



Predictive Value of Moral Sensitivity for Quality of Care Among Iranian Nurses

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Abstract

Background: Morality is an important factor affecting the quality of care. To provide high-quality patient care, nurses are facing a number of ethical problems that need moral skills to be solved. Moral sensitivity is the first logical step toward ethical decision-making and judgment.

Objectives: This study was conducted to determine the predictive value of moral sensitivity for the quality of care delivered by Iranian nurses.

Methods: This cross-sectional study was undertaken on 250 nurses who were selected by census sampling based on inclusion and exclusion criteria from selected hospitals in Qazvin, Iran, in 2022. The required data were gathered by the Moral Sensitivity Questionnaire (MSQ) and the Quality Patient Care Scale (QUALPAC). Data were analyzed using a multivariate regression model.

Results: The mean age of the nurses was 32.62 ± 6.95 years old, ranging from 22 to 54 years. The quality of care from the viewpoint of most nurses ($n = 198$, 78.0%) was desirable. The highest quality of care was related to the physical dimension (69.56 ± 8.48), and the least was related to the psychosocial dimension (89.74 ± 9.47). The highest moral sensitivity was related to the dimensions of relational orientation (15.03 ± 2.93) and respect for the patient's autonomy (7.88 ± 1.73). The results also revealed that moral sensitivity ($\beta = 0.43$, $P < 0.001$), gender ($\beta = 0.30$, $P < 0.001$), and economic status ($\beta = -0.17$, $P = 0.003$) were the most significant predictors of the quality of nursing care.

Conclusions: Our results highlighted that boosting moral sensitivity among nurses could be effective in improving the quality of nursing care. So, it is recommended to hold periodic training programs to teach ethical principles to nurses to promote their moral sensitivity and, therefore, the quality of patient care.

Keywords: Ethics, Quality of Care, Nursing Care, Communication, Patient Care, Moral Sensitivity

1. Background

Nursing is an integral part of the health care system that promotes the best possible physical and mental outcomes for patients and disabled people (1). Nursing is a profession that has an essential role in patient care (2). The improvement of patients' health is governed by the quality of nursing care (3). The World Health Organization (WHO) states that the quality of care is the degree to which healthcare services raise the probability of desired health outcomes (4). For providing high-quality care, nurses usually face ethical issues during their daily practice (5). Nurses constitute the largest healthcare profession group and are frequently confronted with many ethical challenges and problems in their work in relation to their

managerial and nursing care responsibilities, care burden, and workload (6, 7).

Nursing is a job rooted in professional ethics and moral values, and nursing performance is based on such principles (8). Many ethical issues related to patient care are associated with socio-cultural, financial, spiritual, and religious factors (9). Hariharan et al. (2006) (10) showed that 11% of nurses encounter daily and more than 35% of them encounter weekly moral issues. Younas & Sundus (2018) (11) also reported that 85.6% of nurses working in Bandar Abbas hospitals failed to apply ethical principles correctly in their decisions. In line with professional ethics, moral sensitivity is the first component of ethical behaviors and plays an important role in solving ethical conundrums (12). Nurses are

anticipated to have not only professional competency but also the moral sensitivity required for resolving patients' concerns (13). Moral sensitivity is the ability to recognize ethical issues and dilemmas that influence the quality of care (14). In nursing, moral sensitivity refers to accepting the patient's vulnerability and being conscious of the ethical consequences of health-related nursing care decisions in any situation (15).

Moral sensitivity, as the foundation and cornerstone of professional ethics in nursing, creates a context for nurses to provide efficient and ethical care to patients (16). Considering that nurses, compared to other medical professionals, have more communication with patients and more frequently face complex moral situations in their careers, they can benefit from moral sensitivity to solve these conflicts (17). Nurses with higher moral sensitivity make better clinical decisions, use ethical codes more properly, are able to solve ethical problems, and tolerate less stress. Moral sensitivity empowers nurses to use ethics better and more efficiently during patient care (18) and enables them to identify ethical conflicts, analyze the condition appropriately, and make proper and ethical nursing care decisions (19).

