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Correlation between nurses' attitude and practice toward communication with patients of decreased level of consciousness and its relationship with ethical care in ICU: A cross-sectional study

Fatemeh Pooyanfard[1] | Farideh Razban[1] | Neda Asadi[1] | Saiedeh Haji-Maghsoudi[2]

[1]Nursing Research Center, Kerman University of Medical Sciences, Kerman, Iran

[2]Modeling in Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

Correspondence
Neda Asadi, Nursing Research Center, Kerman University of Medical Sciences, Kerman, Iran.
Email: Nedaasadi87.nax@gmail.com

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Abstract

Background and Aims: Communication between intensive care unit (ICU) nurses and patients with decreased Level of Consciousness (DLOC) is now regarded as a difficult task. Proper communication is regarded as a crucial component of care and stems from the attitude and practice of nurses. Intensive care nurses are responsible for providing care to patients with DLOC in accordance with ethical principles because care and ethics cannot be separated. To better understand ICU nurses' attitudes and practice toward communicating with patients who have decreased levels of consciousness and how this affects the provision of ethical care, the current study was conducted.

Methods: This is a cross-sectional study. Two hundred ICU nurses from southeast Iran took part in this study. Three questioners, including attitude and practice toward communicating with patients who decreased Levels of consciousness, and ethical Care were used as data collection tools.

Results: The mean score for ICU nurses' attitude, practice, and ethical care towards communicating with patients with DLOC were, respectively, 4.02 ± 0.45,2.91 ± 0.49. The findings demonstrated a very weak correlation between the ICU nurses' attitude score and communication practice for DLOC patients ($p = 0.04$; $r = 0.14$).

Conclusion: Nurses who had a more positive attitude toward communicating with DLOC patients performed better in this area. It is suggested that nurses employed in ICUs should be monitored and judged based on how well they communicate with DLOC patients through workshops and conferences. By doing this, they would become more cognizant of the necessity for and effective methods of communication with these patients as well as the repercussions of their poor communication practice.

KEYWORDS

attitude, communication, consciousness, ethical care, intensive care nurse, practice

1 | INTRODUCTION

The neurological examination's most important step is figuring out the patient's level of consciousness. The patient's altered level of consciousness (ALOC) is frequently the first sign of neurological changes. Reduced consciousness occurs when a person appears to be awake and aware of their surroundings (conscious), but is not functioning normally. It can be due to a variety of factors, including drug side effects, brain damage, and metabolic disorders.[1] Over 85% of patients with diminished consciousness require specialized care and therapy.[2] Due to their extended hospitalization in the intensive care unit (ICU), these patients depend on nurses and nursing care. The presence of mechanical ventilation, a variety of electronic devices, the patient's critical condition, the course of treatment, and lack of consciousness are all things that nurses must pay close attention to to provide the highest level of nursing care.[3,4] In these circumstances, the patients cannot communicate with others or express their needs through natural speech, which could hinder their ability to recover.[5]

One of the biggest problems for patients with a decreased level of consciousness (DLOC) today is the breakdown in nurse-patient communication. In ICUs, nurses have a special relationship with patients and play a crucial role in communicating with patients who are unable to speak.[6] According to Holm & Dreyer (2018), communicating with a patient who has a lower level of consciousness revolves around two emotions: frustration and open communication.[7] Meanwhile, weak nurse-patient communication when patients have DLOC was mentioned by Dithole et al.[8] as a communication barrier with patients.[8] They demonstrated the gap in the literature that exists regarding nurses' concerns when it comes to communicating with patients who have a diminished level of consciousness. These circumstances are incompatible with delivering high-quality, secure, and patient-centered care.[6] It is highly advised to maintain a positive attitude, be a good listener, and grasp patients' needs by using appropriate skills to improve communication[9,10] along with providing useful and ethical care.[11]

