Original Article

Barriers to compliance with principles of nursing ethics and their relationship with caring behaviors: perspectives of intensive care unit nurses in Tabriz University of Medical Sciences

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Abstract

This study examined the barriers to complying with nursing ethics principles in adult intensive care units at teaching hospitals affiliated with Tabriz University of Medical Sciences and their relationship with caring behaviors in 2024. Using a descriptive-analytical design, 300 ICU nurses were surveyed through proportional random sampling. Data were collected via demographic forms, an ethical barriers questionnaire, and the Caring Behaviors Inventory (CBI-42). Results showed that the "individual and caring" domain had the highest ethical barrier score (52.36 ± 9.43), while the "workspace" domain had the lowest (20.56 ± 3.44). Most nurses (75.3%) perceived ethical barriers to be serious. Among the caregiving behaviors, "respect for others" had the highest score (56.93 ± 10.69), and "attention to others' experiences" had the lowest (20.02 ± 3.68). No significant correlation was found between ethical barriers and caregiving behaviors (P = 0.072, r = 0.104). Despite serious ethical challenges, the nurses in this study maintained acceptable standards of care. It is recommended to conduct further research into the specific ethical barriers subscales to better understand their influence on care quality and to develop strategies to improve nurses' working conditions.

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Introduction

Medical ethics is the analysis of thoughts, beliefs, commitments, behaviors, feelings, and arguments associated with ethical decision-making in medical sciences (1). Ethical performance is a key element of providing proper care to clients that creates trust and effective communication between patients and caregivers, and can increase client satisfaction, improve staff competence, and reduce the treatment duration and costs (1).

Beauchamp and Childress have proposed four basic principles for bioethics: autonomy, justice, beneficence, and non-maleficence. All nurses must be aware of these principles and observe them in their performance to provide the optimal, safest, and most humane care to the patients (2). Nursing is a science shaped by various ethical considerations over time. The care provided by nurses must be accompanied by respect for clients' rights and ethical principles (3).

Nursing theorists, including Johnson, Watson, and Leininger, have presented several definitions for care. Leininger defines care as helpful, supportive, and empowering behaviors extended to individuals or groups with obvious or expected needs to improve human conditions and life (4). Caring behavior reflects nurses' ethical actions, encompassing emotional and cognitive thoughts, perceptions, and actions, as well as the efforts nurses make to care for the client. This behavior includes physical, emotional, spiritual, social, and psychological care (5).

Scholars believe that ethics is embedded in the provision of high-quality nursing care and that nurses should apply professional ethics standards inherent to the therapeutic relationship. Therefore, it is necessary to identify and remove barriers to nurses' compliance with professional ethics principles so that patient care is delivered to the highest standards, thereby improving the quality of care (6).

Ilkafah et al. assert that fostering caring attitudes among nurses enhances motivation, performance, and ethical practice, which are crucial to quality nursing care. While nurses generally uphold ethical standards, there remain a few objectives that are not met due to gaps in their understanding and awareness of the necessary ethical practices (7).

In Azadian et al.'s study, barriers to nurses' adherence to professional ethics were investigated across three domains: managerial, workspace, and individual. The most critical barriers include the shortage of human resources in the organizational domain, the biological changes caused by working night shifts in the workspace domain, and the shortage of time in the individual domain (8).

In a descriptive study, Taylan et al. examined the relationships among caring behaviors, emotional intelligence, moral sensitivity, and demographic traits among intensive care nurses. The study found that these factors positively correlated with and could influence the prediction of nurses' caring behaviors (9). In their study entitled "The Relationship between Nurses' Perception of Caring Behaviors Based on Watson's Theory and Professional Ethics," Heydari et al. found that nurses' caring behaviors were influenced by their awareness of and adherence to professional ethics (10).