Understanding the determinants of quality nursing care is of great importance to enhancing nursing performance and obtaining desired patient outcomes and patient satisfaction. Contradictory results have been found regarding the role of demographic characteristics in predicting the quality of nursing care. For instance, Jamsahar et al. (20) and Vatandost et al. (21) reported that gender was related to the quality of nursing care; however, Afrasiabifar et al. (13) could not find such an association. Furthermore, Darawad et al. (22) claimed that economic status was correlated with the quality of nursing care, which was contradicted by another study (23).

Regarding the relationship between nurses' moral sensitivity and the quality of patient care, a literature review revealed discrepancies in research findings and a gap in this area in Iran. Several studies (13, 24, 25) have indicated that an increase in nurses' moral sensitivity is accompanied by higher-quality nursing care. In contrast, Nazari et al. (26) showed that with an increase in moral sensitivity, the quality of nursing care decreased in older patients with COVID-19. However, Amiri et al. (5) declared no significant correlation between moral sensitivity and the quality of nursing care.

2. Objectives

To the best of our knowledge, there is no study on the role of moral sensitivity as a predictor of the quality of nursing care among nurses in Qazvin, Iran. So, based on

the above arguments and the importance of ethical issues in providing quality care to patients, the current study was undertaken to assess the potential role of moral sensitivity in predicting the quality of nursing care delivered by a sample population of Iranian nurses.

3. Methods

This cross-sectional study was carried out on 250 nurses working at the hospitals affiliated with the Qazvin University of Medical Sciences, including Boooli Sina (85 nurses), Velayat (71 nurses), and Shahid Rajaie (94 nurses). Inclusion criteria were having at least a bachelor's degree, a minimum of 6 months of work experience, and willingness to participate in the study. Nurses working in the emergency and observation wards, as well as critical care units (ICU and CCU) and the dialysis department, were not included in the present study. Nurses were selected by the census method, and all eligible nurses entered the study.

3.1. Instruments

Data were gathered using a demographic questionnaire (age, gender, marital status, level of education, employment status, economic situation, work shift situation, working at a second job, participating in ethics education programs, studying in postgraduate courses, work experience, and overtime working). Also, the Persian versions of the Moral Sensitivity Questionnaire (MSQ) and the Quality Patient Care Scale (QUALPAC) were used. After explaining the objectives of the study, informed consent was signed by all nurses who participated in the present study.

The MSQ was first developed by Lutzen et al. in 1995 (27). The questionnaire encloses 25 items, and each item is rated on a 5-option Likert scale from totally agree (4) to totally disagree (0). The obtained total score ranges from 0 to 100, where scores in the ranges of 0 - 50, 50 - 75, and 75 - 100 suggest low, moderate, and high moral sensitivity, respectively. Using this tool, moral sensitivity is investigated in six dimensions: Modifying autonomy (3 items), interpersonal orientation (5 items), moral meaning (5 items), experiencing moral conflict (3 items), professional knowledge (2 items), and expressing benevolence (7 items) (26). Borhani et al. translated the MSQ using the backwards-forward method and confirmed its content validity and internal consistency based on Cronbach's alpha coefficient of 0.93 (28). In the present study, the value of Cronbach's alpha was equal to 0.73.

The QUALPAC contains 68 items and scrutinizes the quality of nursing care in 3 dimensions, including

psychosocial (32 items), physical (23 items), and communicational (13 items). Each item is scored on a 4-point Likert scale from never (1) to always (4), delivering a total score between 68 and 272. The total score was divided by the total number of questions, and accordingly, the quality of nursing care was classified into three groups: Undesirable (0 - 1.89), relatively desirable (1.90 - 2.63), and desirable (2.64 - 4) (29). Ebrahimi et al. (30) confirmed the content, face validity, and internal consistency (Cronbach's alpha = 0.93) of the Persian version of the questionnaire. In the present study, Cronbach's alpha was calculated as 0.90.

After receiving the required permissions, two of the authors (H.KH and A.A) referred to the selected hospitals on all weekdays in different shifts and distributed the questionnaires among eligible nurses. Nurses were requested to complete the questionnaires and return them on their next shift. The data were gathered in a 3-month period from June to September 2022.

3.2. Ethical Consideration

This study was approved by the Ethics Committee of Qazvin University of Medical Sciences, Qazvin, Iran (IR.QUMS.REC.1398.370). All methods were carried out in accordance with relevant ethical guidelines and regulations. The objectives of the study were explained to the participants, and they were assured of the confidentiality of their information. Written informed consent was signed by all nurses before completing the questionnaires.

