by the fact that nurses who work fixed shifts may have the chance to get to know hospital administrators better, resulting in more favorable perceptions of their relationships.

On the other hand, nurses on rotating shifts reported lower mean scores for missed nursing care compared to those on fixed shifts. This finding aligns with previous research conducted by **Chiang et al. (2022)** where nurses working rotating shifts reported a lower rate of missed nursing care. This might be because the flexibility and variability of rotating shifts allow nurses to adapt their schedules, leading to better management of their workload and reduced chances of missed care.

The current study's findings indicated significantly higher levels of relationships with the hospital for nurses who did not attend an ethical course. Contrasting results were reported by **Okumoto et al. (2022)** who found no significant difference in relationships with the hospital and attending an ethical course. Ethics courses may improve nurses' ethical behavior, but the hospital climate, which may be impacted by

organizational culture and leadership, plays a bigger role in determining how nurses interact with hospitals.

Nurses who attended an ethical course reported lower levels of missed nursing care compared to those who did not attend. **Asare, Ansah, and Sambah (2022)** found that nurses who participated in an ethical course demonstrated improved knowledge and awareness of ethical considerations in nursing practice as well as increased ethical awareness was associated with a greater sense of responsibility and attentiveness in providing nursing care. These relationships could result in reduced incidences of missed care.

The results indicated that nurses with an associate degree had a higher level of the hospital's ethical climate dimension concerning relationships with other disciplines compared to other educational levels. This finding aligns with a study by **Schnitzler, Holzberger, and Seidel (2020)** where they found that nurses with an associate degree reported higher of the same dimension. However, opposing results were reported by **Okumoto et al. (2022)** who found no significant differences with different education levels. Regardless of these unexplained results, the ethical climate in healthcare settings might be influenced by multiple factors, including personality traits, culture, organizational environment, leadership styles, professional development opportunities, interprofessional collaboration with other disciplines, and dynamics.

Nurses in the Medical-surgical department rated higher in all dimensions and overall hospital's ethical climate. Contradictory, **Lemmenes, Valentine, Gwizdalski, Vincent, and Liao (2018)** Found that nurses in ICUs were significantly reported higher than medical surgical dep. regarding hospital E. Climate than in medical-surgical nurses. This result might be

due to the increased interaction of nurses in medical and surgical departments with patients, their families, relatives, and other healthcare providers compared to other settings. It could also be influenced by nurses' professional commitment to regulations that guide their behaviors. Conversely, in ICUs, patients may be viewed more as passive objects.

Nurses who worked in Medical-surgical departments reported lower levels of missed nursing care compared to those working in intensive care units (ICUs). This result could be explained because medical-surgical departments typically have more stable patient populations which may result in fewer missed nursing care events. On the same line, **Hammad, Guirguis, and Mosallam (2021)** and **Witczak et al. (2021)** found that nurses in medical-surgical units reported significantly lower levels of missed care than nurses in critical care units. This could be due to the demanding nature of critical care units, which involve specialized and intense interventions that consume more nursing time, potentially resulting in a higher incidence of missed care activities. However, according to a study by **Imam et al. (2021)**, missed nursing care events are not exclusive to any particular department and can happen across various healthcare settings. Their research, which evaluated missed care in medical-surgical, oncology, cardiac, and intensive care departments, revealed that each department had its own distinct instances of missed care, with no significant variations in terms of frequency or severity between departments.

Conclusion

The level of missed nursing care among nurses was moderate. The highest rated levels for the hospital's ethical climate were observed in the relationships with other disciplines followed by with managers.

Missed nursing care exhibited significant positive correlations with the dimensions and the total of the hospital's ethical climate.

The study revealed significant positive correlations between age, years of experience in the nursing profession, in the hospital, and in the department with the hospital's ethical climate. Nurses who were married, and working fixed shifts reported significantly higher levels of hospital ethical climate dimension about relationships with the hospital. Nurses holding associate degrees had higher scores in the dimension concerning relationships with other disciplines and the overall ethical climate. Additionally, nurses in the Medical-surgical department rated higher in all dimensions and overall hospital's ethical climate.

Significant positive correlations were identified between missed nursing care and age, years of experience in the nursing profession, and years of experience in the department. Female nurses who work rotating shifts, attend an ethics course, and work in the medical-surgical department reported lower levels of missed nursing care.

Recommendations

This study is important for nursing science because it explores the relationship between ethical climate and missed nursing care in a hospital setting. So, considering the findings of the current study, the following recommendations are suggested: develop and implement ethics training programs for all nurses to increase their awareness and knowledge of ethical issues and principles in healthcare settings. Furthermore, implementing a regulatory framework to ensure the display of ethical conduct across various healthcare settings.

It is also recommended to establish a system for reporting and addressing missed nursing care incidents to identify patterns and implement solutions to prevent them

from occurring in the future. It is suggested to the hospital's upper management to promote no-blame culture and incentivize young, inexperienced nurses to report the occurrences of missed nursing care.

Future studies should consider using longitudinal designs to establish the causal relationship between ethical climate and missed nursing care over time. Additionally, exploring the relationship between ethical climate and missed nursing care in diverse cultural contexts and healthcare settings. Lastly, conducting intervention research studies can provide valuable insights into effective strategies for creating a positive ethical climate and reducing missed nursing care, ultimately enhancing patient safety and quality care.

Limitations

Firstly, the study employed a descriptive correlational design, which only allows for the description of the variables and relationships, limiting the ability to establish causality or capture changes over time. Secondly, the study was conducted in specific hospitals in Cairo, which may limit the generalizability of the findings to other healthcare settings or populations. Additionally, the reliance on self-reported data through survey instruments may be subject to response bias or social desirability bias.

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