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Barriers to Effective Communication Between Nurses and Patients from the Perspective of Emergency Nurses at Educational-Therapeutic Centers of Mazandaran University of Medical Sciences in 2023: A Cross-Sectional Study

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Abstract

Background: Effective communication between nurses and patients is essential for delivering quality patient care, particularly in high-pressure settings such as emergency departments.

Objectives: This study aimed to assess the barriers hindering effective nurse-patient communication, as perceived by emergency nurses employed at the teaching hospitals associated with Mazandaran University of Medical Sciences in Iran in 2023.

Methods: This cross-sectional study recruited 184 emergency nurses from five university hospitals using a census method. The sample population consisted of nurses working in emergency departments affiliated with Mazandaran University of Medical Sciences from May to August 2023, in Iran. Data were collected using demographic and the Barriers to Nurse-Patient Communication questionnaires, a validated and reliable instrument that assesses four domains hindering effective communication between nurses and patients. The data were analyzed using SPSS version 22.

Results: According to the calculations, 65.2% of the participants were female, with ages ranging from 23 to 54 years and work experience between 1 and 27.5 years. Additionally, 92.4% held a bachelor's degree, and 7.6% had a master's degree. The results showed that, according to the emergency nurses, the barriers to communication between nurses and patients in the four investigated areas, ranked from highest to lowest score, were occupational characteristics, environmental factors, personal-social factors, and patient's clinical conditions. The highest obstacles identified were: In the field of personal-social factors, patient's excessive expectations (4.05 \pm 0.88); in the field of occupational characteristics, heavy workload (4.32 \pm 0.90); in the field of patient's clinical conditions, presence of a companion (3.17 \pm 1.29); and in the field of environmental factors, lack of appreciation of nurses by officials (3.96 \pm 1.09). The barrier scores did not significantly correlate with nurses' demographic variables.

Conclusions: According to the results, the biggest obstacles were in the field of job characteristics of the emergency nurses. Therefore, the findings of this research can help nursing managers identify and adjust communication barriers between nurses and patients to adopt more effective strategies for teaching and evaluating nursing communication skills, ultimately fostering effective communication between nurses and patients.

Keywords: Barriers, Effective Communication, Emergency Nurses, Patients

1. Background

Communication is a dynamic process through which humans share their thoughts, emotions, and beliefs. It enables individuals to understand, accept, and be accepted by others, facilitating the exchange of information (1). Nursing, which encompasses knowledge, clinical practice, and interpersonal communication, recognizes effective communication as an essential component of social skills (2, 3). Communication plays a vital role in providing quality care and is integral to the professional responsibilities

of nursing, serving as a powerful tool to alleviate patient grief and suffering, creating comfort, happiness, and vitality (4). Effective communication is essential to safe and high-quality health care (5). In high-stress hospital environments like emergency departments, effective communication serves as the cornerstone of quality care services (6). Due to the nature of their duties, emergency nurses are the most effective in determining the quality of services provided. The unstable conditions of this department, along with the high volume of patients, pose more challenges compared to other departments (7). Therefore, communication in this

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department is of special importance and guarantees patient safety and quality of care (8).

Training in communication skills can effectively enhance communication between nurses and patients (9). Iwanow et al. have identified several interconnected factors, such as professional experience, empathetic disposition, and degree of agreeableness, that influence the development of communicative abilities in nurses (10). Furthermore, nurses with effective communication skills play an important role in minimizing the stress of hospitalization for patients and their families (11).

Poor communication can significantly compromise nursing care and patient education, necessitating the addressing of communication barriers to ensure highquality patient care and successful recovery (12). Communication barriers often negatively affect the selfconfidence of involved parties, leading to defensive reactions, resistance, or distress, with approximately 90 percent of communication issues arising from difficulties or unresolved needs (13). It is evident that many nurses face challenges in effectively communicating with their patients (9). Research indicates that nurses' lack of personnel, difficulty in nursing tasks, lack of acknowledgment by the authorities, physical and mental fatigue, and patients' excessive expectations are the main barriers to effective nurse-patient communication (1). Nurses' perspectives reveal that occupational characteristics, such as inadequate welfare facilities, low salaries, and heavy workloads, pose substantial barriers to effective communication with elderly patients (2). Amoah et al. highlighted environmental barriers, including a noisy environment, heavy work schedules, intensive nursing tasks, and lack of welfare facilities, which hinder effective therapeutic communication between nurses and patients (14).

Despite the abundant literature on communication barriers between nurses and patients, published studies have shown conflicting results, with some emphasizing nurses' occupational characteristics and others highlighting environmental factors as primary barriers (1, 14). Additionally, studies conducted in countries other than Iran identified language, culture, and religious differences as major barriers (15-17). Due to the conditions of the unpredictable emergency department, along with the high volume of patients who are discharged and admitted during a working day, there are more challenges compared to other departments (7). Therefore, communication in this sector is of particular importance and guarantees patient safety and quality of care (8). Given the available evidence, no study has been conducted that examines

the barriers to effective communication between emergency nurses and patients in Mazandaran province, considering the different cultural and social conditions.