3.3. Data Analysis

The data were analyzed by SPSS 20.0 (SPSS Inc., Chicago, Illinois, USA). Quantitative variables were presented by means and standard deviations (SD), and qualitative variables by frequencies and percentages. In order to identify the predictors of the quality of nursing care, univariate regression was initially run, and then variables with potential significance with regard to the quality of nursing care ($P \leq 0.05$) were included in a multivariate regression model.

In order to evaluate multicollinearity issues, the variance inflation factor (VIF) of nursing care quality was computed, which was in the satisfactory range. Homoscedasticity was also assessed and confirmed. The statistical significance level was $P < 0.05$.

4. Results

In the current study, the mean \pm SD of the nurses' age was 32.62 ± 6.95 years, and the age range was 22 to 54 years.

The demographic features of the participants have been depicted in Table 1.

The means \pm SDs of the scores of the quality of nursing care, moral sensitivity, and their subscales have been presented in Table 2. The mean \pm SD score of moral sensitivity was 63.85 ± 8.92 , and the moral sensitivity score range was from 39 to 96. In order to be able to compare the scores of different dimensions, the mean score of each dimension was divided by the number of its items. The highest quality of care was related to the physical dimension, and the least was related to the psychosocial dimension. Regarding moral sensitivity, the highest score belonged to the orientation dimension, and the least was related to professional knowledge. The quality of nursing care from the viewpoints of 55 nurses (22.0%) was somewhat desirable, and 198 nurses (78.0%) perceived nursing care quality at a desirable level.

The results of the multivariate regression model showed that the most significant predictors of the quality of nursing care were moral sensitivity, gender, and economic situation, respectively. The quality of nursing care showed a positive association with moral sensitivity ($\beta = 0.43$, $P < 0.001$). Female nurses ($\beta = 0.30$, $P < 0.001$) reported higher quality nursing care compared with male counterparts. Furthermore, nurses with low economic status ($\beta = -0.17$, $P = 0.003$) reported lower quality of nursing care compared with those with average economic situation. Based on the results, the strongest predictor of nursing care quality was moral sensitivity (Table 3)

5. Discussion

The current study examined the role of moral sensitivity in predicting the quality of nursing care. According to the results of this study, most of the nurses studied reported moderate moral sensitivity and somewhat desirable quality of care. This study showed that there was a significant association between the moral sensitivity of nurses and the quality of patient care. Furthermore, gender and economic status were observed to be other predictors of the quality of nursing care.

The results of the present study revealed that the quality of nursing care was perceived as desirable by most of the nurses studied. Furthermore, the highest to lowest average scores of the quality of nursing care dimensions ranged from physical to communicational and psychosocial areas. In this regard, different results have been reported in the previous studies. For instance, Ebrahimi et al. (30) found that the quality of nursing care was moderate in the psychological dimension and favorable in other dimensions. Fatehi et al. (31), Gholjeh

Table 1. Demographic Features of the Nurses who Participated in the Study (N = 250)^a

Demographic Characteristics	Values
Gender	
Female	139 (55.6)
Male	111 (44.4)
Total	
Marital status	
Single	102 (40.8)
Married	148 (59.2)
Total	
Educational level	
Diploma	24 (9.6)
BSc.	196 (78.4)
MSc.	30 (12.0)
Employment status	
Employed	135 (54.0)
Unemployed	115 (46.0)
Economic situation	
Low	37 (14.8)
Average	127 (50.8)
Good	79 (31.6)
Excellent	7 (2.8)
Work shift situation	
Rotation	229 (91.6)
Only morning	19 (7.6)
Evening or night	2 (0.8)
Working at a second job	
Yes	31 (12.4)
No	219 (87.6)
Participation in ethics educational programs	
Yes	74 (29.6)
No	176 (70.4)
Hospital	
Velayat	71 (28.4)
Booali Sina	85 (34.0)
Shahid Rajaie	94 (37.6)
Studying in a postgraduate course	
Yes	45 (18.0)
No	205 (82.0)
Age (y)	32.62 ± 6.95
Work experience (y)	9.51 ± 6.57
Duration of overtime working (h)	62.06 ± 37.72

^a Values are presented as No. (%) or mean ± SD.

et al. (32), and Jamsahar et al. (20) found that the quality of care was optimal in all of these three dimensions. However, Akbari Kaji & Farmahani Farahani (33) reported that all three dimensions of nursing care quality had unsatisfactory low levels. These variabilities may be due to different research environments and socio-cultural differences of participants.