Adherence to ethical principles is a key factor in improving nursing service quality, providing safe care, and advancing professional development. Therefore, identifying the barriers that hinder nurses' adherence to ethical standards, as well as examining their relationship to the delivery of ethical caregiving behaviors, can help uncover existing gaps and offer managerial solutions to address these challenges. This may ultimately resolve issues within hospitals and enhance nurses' performance in providing ethical care.

Methods

This was a descriptive-correlational study. The research environment consisted of intensive care units (ICUs) in Imam Reza, Shahid, Madani, Alzahra, Sina, Shohada, and Shahid Taleghani hospitals, affiliated with Tabriz University of Medical Sciences. The research population included all nurses working in these wards. The sample size was calculated to be 300 individuals, assuming r = 0.2 and using the correlation confidence coefficient formula. The confidence level was 95%, the test power was 90%, and the attrition rate was 20%.

After determining the sample size, participants were selected using stratified random sampling. First, the proportional share of each educational and medical center was specified, followed by the allocation of quotas to each intensive care unit within those centers. Subsequently, a unique code was assigned to each participant, and individuals were selected and enrolled in the study using a random number table.

Data Collection Tools

The data collection tools included a socio-demographic questionnaire (including gender, age, marital status, work experience, educational degree, and employment status), Dehghani's questionnaire of barriers to the observance of professional ethics (2014), and Wolf's questionnaire on nurses' caring behavior (CBI-42) (1998).

The questionnaire on barriers to the observance of professional ethics consists of 33 questions across three domains: managerial (14), workspace (5), and individual (14). The scoring is based on a five-point Likert scale. In each domain, the highest score indicates more emphasis on that factor as an obstacle to the principles of professional ethics. A score between 33 and 55 is considered low, between 55 and 110 moderate, and above 110 high. The validity and reliability of this questionnaire have been confirmed in a study by Mohammadi et al. ($\alpha = 0.89$)(11).

The Nurse Caring Behavior Inventory (CBI) was was designed by Wolf (12) with 75 items in 1998 and after revision it was reduced to 42 items. This questionnaire contains 42 questions across five subscales (respect for others, ensuring human presence, positive connectedness and inclination, professional knowledge and skills, and attentiveness to the experiences of others). The scoring is based on a 6-point Likert scale (never, rarely, not very often, sometimes, usually, and always), with 1 = never, 2 = rarely, 3 = not very often, 4 = sometimes, 5 = usually, and 6 = always. The highest and the lowest scores in this questionnaire were 252 and 42, respectively. The Cronbach's alpha has been reported by Wolf (12) as 0.93, and its reliability in Iran was also assessed in a study by Hajinezhad, where the Cronbach's alpha coefficient was calculated to be 0.85 (13) .

Data Collection

After obtaining permission from the ethics committee of Tabriz University of Medical Sciences (code IR.TBZMED.REC.1403.564) and the authorities of the teaching hospitals, the researcher entered the research environment. Sampling was conducted using proportional random sampling, in accordance with the inclusion criteria. The questionnaires were provided to the participants by the researcher after the objectives and method of the study were stated, and voluntary informed consent was obtained during three shifts. The questionnaires were completed using the self-report method in a private environment. Participants were assured

that all collected information would be kept confidential and that they could withdraw from the study at any time.

Inclusion criteria consisted of employment in the intensive care unit for at least 6 months, holding a bachelor's, master's, or doctoral degree, and providing direct clinical care to patients. Exclusion criteria were the subject's unwillingness to continue participating for any reason and failure to complete the questionnaires fully (not answering 10% or more of the questions). Data were analyzed using SPSS software version 26 and descriptive and analytical statistical methods. The mean and standard deviation were used to describe quantitative data, and statistical ratios such as absolute frequency and percentage were used to describe qualitative data. The normality of the data was assessed using the Shapiro–Wilk test. The Pearson and Spearman correlation tests were used to analyze the data at the 0.05 significance level, and an independent t-test, ANOVA, and LSD post hoc test were used to compare the groups. To investigate the relationship between barriers to nurses' observance of ethical principles and caring behavior, individual-social variables, and to determine the predictive variable, a linear regression analysis was used.