The practice of nursing is regarded as a clinical activity that is intertwined with ethics.[12] Because of the nature of nursing, it is impossible to consider ethical compliance in care as separate from it.[13] In providing quality nursing care, ethical care encompasses attention to human, religious, and cultural values, as well as appearance and confidentiality. Due to technological advancements and the need to provide more complex care, ICU nurses face numerous ethical challenges every day.[14] Despite nurses' awareness of the significance of ethical issues, research indicates that the level of care delivered in accordance with ethical principles is not optimal.[15] According to studies, 98% of nurses are aware of how critical it is to pay attention to the ethical aspects of care. However, they often become confused and occasionally disregard these principles as a result of challenges like time constraints and a hectic schedule.[16,17] A moderate level of ethical principles was reported by nurses working in ICUs when providing patient care, per the findings of Borhani et al.[18] It is obvious that effective communication with the patient brings both the patient and the nurse's peace of mind. On the other hand, focusing particularly on the attitude and Practice of nurses in these areas, which are thought to be one of their inevitable roles, can be culturally influenced by the values that govern society. The present study was carried out with the intention of examining the attitude and practice of nurses in communicating with patients with a DLOC and its relationship with ethical care in ICUs since no study was found that examined these issues.

2 | METHODS

2.1 | Sample

In this cross-sectional study, nurses performing in the ICUs of three hospitals affiliated with the Kerman University of Medical Sciences were investigated. The ICUs were three general ICUs, two trauma ICUs, five Covid-19 ICUs, one surgical ICU, one cardiac surgery ICU, and one stroke ICU. After conducting a pilot study on 30 ICU nurses, the sample size was calculated to be 186 people based on a confidence interval (CI) of 95% and a test power of 80%. To improve reliability, 200 nurses were incorporated into the study using convenience sampling method. Questionnaires were provided to nurses from August to November 2021 and during the morning, evening, and night shifts. The criterion for exclusion from the study was a lack of answers to more than 10% of the questionnaire items, which was met by none of the nurses.

2.2 | Data collection tools

2.2.1 | Background information questionnaire

Nurses working in ICUs provided demographic information such as age, gender, marital status, education level, type of ICU setting, for example, general, stroke, surgical, and so forth, work experience in ICU, total work experience, and working shift.

2.2.2 | Attitude towards communicating with patients who decreased levels of consciousness

This questionnaire was devised using an analysis of the literature[19,20] and experts' opinions. There are 10 items in the questionnaire, and they are graded on a 5-point Likert scale from completely disagree (5-points) to completely agree (3-points) (1-point). Items 1–3 through 10 were scored in reverse. The lowest score on this questionnaire is 1, and the highest score is 5.

2.2.3 | Practice in communicating with patients who decreased levels of consciousness

This questionnaire was created using both expert opinions and a review of the literature.[21-24] A 5-point Likert scale with 25 items

ranging from zero to 4-points, always (4-points) to never (0-points), makes up the questionnaire (1-point). Additionally, participants had the option of selecting "I don't know/I have no opinion" (0-points). The lowest total score on this questionnaire is 0, and the highest total score is four.

2.2.4 | Ethical care from patients with decreased levels of consciousness

In Iran,[17] Shafaat et al.[14] developed a questionnaire with 38 items divided into two categories: "Nurse and professional commitment" (20 questions), and "Nurse and clinical services" (18 questions). Items on the questionnaire range in value from 0 to four, with a Likert scale of 1 to 5 always (4) to never (1). Additionally, the option "I don't know/I have no opinion" was available for the participants to choose (0). The "Nurse and professional commitment" scores range from 0 to 80 on this questionnaire, while the "Nurse and clinical services" scores range from 0 to 72. Together, these two fields have a score of 0–152.