In the current study, economic status was a predictor of the quality of nursing care. Specifically, nurses with a low economic status were more likely to report poor quality of care. This finding was consistent with the report of Darawad et al. (22), who found that a desirable economic status significantly increased the quality of nursing care. Higher incomes and satisfactory economic status seem to be associated with better job performance and higher job satisfaction among nurses (34). In this regard, Farman et al. (35) and Dargahpour et al. (36) observed a direct association between job satisfaction and the quality of care delivered by nurses. Contrary to the findings of the present study, Ahmed et al. (23), in a study in the United Arab Emirates, could not find a statistically significant relationship between the economic status of nurses working in critical care units and their caring behaviors. This disparity can be related to differences in work conditions in special care units vs. general wards, as well as different incomes of Iranian nurses vs. those working in the United Arab Emirates.

The results of the present study showed that female nurses reported higher quality of care compared with male nurses. This was consistent with the results of similar domestic (20, 21) and overseas (11, 23) studies. Male nurses in Iran face cultural-religious and organizational challenges when providing care to female patients, which can affect the quality of nursing care. Furthermore, most male nurses are obliged to limit their abilities when providing care to female patients, prohibiting them from evoking their full professional capabilities (21). In Islamic countries such as Iran, religious beliefs are among the challenges faced by male nurses when caring for female patients (37). This may be correlated with the fact that female nurses are more compassionate and also the fact that the conflict between masculinity and kindheartedness can influence certain caring behaviors by male nurses (23). However, Mudallal et al. (38) reported that the quality of care was superior among male nurses. Furthermore, Afrasiabifar et al. (13) did not find a significant difference between female and male nurses regarding their caring behaviors. These differences may be related to the inherent variabilities of the concepts assessed, as well as due to the use of different instruments.

The results of the present study showed a moderate level of moral sensitivity among nurses. The highest

Table 2. Descriptive Statistics Related to Quality of Nursing Care, Moral Sensitivity, and Their Subscales

Variables	Min	Max	Mean ± SD	Mean/No of Items
Quality of nursing care				
Psychosocial	61	128	89.74 ± 9.47	2.80
Physical	52	92	69.56 ± 8.48	3.02
Communication	25	52	37.93 ± 5.65	2.91
Total	145	272	197.24 ± 20.95	2.90
Moral sensitivity				
Relational orientation	5	20	15.03 ± 2.93	3.01
Autonomy	2	11	7.88 ± 1.73	2.67
Benevolence	4	28	17.36 ± 4.19	2.48
Moral conflicts	2	12	7.66 ± 2.02	2.55
Moral meaning	6	20	11.78 ± 2.63	2.36
Professional knowledge	0	8	4.13 ± 1.56	2.07
Total	4	28	63.85 ± 8.92	2.55

Table 3. Predictors for the Quality of Nursing Care

Variables	Univariate Regression		Multivariate Regression	
	β (CI: 95%)	P-Value	β (CI: 95%)	P-Value
Age	-0.10 (-0.69, 0.07)	0.104	-	-
Work experience	-0.09 (-0.70, 0.09)	0.141	-	-
Overtime working (h)	-0.44 (-0.09, 0.05)	0.492	-	-
Gender	0.37 (10.67, 20.45)	0.001	0.30 (7.51, 17.36)	0.000
Marital status	0.04 (-3.76, 6.87)	0.564	-	-
Employment status	0.01(-4.94, 5.55)	0.908	-	-
Working at a second job	-0.16 (-17.97, -2.31)	0.011	0.01 (-6.71, 7.39)	0.924
Studying at a postgraduate course	0.09 (-1.81, 11.75)	0.150		
Participation in ethics educational programs	0.19 (3.18, 14.42)	0.002	0.03 (-3.65, 6.22)	0.192
Level of education				
BSc	1		1	
Diploma	-0.12 (-17.58, 0.20)	0.055	-	-
MSc	0.01 (-8.03, 8.09)	0.993	-	-
Economic situation				
Average	1		1	
Low	-0.17 (-17.26, -2.54)	0.009	-0.17 (-16.16, -3.49)	0.003
Good	0.21 (3.95, 15.25)	0.001	0.03(-3.89, 6.36)	0.436
Excellent	0.08 (-5.26, 25.34)	0.197	0.09 (-1.89, 24.96)	0.073
Moral sensitivity	0.48 (0.79-1.26)	0.000	0.43 (0.69, 1.15)	0.000
Work shift status	-0.07 (-12.87, 3.94)	0.30		