Results

The socio-demographic characteristics of the study participants are provided in Table 1. 74 participants (24.7%) reported that barriers to observing ethical principles were at a moderate level, and 226 (75.3%) reported that they were higher. The frequency of the dimensions of barriers to observing nursing ethics principles among nurses working in intensive care units of teaching hospitals affiliated with Tabriz University of Medical Sciences who participated in the study is presented in Table 2.

The total score for barriers to observing nursing ethics was 119.13 ± 21.48 in men and 126.70 ± 20.33 in women (CI = -12.70 to -2.44), indicating a significant difference between the groups. Regarding the dimensions of barriers to compliance with nursing ethics, the highest and lowest mean scores were observed in the "individual and care" (52.36 ± 9.43) and "workspace" (20.56 ± 3.44) domains, respectively. The highest score in the managerial domain was for "long working hours," in the individual and care domain for "failure to meet basic needs such as income or rest among nursing staff," and in the workspace domain for

"biological changes in the body during night shifts".

Based on Table 3, the level of nurses' caring behaviors was high (204). The total caring behavior score was 37.97 ± 196.43 in men and 30.80 ± 207.25 in women. This indicates that caring behavior was higher among women than among men (CI = -19.02 to -2.60). Also, no significant relationship was found between caring behavior and barriers to adherence to nursing ethics (r = 0.10، (*P* = 0.07).

Table 1. Demographic characteristics of the nurses working in intensive care units of teaching hospitals affiliated with Tabriz University of Medical Sciences participating in the study

Variable	Variable Components	Descriptive Indices
Gender	Man	90 (30%)
	Woman	210 (70%)
Marital Status	Married	183 (61%)
	Single	117 (39%)
Age	Under 25 years old	17 (7.5%)
	25-35	162 (54%)
	36-45	88 (29%)
	46-55	33 (11%)
Work Experience	1-5 years	85 (28.3%)
	6-10 years	92 (30.7%)
	11-15 years	50 (16.7%)
	16-20 years	39 (13%)
	Over 20 years	34(11.3%)
Employment Status	Training	55 (18.3%)
	Corporate	20 (6.7%)
	Contractual-to-Permanent	43 (14.3%)
	Permanent	177 (59%)
	Contractual	5 (1.7%)
Education	Bachelor's degree	276 (92%)
	Master's degree	24 (8%)
Hospital	Imam Reza	162 (54%)
	Sina	60(20%)
	Shohada	17(5.7%)
	Shahid Madani	38(12.7%)
	Al-Zahra	9(3%)
	Taleghani	14(4.7%)

Table 2. Frequency of various dimensions of compliance with nursing ethics principles among the nurses working in intensive care units of teaching hospitals affiliated with Tabriz University of Medical Sciences participating in the research

Dimensions	Count	Minimum	Maximum	Mean	Standard Deviation
Individual and Caregiving Domain	300	28	70	52/36	9/43
Workspace Domain	300	9	25	20/56	3/44
Management Domain	300	24	70	51/50	10/41
Total	300	61	165	124/43	20/93

Table 3. Dimensions of caring behaviors among the nurses working in intensive care units of teaching hospitals affiliated with Tabriz University of Medical Sciences participating in the Study

Dimensions	Count	Minimum	Maximum	Mean	Standard Deviation
Respect for Others	300	20	72	56/93	10/70
Ensuring Human Presence	300	23	60	47/33	7/73
Communication and Positive Orientation	300	16	45	33/09	6/55
Professional Knowledge and Skills	300	10	30	25/47	4/52
Paying Attention to Others' Experiences	300	6	24	20/02	3/70
Total	300	78	252	204	33/42

Discussion

In this study, the barriers to complying with nursing ethics in adult intensive care units and their relationship with caring behaviors were examined from the perspective of nurses working in these wards. The results of the present study showed no statistically significant relationship between barriers to observing ethical principles and caring behaviors from ICU nurses' perspectives. The findings indicated that despite the high levels of ethical obstacles, nurses were able to overcome them and show a desirable degree of caring behaviors.