2.3 | Validity and reliability of instruments

Seven faculty members at Razi Nursing School and five ICU nurses with MSc degrees in ICUs were given the two scales—attitude and practice toward communicating with patients who decreased levels of consciousness—to assess their content validity. The instruments used in this study were finalized with the help of comments and adjustments, and the Content validity index was computed as 0.92 for the attitude questionnaire and 0.89 for the practice questionnaire. Additionally, 30 ICU nurses were given these two questionnaires to test their reliability. Cronbach's alpha values for the attitude and the practice questionnaire were 0.83 and 0.94, respectively.

Shafaat et al.[14] used the Content validity method to validate ethical care to patients with decreased levels of consciousness. In this way, the questionnaire was distributed to 11 ethics experts, professors, and nursing staff, who then made the necessary changes and approved the questionnaire in its final form. The reliability of this questionnaire was assessed using the internal consistency method, and the Cronbach's alpha coefficient was 0.896.[17]

2.4 | Ethical considerations

The Kerman University of Medical Sciences' research ethics committee gave its approval before the start of this study (ethics code: IR.KMU.REC.1400.116). The questionnaires were given to the nurses after giving the necessary explanations regarding the study's objectives and methodology. The nurses had the option to withdraw from the study at any time, so they were free to take part. They received assurances that their names were not required to be included in the questionnaires and that the information was being collected in a private manner. The researcher informed the nurses that he went to the appropriate department to deliver the finished questionnaires 2 days later to avoid interfering with the completion of the questionnaires with the care of the patients.

2.5 | Data analysis

The research was conducted using SPSS version 25. To describe the background information of the research units and the scores of attitude, practice, and ethical care in communicating with patients with DLOC, descriptive statistics (absolute frequency, relative frequency, mean, and standard deviation) were used. The results of the Kolmogorov-Smirnov test indicated that the scores obtained for attitude, practice, and ethical considerations did not follow a normal distribution; as a result, the relationship between these three variables was examined using the Spearman's test. Correlations were classified and interpreted according to Evans (1996): less than 0.20 is very weak, 0.20–0.39 is weak, 0.40–0.59 is moderate, 0.60–0.79 is strong and 0.80 or greater is a very strong correlation.[22] All tests were conducted two-side. The background information that predicted attitude, practice, and moral concern was determined using a multiple linear regression test. The participants' background data were entered into the multiple linear regression model using the backward method if the correlation between each of the three dependent variables and the univariate linear regression p Value was less than 0.2.[25]

3 | RESULTS

3.1 | Descriptive findings

According to Table 1, 200 nurses working in ICUs at hospitals affiliated with the Kerman University of Medical Sciences partook in this study. Most of the participating nurses were aged 20–30 years (53.3%), female (81.0%), married (60.5%), and had a BSc degree (90.0%). Most of them had worked in the general ICU (38.5%) and surgical ICU units (35.5%). Their mean total work experience was 5.82 ± 7.62 and the mean work experience in ICU was 5.31 ± 6.14.

According to Table 2, the results indicated that the mean score for nurses' attitudes toward communicating with DLOC patients was 0.45 ± 4.02. The highest mean positive attitude was, respectively, for items representing "communication is important" (0.71 ± 4.86), "communication is not boring" (0.74 ± 4.56), and "no patient communication is unethical" (1.04 ± 4.53) with patients with a DLOC. The lowest mean positive attitude was related to the items denoting "I feel comfortable during communication" (1.20 ± 3.04) and "nurse-patient communication is not difficult" (1.37 ± 3.03) with DLOC patients.

Furthermore, the results demonstrated that the mean score of nurses' total practice in communicating with DLOC patients was 0.49 ± 2.91 out of the total 4.0 scores (Table 2). The highest mean score for nurses' practice in communication with such patients, respectively, was related to the items "I avoid using inappropriate words with the patient" (0.97 ± 3.27), "I talk to the patient gently and

TABLE 1 Background Information of ICU Nurses.