Abbreviations: β , standard regression coefficient; t, test statistics; SD, standard deviation; CI, confidence interval.

moral sensitivity was related to the dimension of communication with the patient. Compared to other healthcare providers, nurses have more interactions with patients (39). Communication between the nurse and the patient, as the basis of nursing care, improves patients' health levels and strengthens the feelings of security and trust in patients (40). Likewise, Lotfi et al. (41) reported a significant relationship between nurse-patient communication, patient satisfaction, and the quality of care. Inappropriate communication between the nurse and the patient compromises the quality of care and patient independence (42). Similarly, Taylan et al. (14) reported that maintaining patient autonomy was a predictor of desirable care behaviors.

The findings of this study indicated that moral sensitivity was a predictor of nursing care quality. Consistently, Afrasiabifar et al. (13) found a positive and significant correlation between nurses' caring behaviors and their moral sensitivity. Darzi-Ramandi et al. reported that higher moral sensitivity was related to higher quality nursing care delivered to patients with COVID-19 (24). Moral sensitivity has been noted to increase nurses' considerations for ethical principles, encouraging them to offer higher quality care to patients (26, 43). A high level of moral distress is experienced when providing nursing care requires making ethical decisions. Higher moral sensitivity can play an important role in boosting a nurse's ability to make proper ethical decisions during patient care (44). In fact, the lack of moral sensitivity or inability to identify ethical challenges and make decisions about them may lead to undertaking undesirable care behaviors (22). However, the findings of Amiri et al. (5) indicated that there was an insignificant association between the moral sensitivity of nurses and the quality of nursing care reported by patients. This difference can be due to the different subjective nature of the concept of healthcare quality from the perspectives of patients and nurses.

4.1. Limitations and Strengths

This was the first study in Qazvin to investigate the association between moral sensitivity and quality of nursing care. Our results provided first-hand and important information about moral sensitivity in nurses and its association with the quality of patient care. One of the limitations of the present study was the use of a convenience sampling technique, which might restrict the generalizability of the results. Furthermore, the self-reporting procedure used for completing questionnaires raises the question that some nurses may not have given honest answers. By providing full explanations about the purposes of the study, we tried to resolve this limitation.

4.2. Conclusions

According to the viewpoints of most of the nurses participating in this study, the quality of patient care was at a desirable level. The quality of care was also better in the physical and communication dimensions. Furthermore, moral sensitivity, gender, and economic situation were found to be the most important predictors of the quality of nursing care. Our results have implications for planning, training, educating, rehearsing, managing, and developing moral sensitivity among nurses. It is therefore suggested that health policymakers provide the necessary training in universities and clinical environments to enhance moral sensitivity among nurses to improve the quality of care.

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Footnotes

Authors' Contribution: HKH, SAM, and AA conceived and designed the research method and helped draft the manuscript. HKH and AA collected the data. SAM performed statistical analysis. HKH, SAM, and MM revised the manuscript. All authors read and approved the final manuscript.

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References

1. Nwozichi CU, Ojewole F, Oluwatosin AO. Understanding the challenges of providing holistic oncology nursing care in Nigeria. *Asia Pac J Oncol Nurs*. 2017;4(1):18–22. [PubMed ID: 28217725]. [PubMed Central ID: PMC5297226]. <https://doi.org/10.4103/2347-5625.199074>.
2. Salehitali S. Patients and nursing students' viewpoints on the importance of caring behaviors in a hospital affiliated to Shahrekord university of medical sciences in Iran. *Jundishapur J Chronic Dis Care*. 2021;10(4). <https://doi.org/10.5812/jjcdc.116963>.