The results show that adherence to professional ethics among intensive care nurses, particularly for patients who lack the decision-making capacity, faces serious obstacles in the

workspace, managerial, and individual domains. The results of Sharif et al.'s study likewise showed that the personal care dimension had the highest mean score, followed by the managerial and workspace dimensions, which align with the results of the present study (14).

Blackwood and Chiarella's study indicates that individual nurse characteristics, organizational barriers such as constant presence and professional obedience, and cultural barriers such as educational needs influence nurses' ethical behavior. These results are consistent with the present study in terms of obstacles to moral conduct, with individual characteristics being the most significant barrier (15).

In the study by Tayebi et al, workspace barriers, managerial barriers, and individual barriers received the highest scores, respectively, whereas in the present study, workspace barriers received the highest score. This difference appears to stem from the complexity of patient needs and care decisions in the ICU compared to those in the general wards. Also, their study was conducted in only one educational and medical center, while the present study was conducted across a larger statistical population (16). The results of the study by Asadi et al. indicated thah environmental domain as the first obstacle to observing professional ethics from the perspective of nurses and the individual-caring and management domains as the next obstacles respectively, which is not in line with the present study. The reason for this discrepancy is likely due to differences in the workspaces and research populations in both studies (17).

In the present study, the subscales of "long working hours" in the managerial domain, "failure to satisfy basic needs such as adequate income or rest of nursing personnel" in the individual and caring domain, and "biological changes in the body during night shifts" in the workspace domain had the highest scores. These results are aligned with the findings of studies by Azadian (8) and Heydari (11).

The biological changes in the body during night shifts, along with factors such as failure to meet the basic needs of staff, for instance, adequate income or sufficient rest, are significant contributors to decreased concentration, increased likelihood of errors, and overlooking specific ethical considerations by nurses.

Therefore, it is recommended to implement more effective planning to increase income, reduce workload, and address the fatigue caused by night shifts and other problems faced by nurses; otherwise, despite their inner desire and awareness of ethical principles, nurses will not be able to provide care services at an acceptable level (17).

The results of the present study showed that among the demographic variables, including age, work experience, education, and employment status, only gender had a significant correlation with barriers to ethical practice, consistent with the findings of Shafaat et al. This implies that, regardless of their individual and social characteristics, intensive care unit nurses feel responsible for providing ethical care to their patients (18).

In this study's examination of caring behavior, the highest and the lowest mean scores pertained to the domains of “showing respect for others” and “attention to the experiences of others". This is inconsistent with the studies by Elcelik et al.(19), Salehi et al. (20), and Düzalan et al. (21). The reasons may include differences in education, attitudes, workspace, workload, ICU nurses' cultural competency, and even national contextual factors influencing caring behaviors.

There was no statistically significant relationship between socio-demographic variables and caring behavior. In their studies, Shafaat et al. (18) and Ilkafah et al. (7) found no statistically significant relationship between nurses' demographic characteristics and decreased levels of consciousness in providing ethical care, which aligns with the present study's results.

The results of a study by Salehi et al. indicated a significant, positive relationship between caring behaviors and age and work experience, which is inconsistent with the present study. This is probably because individuals gain broader insight into their profession with age and work experience, which can positively impact the quality of care. Another reason for this difference can be the statistical population, since in Salehi's study, nurses were recruited from all wards, while in the present study, only intensive care unit nurses were studied (20).

In the study by Rafat Ahmad et al., the mean score for nurses' caring behaviors in the

intensive care unit was low. Also, there was a positive and significant relationship among gender, education, and caring behaviors, which was inconsistent with the present study's results. The difference between the results of the two studies may be related to the workspace, workload, and even national contextual factors of intensive care unit nurses (22).