Variable	Category	Number (%)
Age	20–30	106 (53.3)
	31–40	55 (27.7)
	41–50	31 (15.6)
	51–55	7 (3.5)
	Mean ± SD	33.08 ± 8.48
Sex	Female	162 (81.0)
	Male	38 (19.0)
Marital state	Single	79 (39.5)
	Married	121 (60.5)
Education	BSc	180 (90.0)
	MSc	20 (10.0)
Working setting	General unit	77 (38.5)
	Surgery unit	71 (35.5)
	Stroke unit	10 (5.0)
	Trauma unit	42 (21.0)
Total work experience [year]	<2	17 (8.5)
	2–5	65 (32.5)
	5–10	50 (25.0)
	>10	68 (34.0)
	Mean ± SD	7.62 ± 5.82
ICU work experience	<2	45 (22.5)
	2–5	59 (29.5)
	5–10	35 (17.5)
	>10	61 (30.5)
	Mean ± SD	6.14 ± 5.31
Shift of work	Rotating	191 (95.5)
	Fixed	9 (4.5)

Abbreviation: SD, standard deviation.

TABLE 2 Attitude, practice, and ethical care of ICU nurses in communicating with patients with decreased level of consciousness.

Variable		Mean ± SD	
Attitude	Total score	Total 5	
		0.45 ± 4.02	
Practice/ practice	Total score	Total 4	
		0.49 ± 2.91	
Ethical care	Nurse and professional commitment	Total 80	Total 40
		25.86 ± 63.13	0.37 ± 3.77
	Nurse and clinical service	Total 77	Total 4
		17.76 ± 54.42	0.32 ± 3.69
	Total score	Total 157	Total 4
		40.82 ± 117.56	3.74 ± 0.31

Abbreviation: SD, standard deviation.

TABLE 3 The relationship between attitude, practice, and ethical care of ICU nurses in communicating with decreased level of consciousness.

	Ethical care			
Variable	Nurse and professional commitment	Nurse and clinical service	Total	Total practice
Total attitude	$R = -0.003$	$R = 0.09$	$R = 0.14$	$R = 0.14$
	$p = 0.96$	$p = 0.17$	$p < 0.57$	$p < 0.04$
Total practice	$R = -0.006$	$R = 0.07$	$R = -0.047$	–
	$p = 0.93$	$p = 0.28$	$p = 0.50$	

Note: Significance level was set at $p < 0.05$.

respectfully" (0.79 ± 3.24), and "I avoid interrupting the patient." The lowest mean score for nurses' Practice in communication with DLOC patients was related to the items "I use closed answer questions" (0.95 ± 2.40), "I inform the patient about the time/date" (0.99 ± 2.60), "When talking to the patient, I touch him (in same nurse-patient genders)" (0.92 ± 2.61) and "I use the hand, face, and body movements" (0.86 ± 2.83), respectively.

The mean score for nurses' ethical care to patients with decreased levels of consciousness was 40.82 ± 117.56 out of total 152 points. The mean scores for subscales, that is, "Nurse and Professional Commitment" was 25.86 ± 63.13 out of 80 points, and the "Nurse and Clinical Services" was 17.76 ± 54.42 out of total 72 scores. The scores of the two fields were also calculated as mean scores with the aim of comparing the scores for both subscales because the number of items in the two components varied from one another. The results showed that the score of "Nursing and Professional Commitment" (0.37 ± 3.77 out of 4) was slightly higher than that of "Nursing and Clinical Services" (0.32 ± 3.69 out of 4) (Table 2).

3.2 | Analytic findings

The findings demonstrated a direct and significant very weak correlation between the overall attitude and practice scores of the ICU nurses ($p < 0.04$; $r = 0.14$). As a result, nurses who approach communicating with DLOC patients with a more positive attitude would then perform better in this area (Table 3).

Multivariable linear regression results revealed that the attitude score enhanced by 0.01 units for each year that the participants' ages increased. This value ranged from 0.009 to 0.02 with a 95% confidence level ($p < 0.001$). The overall attitude scores for the nurses decreased by 0.01 points for every additional year of work experience. This number was between −0.006 and −0.03 with a 95% CI ($p < 0.003$). The nurses working in the surgical ICU had an overall

TABLE 4 The Relationship between background information of ICU nurses and their attitude and ethical care in communicating with DLOC patients (multivariate linear regression).