3. Nabili A, Bastani F. Evaluate quality of nursing care from the viewpoint of elderly patients under hemodialysis in selected Medical Education Centers of Iran University of Medical Sciences, 2018. *Iran J Nurs Res.* 2020;**15**(3):10-21. Persian.
4. Hughes RG. *Patient safety and quality: An evidence-based handbook for nurses.* Rockville (MD): Agency for Healthcare Research and Quality (US); 2008.
5. Amiri E, Ebrahimi H, Namdar Areshtanab H, Vahidi M, Asghari Jafarabadi M. The relationship between nurses' moral sensitivity and patients' satisfaction with the care received in the medical wards. *J Caring Sci.* 2020;**9**(2):98-103. [PubMed ID: 32626672]. [PubMed Central ID: PMC7322405]. <https://doi.org/10.34172/JCS.2020.015>.
6. Aitamaa E, Suhonen R, Puukka P, Leino-Kilpi H. Ethical problems in nursing management - a cross-sectional survey about solving problems. *BMC Health Serv Res.* 2019;**19**(1):417. [PubMed ID: 31234855]. [PubMed Central ID: PMC6591814]. <https://doi.org/10.1186/s12913-019-4245-4>.
7. Heydari A, Meshkinyazd A. Ethical challenges in nursing. *J Clin Nurs Midwifery.* 2018;**7**:84-95.
8. Poorchangizi B, Borhani F, Abbaszadeh A, Mirzaee M, Farokhzadian J. The importance of professional values from nursing students' perspective. *BMC Nurs.* 2019;**18**:26. [PubMed ID: 3131211]. [PubMed Central ID: PMC6610983]. <https://doi.org/10.1186/s12912-019-0351-1>.
9. Aminbeidokhti A, Mardani E. Relationship between mental health and professional ethics among nursing staff. *Med Ethics J.* 2015;**9**:49-73.
10. Hariharan S, Jonnalagadda R, Walrond E, Moseley H. Knowledge, attitudes and practice of healthcare ethics and law among doctors and nurses in Barbados. *BMC Med Ethics.* 2006;**7**:E7. [PubMed ID: 16764719]. [PubMed Central ID: PMC1524795]. <https://doi.org/10.1186/1472-6939-7-7>.
11. Younas A, Sundus A. Patients' experiences and satisfaction about care provided by male nurses in medical surgical units in Islamabad, Pakistan: A pilot study. *Nurs Forum.* 2018;**53**(1):12-9. [PubMed ID: 28776685]. <https://doi.org/10.1111/nuf.12212>.
12. Choe K, Kim S, Lee C, Kim S. Effect of ethics seminar on moral sensitivity and ethical behavior of clinical nurses. *Int J Environ Res Public Health.* 2020;**18**(1). [PubMed ID: 33396206]. [PubMed Central ID: PMC7795744]. <https://doi.org/10.3390/ijerph18010241>.
13. Afrasiabifar A, Mosavi A, Dehbanizadeh A, Khaki S. Nurses' caring behaviour and its correlation with moral sensitivity. *J Res Nurs.* 2021;**26**(3):252-61. [PubMed ID: 35251248]. [PubMed Central ID: PMC8895006]. <https://doi.org/10.1177/1744987120980154>.
14. Taylan S, Ozkan I, Sahin G. Caring behaviors, moral sensitivity, and emotional intelligence in intensive care nurses: A descriptive study. *Perspect Psychiatr Care.* 2021;**57**(2):734-46. [PubMed ID: 32885427]. <https://doi.org/10.1111/ppc.12608>.
15. Suazo I, Perez-Fuentes MDC, Molero Jurado MDM, Martos Martinez A, Simon Marquez MDM, Barragan Martin AB, et al. Moral sensitivity, empathy and prosocial behavior: Implications for humanization of nursing care. *Int J Environ Res Public Health.* 2020;**17**(23). [PubMed ID: 33266232]. [PubMed Central ID: PMC7730362]. <https://doi.org/10.3390/ijerph17238914>.
16. Hazaryan M, Hemati N, Ersali H, Beiranvand R, Mirzaei pour F, Asadi M. Comparison of moral sensitivity among nursing student in Abadan University of Medical Sciences and Shushtar College. *Compr Health Biomed Stud.* 2022;**1**(1):e142857. <https://doi.org/10.22034/hmrj.2021.140092>.
17. Farasatkish R, Shokrollahi N, Zahednezhad H. Critical care nurses' moral sensitivity in Shahid Rajaee Heart Center Hospital. *Iran J Cardiovasc Nurs.* 2015;**4**(3):36-45. Persian.
18. Ekramifar F, Farahaninia M, Mardani Hamooleh M, Haghani H. The effect of spiritual training on the moral sensitivity of nursing students. *J Client-centered Nurs Care.* 2018;**2**:13-22. <https://doi.org/10.32598/jccnc.4.4.213>.