In this study, there was no significant relationship between nurses' caring behaviors in intensive care units and barriers to observance of nursing ethics. In reviewing the literature, no similar study was found that investigated the relationship between barriers to observing professional ethics principles and nurses' caring behaviors; consequently, it was not possible to compare this part of the study's results. Despite the absence of a correlation between caring behaviors and ethical barriers in the present study, according to Ilkafah et al., nurses who have a positive caring attitude automatically observe ethical principles in providing nursing care to patients (7). In a 2020 study, Heydari showed a positive correlation between nurses' perception of professional ethics principles and their caring behaviors (10).

The present research had certain limitations, including the study environment, which was restricted to intensive care units in educational and therapeutic centers, and the potential for social desirability bias due to the self-report nature of the questionnaires. It is therefore suggested that semi-structured interviews be used in future studies to better understand the subtler relationships between the subscales of barriers and caring behaviors across different non-educational medical centers or treatment wards.

Conclusion

The results of this study indicate that nurses working in intensive care units maintain their professional and ethical commitment to patient care despite the numerous individual, workspace, and managerial challenges. This commitment is particularly evident in caring for unconscious patients, which is realized through their specialized knowledge, professional skills, and empathic engagement. Individual factors such as professional conscience and personal ethics play a fundamental role in mitigating the adverse effects of workspace barriers. Nurses

manage workload pressures and resource constraints by adopting adaptive coping mechanisms. Furthermore, organizational support and resilience function as mediating factors that may attenuate the impact of existing obstacles.

Therefore, the absence of a statistically significant association between caring behaviors and ethical barriers underscores the need for more in-depth analyses of the subscales in both domains. Such scrutiny could reveal subtle interconnections and inform more effective strategies for enhancing care quality under challenging circumstances.

Healthcare policymakers and nursing administrators can support nurses' adherence to ethical principles by ensuring suitable working conditions, addressing operational barriers, and delivering ongoing ethics education. These measures are likely to alleviate work-related stress, prevent occupational burnout, and enhance satisfaction among both patients and staff.

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Authors' Contributions

M.B. and E.F. contributed to the study design. E.F. implemented data collection. R.SH conducted the statistical analysis and provided the data. M.B., R.SH., and E.F. provided data and prepared the manuscript. M.B. and E.F. contributed to manuscript preparation, final edit, and study conception.

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Data Availability

The datasets used and/or analyzed during the present study are available from the corresponding author upon reasonable request.

Ethics Approval and Consent to Participate

This study was approved by the Medical Philosophy and History Research Center of

Tabriz University of Medical Sciences, Iran (ethical code IR.TBZMED.REC.1403.564). To comply with ethical standards, voluntary informed consent was obtained from the subjects, and participants were assured of the confidentiality of their information. It should also be mentioned that the present study adhered to the Declaration of Helsinki.

Consent for Publication

Not applicable.

Competing Interests

The authors declare no competing interests.

References

1. Salar A, Ghaljaei F. Effect of professional empowerment Model on ethical codes implementation from nurse's and Mother's viewpoint. Journal of Pediatric Nursing. 2021;7(3):29-35.

2. Haahr A, Norlyk A, Martinsen B, Dreyer P. Nurses experiences of ethical dilemmas: A review. Nursing ethics. 2020;27(1):258-72.

3. Hoseini M, Ebadi M, Farsi Z. The effect of ethical motivational program on nursesâ moral courage in Mashhadâ s military hospitals. Journal of Military Medicine. 2022;21(4):410-7.

4. Salimi S, Tarbiat S. Predictors and priority of caring behaviours in intensive care units. Nursing in Critical Care. 2021;26(6):523-30.

5. Hajibabaee F, Salisu WJ, Akhlaghi E, Farahani MA, Dehi MMN, Haghani S. The relationship between moral sensitivity and caring behavior among nurses in iran during COVID-19 pandemic. BMC nursing. 2022;21(1):58.