		Total attitude			Total ethical care		
Variable		Regression coefficient	Confidence interval	*p* Value	Regression coefficient	Confidence interval	*p* Value
Age		0.01	0.24–0.009	<0.001	−0.93	−0.20 to −1.66	<0.01
Total Work experience		−0.01	−0.06 to −0.03	<0.0003	3.76	4.48–2.04	<0.001
Working setting	General	−0.17	0.03 to −0.28	0.11	–		
	Surgery	−0.28	−0.17 to −0.45	<0.001			
	Stroke	−0.44	−0.14 to −0.73	<0.003			

attitude score that was 0.28 points lower than the nurses working in the stroke ICU. This value ranged from −0.45 to −0.17 with a 95% confidence level ($p < 0.001$). The nurses working in the stroke ICU had an overall attitude score that was 0.44 points lower than the nurses working in the stroke ICU. This value was between −0.73 and −0.14 with a 95% CI ($p < 0.003$).

According to the findings of multivariate linear regression, there was no correlation between any of the background data and the ICU nurses' overall Practice score. But, Table 4 shows that the total score for ethical care was 0.93 units ($p < 0.01$) and the score for the subscale "Nursing and Professional Commitment" was 0.68 units ($p < 0.004$) for every year that the average age of nurses increased. The score for "Nurse and Professional Commitment" was 1.98 units ($p < 0.001$), the score for "Nurse and Clinical Service" was 0.62 units ($p < 0.004$), and the overall ethical care score increased by 3.26 points ($p < 0.001$) for every additional year of a nurse's total work experience.

4 | DISCUSSION

Proper communication, which stems from nurses' attitudes and practice, is regarded as an essential component of ethical care to understand and meet the needs of patients with a diminished level of consciousness.[27] The findings of this study demonstrated that the majority of the research units had a positive attitude toward communicating with DLOC patients in ICUs. The positive attitude of nurses toward communicating with DLOC patients, according to Aghaei et al.[26] might indeed contribute to enhancing their communicative abilities. According to Dithole et al.[8] a barrier to ICU nurse-patient communication is nurses' undesirable attitudes toward communicating with patients who have a reduced level of consciousness.[28] Effective patient communication results in improved psychological conditions for the patient, successful disease management, higher patient satisfaction, medication adherence, and patient self-management, as well as lower financial and medical-legal costs. In the nursing field, attitude is essentially a concept that is highly valued.[26]

The findings indicated that nurses' overall Practice in terms of communication with DLOC patients was rated as having an average mean score. According to a study, more than half of the patients had a favorable opinion of the nurses' efforts and Practice in establishing nonverbal communication.[27] Nevertheless, according to the study by Maghaminejad et al.,[28] only 50% of the nurses performed well in terms of having proper communication with the patient while dressing, and their mean score was at an average level.[10] It might be because the ICU nurses were not really aware of the significance of patient communication issues when providing care. The provision of safe, efficient, and high-quality care requires effective communication techniques.[29]

All nurses scored fairly highly for ethical care, according to the study's findings. In this regard, it was demonstrated in the study by Shafaat et al. (2020) that all nurses in ICUs had a relatively high ethical care score.[30] However, the study by Kuzu et al. in Turkey (2006) showed that some standards of professional ethics were not well respected among nurses, and patients' right to privacy was preserved only in 1.68 cases.[31] The discrepancy between the findings of these and that of the current study appears to be due to differences in the research communities, the cultures of the communities, and managerial and organizational factors. The longer a patient stays in the hospital, the more satisfied they are with the nursing care, and the more their need for security and identity is met when nurses adhere to ethical standards in patient care.[30]