19. Sepehrirad E, Heidarzadeh M, Asl ZE, Abbasian Z, Ashtari S. The relationship between moral sensitivity, ethical climate, and job strain with patient privacy from viewpoint of operating room staffs. *Iran J Nurs Midwifery Res.* 2021;**26**(2):183-7. [PubMed ID: 34036068]. [PubMed Central ID: PMC8132858]. https://doi.org/10.4103/ijnmr.IJNMR_22_20.
20. Jamsahar M, Khaki S, Esmaeilpour Zanjani S, Mashouf S. Comparison of quality of nursing cares from the perspective of nurses and patients. *Sci J Nurs Midwifery Paramed Faculty.* 2020;**5**(4):72-83.
21. Vatandost S, Oshvandi K, Ahmadi F, Cheraghi F. The challenges of male nurses in the care of female patients in Iran. *Int Nurs Rev.* 2020;**67**(2):199-207. [PubMed ID: 32314370]. <https://doi.org/10.1111/inr.12582>.
22. Darawad MW, Abu Feddeh S, Saleh AM. Factors affecting the caring performance of newly graduated Nurses' working in critical care units. *Int J Nurs Pract.* 2022;**28**(2):e13047. [PubMed ID: 35263813]. <https://doi.org/10.1111/ijn.13047>.
23. Ahmed FR, Saifan AR, Dias JM, Subu MA, Masadeh R, AbuRuz ME. Level and predictors of caring behaviours of critical care nurses. *BMC Nurs.* 2022;**21**(1):341. [PubMed ID: 36464687]. [PubMed Central ID: PMC9720932]. <https://doi.org/10.1186/s12912-022-01125-4>.
24. Darzi-Ramandi M, Sadeghi A, Tapak L, Purfarzad Z. Relationship between moral sensitivity of nurses and quality of nursing care for patients with COVID-19. *Nurs Open.* 2023;**10**(8):5252-60. [PubMed ID: 37073584]. [PubMed Central ID: PMC10333854]. <https://doi.org/10.1002/nop2.1763>.
25. Khodaveisi M, Oshvandi K, Bashirian S, Khazaei S, Gillespie M, Masoumi SZ, et al. Moral courage, moral sensitivity and safe nursing care in nurses caring of patients with COVID-19. *Nurs Open.* 2021;**8**(6):3538-46. [PubMed ID: 33945661]. [PubMed Central ID: PMC8242869]. <https://doi.org/10.1002/nop2.903>.
26. Nazari S, Poortaghi S, Sharifi F, Gorzin S, Afshar PF. Relationship between moral sensitivity and the quality of nursing care for the elderly with Covid-19 in Iranian hospitals. *BMC Health Serv Res.* 2022;**22**(1):840. [PubMed ID: 35773700]. [PubMed Central ID: PMC9244299]. <https://doi.org/10.1186/s12913-022-08258-x>.
27. Lutzen K, Evertzon M, Nordin C. Moral sensitivity in psychiatric practice. *Nurs Ethics.* 1997;**4**(6):472-82. [PubMed ID: 9416106]. <https://doi.org/10.1177/096973309700400604>.
28. Borhani F, Abbaszadeh A, Mohamadi E, Ghasemi E, Hoseinabad-Farahani MJ. Moral sensitivity and moral distress in Iranian critical care nurses. *Nurs Ethics.* 2017;**24**(4):474-82. [PubMed ID: 26419438]. <https://doi.org/10.1177/0969733015604700>.
29. Neishabory M, Raeisdana N, Ghorbani R, Sadeghi T. Nurses' and patients' viewpoints regarding quality of nursing care in the teaching hospitals of Semnan University of Medical Sciences, 2009. *Koomesh J.* 1389;**12**(2):134-43. Persian.
30. Ebrahimi H, Namdar H, Vahidi M. Quality of nursing care in psychiatric wards of university hospitals in northwest of Iran from the perceptions of nurses. *J Caring Sci.* 2012;**1**(2):79-84. [PubMed ID: 25276680]. [PubMed Central ID: PMC4161066]. <https://doi.org/10.5681/jcs.2012.012>.
31. Fatehi R, Motalebi A, Azh N. Nurses' and elderly's' viewpoints regarding quality of nursing care in the educational hospitals of Sanandaj city. *Nurs Midwifery J.* 2019;**16**(11):779-86. Persian.
32. Gholjeh M, Dastoorpour M, Ghasemi A. The relationship between nursing care quality and patients satisfaction among hospitals affiliated to Zahedan university of medical sciences in 2014. *Hakim Jorjani Biomed J.* 2016;**3**.
33. Akbari Kaji M, Farmahani Farahani B. The effect of nursing process education on nursing care quality of schizophrenic patients. *KAUMS Journal (FEYZ).* 2011;**15**.
34. Ali M, Qun W. Factors contributing to job satisfaction and job performance of nurses in the healthcare industry. *Int J Humanit Soc Dev Res.* 2019;**3**:7-22. <https://doi.org/10.30546/2523-4331.2019.1.1.7>.
35. Farman A, Kousar R, Hussain M, Waqas A, Gilani SA. Impact of job satisfaction on quality of care among nurses on the public hospital