6. Gholami A, Soltanian A, Khalili A. The survey of professional ethics observance from nurses' perspective and its related factors in hamadan medical education centers. 2020.

7. Ilkafah I, Mei Tyas AP, Haryanto J. Factors related to implementation of nursing care ethical principles in Indonesia. Journal of public health research. 2021;10(2):jphr. 2021.211.

8. Azadian M, Rahimi A, Mohebbi M, Iloonkashkooli R, Maleki M, Mardani A. The barriers to observing professional ethics in the practice of nursing care from nurses' viewpoints. Clinical Ethics. 2021;16(2):114-21.

9. Taylan S, Özkan İ, Şahin G. Caring behaviors, moral sensitivity, and emotional intelligence in intensive care nurses: A descriptive study. Perspectives in psychiatric care. 2021;57(2):734-46.

10. Heydari N, Torkaman M, Torabizadeh C. The Relationship Between Nurses' Perceptions of Caring Behaviors based on Watson's Theory and of Professional Ethics: A Cross-Sectional Study. Research Square. 2020.

11. Mohammadi MM, Parandin S, Bahrehmand P. Barriers to apply the principles of professional ethics in the practice from Viewpoints of Nurses and Nursing Instructors of Medical Sciences at Kermanshah University (2015). Journal of Ethics and Culture in nursing and midwifery. 2014;1(2):1-8.

12. Wolf ZR, Colahan M, Costello A, Warwick F. Relationship between nurse caring and patient satisfaction. Medsurg Nursing. 1998;7(2):99.

13. Hajinezhad ME AP, Rafii F, Ramezaniyan N, Tariqat M. Comparis on of patients and nurses views on nurse caring behaviors. Hayat Magazine. 2011;4:36- 45. (Persian).

14. Sharifi S, Ebrahimi H, Elyaszadeh S, Latifi A, Khodayari MT, Alizadeh M. Inhibitors and facilitators of compliance with professional ethics standards: nurses' perspective. BMC Nursing. 2024;23(1):158.

15. Blackwood S, Chiarella M. Barriers to uptake and use of codes of ethics by nurses. Collegian. 2020;27(4):443-9.

16. Tayebi N, Omidi A, Chahkhoei M, Aliravari H, Haghshenas A. Barriers standards of professional ethics in clinical care from the perspective of nurses. Revista Latinoamericana de Hipertension. 2019;14(3).

17. Asadi F, Donyaei M, Karimzadeh M, HEYDARI M. Survey of nurses' awareness about the principles of professional ethics and barriers to its observance in public hospitals in South Khorasan Province in 2019. 2021.

18. Shafaat A, Alimohammadi N, Shahriari M. ̧Ethical Care to Patients with Decreased Levels of Consciousness and its Relationship with Demographic Characteristics of Nurses in Intensive Care Units. Journal of Critical Care Nursing. 2020;13(4):1-10.

19. Elcelik UE, Ozcelik H, Muz G. The Effect on the Care Behaviors of Nurses Working in Intensive Care Clinics of Moral Distress Experienced During End of Life Patient Care. OMEGA-Journal of Death and Dying. 2024;90(1):388-403.

20. Salehi T, Haqqani H, Soltani M. Relationship between Leadership style of nursing managers and caring behaviors of nurses in selected hospitals in Tehran, Iran. Iran Journal of Nursing. 2022;35(136):218-31.

21. Düzalan ÖB, Coşar AA, Şahin E. The impact of nurses' ethical perceptions and sensitivities on care behaviors in internal medicine services. KONTAKT-Journal of Nursing & Social Sciences related to Health & Illness. 2025;27(1).

22. Ahmed FR, Saifan AR, Dias JM, Subu MA, Masadeh R, AbuRuz ME. Level and predictors of caring behaviours of critical care nurses. BMC nursing. 2022;21(1):341.