The findings demonstrated that nurses who communicated with patients who were less alert with a more positive attitude had higher scores for care practice and ethical care in doing so. This study by Mohajalaghdam et al. (2013) demonstrated that nurses perform favorably in relation to patients' ethical dilemmas.[32] At first glance, nursing practice may be considered a clinical activity and separate from ethics, while clinical practice is never separated from ethics. Nurses' negative attitudes, time constraints, and workload may affect how they practice nursing.[10]

The results showed that nurses' total attitude scores decreased for every additional year of experience, indicating that nurses with less experience are more optimistic when communicating with patients than nurses with more experience. In this regard, the study by Abate et al. (2019) demonstrated a statistically significant relationship between ICU nurses' positive attitudes toward end-of-life care and their work experience of 6 to 10 years.[33] However, Khajehmirzaei et al.[34] stated that the work experience variable had no statistically significant relationship with ICU nurses' attitude

toward end-of-life care. This difference might be brought about by the hospitals' various organizational cultures, goals, and community cultures. Additionally, the findings indicated that the nurses working in the surgical ICU had a lower overall attitude score than the nurses working in the trauma ICU. The nurses who worked in the stroke ICU had a lower overall attitude score than the nurses who worked in the trauma ICU. Considering the vital role of nurses in providing the necessary care to patients with life-threatening conditions, they should consider themselves committed to learning special skills and having appropriate attitudes towards these patients.

The findings showed that the scores for "Nursing and Professional Commitment," "Nursing and Clinical Services," and the overall score for ethical care increased for every additional year of work experience a nurse had. Additionally, the outcomes demonstrated that the score of "Nursing and Clinical Services" and the overall score of ethical care increased for each year of work experience in the ICU. Young nurses are more likely to feel helpless in the face of issues because they lack the experience, knowledge, and skills to get past their limitations. However, nurses with more work experience are better able to handle ethical issues and questions because they have dealt with a variety of situations from an ethical perspective. There was no correlation between work experience and ethical care, according to a study by Ikafah et al.[35] The fact that their research samples were drawn from a variety of societies explains why their findings conflict with those of the current study. Additionally, the findings demonstrated that as nurses' age, both the overall score for ethical care as well as the score in the category of "Nursing and Professional Commitment" increased. Based on these findings, nurses acquire expertize that is more clinical as they age and encounter various moral dilemmas, enabling them to make better decisions in various ethical care scenarios as they gain experience commensurate with advancing age. In this regard, the study by Shareinia et al. (2017) determined that there was a significant relationship between the total score of the professional and ethical values of nursing care and their employment status.[36] Therefore, in these studies, it was found that ICU nurses charged with proving care for patients with a low level of consciousness, regardless of any differences in demographic variables, try to provide care services with the highest ethical standards.

5 | CONCLUSION

The results of this research showed that nurses have a positive attitude towards communicating with DLOC patients and consider the issue of communication with these patients as important, and this positive view can have a positive effect on their performance in communicating with DLOC patients. It is clear that effective communication with the patient provides peace and comfort to the patient as well as the peace of mind of the nurses. It is suggested that nurses employed in ICU should be monitored and judged based on how well they communicate with DLOC patients through workshops and conferences. By doing this, they would become more cognizant of the necessity for and effective methods of communication with these patients as well as the repercussions of their poor communication practice.

AUTHOR CONTRIBUTIONS

Fatemeh Pooyanfard: Conceptualization; formal analysis; methodology; writing—review and editing. **Farideh Razban**: Conceptualization; software. **Neda Asadi**: Conceptualization; data curation; formal analysis; resources; writing—original draft. **Saiedeh Haji-Maghsoudi**: Data curation; methodology.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

All authors have read and approved the final version of the manuscript, corresponding author had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

TRANSPARENCY STATEMENT

The lead author Neda Asadi affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

ORCID

Neda Asadi http://orcid.org/0000-0001-7573-0452

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