- of Lahore, Pakistan. *Saudi J Med Pharm Sci.* 2017;**vol3**:511.
36. Dargahpour M, Jalali P, Mohammadi M. The relationship between quality of work life and job satisfaction among nurses in a teaching hospital in 2020. *Evid Based Health Policy, Manage Econ.* 2022. <https://doi.org/10.18502/jebhpme.v6i3.10859>.
 37. Cheraghi F, Oshvandi K, Ahmadi F, Selsele O, Majedi M, Mohammadi H, et al. Comparison of nurses' and nursing students' attitudes toward care provision to opposite-gender patients. *Nursing and Midwifery Studies.* 2019;**8**(2). https://doi.org/10.4103/nms.nms_52_18.
 38. Mudallal R, Saleh M, Al-Modallal H, Abdel Rahman R. Predictors of quality of nursing care: The influence of work conditions and burnout. *Glob J Health Sci.* 2016;**9**:163. <https://doi.org/10.5539/gjhs.v9n4p163>.
 39. Azimilolaty H, Rezaei S, Khorram M, Mousavinasab N, Heidari T. Correlation between the quality of nursing care and burnout of nurses in the teaching hospitals affiliated to Mazandaran university of medical sciences, iran. *Iran J Nurs.* 2021;**33**(128):54-66. <https://doi.org/10.52547/ijn.33.128.54>.
 40. Allande-Cussó R, Fernández-García E, Gómez-Salgado J, Porcel-Gálvez AM. Understanding the nurse-patient relationship: A predictive approach to caring interaction. *Collegian.* 2022;**29**(5):663-70. <https://doi.org/10.1016/j.colegn.2022.04.003>.
 41. Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nurse-patient communication and patient satisfaction from nursing care. *Nurs Open.* 2019;**6**(3):1189-96. [PubMed ID: 31367445]. [PubMed Central ID: PMC6650658]. <https://doi.org/10.1002/nop2.316>.
 42. Molina-Mula J, Gallo-Estrada J. Impact of nurse-patient relationship on quality of care and patient autonomy in decision-making. *Int J Environ Res Public Health.* 2020;**17**(3). [PubMed ID: 32013108]. [PubMed Central ID: PMC7036952]. <https://doi.org/10.3390/ijerph17030835>.
 43. Sedghi Goyaghaj N, Zoka A, Mohsenpour M. Moral sensitivity and moral distress correlation in nurses caring of patients with spinal cord injury. *Clinical Ethics.* 2021;**17**(1):51-6. <https://doi.org/10.1177/1477750921994279>.
 44. Uncu F, Gunes D. The importance of moral sensitivity in nursing education: A comparative study. *Nurs Forum.* 2021;**56**(3):635-9. [PubMed ID: 33896007]. <https://doi.org/10.1111/nuf.12584>.