2. Objectives

Considering the vital importance of effective nursepatient communication and the necessity to develop communication skills in emergency nurses for obtaining information from patients and identifying their problems, this study aimed to identify the barriers to effective communication from the perspective of emergency nurses in teaching hospitals affiliated with Mazandaran University of Medical Sciences.

3. Methods

3.1. Study Design

This study employed a descriptive cross-sectional design, conducted from May to August 2023 in the emergency departments of teaching hospitals affiliated with Mazandaran University of Medical Sciences (Imam Khomeini Sari, Bo Ali Sina Sari, Shahid Zare Sari, Fatemeh Zahra Sari, and Razi Qaim Shahr).

3.2. Study Population and Sampling

Inclusion criteria included having a minimum bachelor's degree, at least six months of clinical experience in the emergency department, and a willingness to participate in the study. Considering that the number of emergency nurses who met the criteria for entering the study in Mazandaran teaching hospitals was 192, the census method was used, and all eligible nurses were included in the study. Of these, 184 completed the questionnaire, while 8 declined to participate for personal reasons.

3.3. Research Tools

Data collection instruments consisted of a sociodemographic questionnaire and the Barriers to Nurse-Patient Communication questionnaire. The sociodemographic questionnaire included variables such as age, gender, marital status, education level, employment status, work experience, work shift, monthly overtime, and participation in communication skills workshops. The Barriers to Nurse-Patient Communication questionnaire comprises 30 items encompassing four dimensions: Individual-social factors (8 items), occupational characteristics (9 items), patients' clinical conditions (4 items), and environmental factors (9 items). Responses were scored on a 5-point Likert scale, ranging from 1 (completely disagree) to 5 (completely agree). Total scores for each dimension were calculated by summing the scores of the 30 questions. Baraz and Mosavi assessed the validity and reliability of the questionnaire and confirmed it, with a reliability coefficient of 0.85 (18). In this study, Cronbach's alpha was 0.82, indicating acceptable reliability.

3.4. Data Analysis

Descriptive statistics such as mean, standard deviation, frequency, and percentage were used for data analysis. The Kolmogorov-Smirnov test was conducted to verify the normality of the data for inferential statistics. Since normality was confirmed, parametric tests were employed, including a t-test (for comparing the means of two groups), analysis of variance (for comparing the means of more than two groups), and Pearson correlation coefficient (for checking the correlation between two quantitative variables). Additionally, multiple regression analysis was conducted to identify factors influencing the total questionnaire score while controlling for confounding variables. Friedman's test was also used to prioritize the questionnaire items. The data were analyzed using SPSS version 22, with a significance level of $P \le 0.05$.

3.5. Ethical Consideration

Ethical approval was obtained from Mazandaran University of Medical Sciences. Informed consent was obtained from the study participants. The study protocol was approved by the ethical committee of Mazandaran University of Medical Sciences (IR.MAZUMS.REC.1402.046).

4. Results

Based on the study findings, the majority of participants were women, accounting for 65.2%, while men comprised 34.8% of the sample. The average age of the participants was 33.29 ± 5.76 years, with ages ranging from 23 to 54 years old. The average work experience was 9.17 ± 5.09 years, ranging from 1 to 27.5 years. The nurses worked an average of 49.21 ± 24.53 hours of overtime. Additionally, 170 participants (92.4%) possessed a bachelor's degree, while 14 (7.6%) held a master's degree. Regarding communication skills training, 121 (65.8%) of the participants reported receiving such training, as shown in Table 1.

Variables	No. (%)
Gender	
Male	64 (34.8)
Female	120 (65.2)
Marital status	
Single	61 (33.2)
Married	116 (63)
Widowed/divorcee	7 (3.8)
Education level	
Bachelor's degree	170 (92.4)
Master's degree	14 (7.6)
Work shift	
Fixed	19 (10.3)
Rotating	165 (89.7)
Employment	
Permanent employee	102 (55.4)
Temp-to-hire employee	31 (16.8)
Contractual employee	6 (3.3)
Agency employee	16 (8.7)
Bonded employee	29 (15.8)
Communication skills training	
Yes	121 (65.8)
No	63 (34.2)

The mean scores of the Barriers to Nurse-Patient Communication questionnaire were compared across the demographic characteristics of the emergency nurses. Independent t-tests and analysis of variance were conducted to examine differences in scores based on gender, education, work shift, communication skills training, as well as marital and employment status. However, the results indicated that there was no significant association between barrier scores and these variables, as the calculated p-values were greater than 0.05 (Table 2).

Table 2. Comparison of Barriers to Nurse-patient Communication Questionnaire Score Based on the Demographics Characteristics of the Emergency Nurses

Variables	Mean ± SD	P-Value
Gender		0.652
Male	101.64 ± 13.75	
Female	102.62 ± 14.04	
Marital status		0.158
Single	99.75 ± 14.18	
Married	103.78 ± 13.29	
Widowed/divorcee	99.28 ± 19.65	
Education		0.813
Bachelor's	102.35 ± 13.78	
Master's	101.43 ± 15.98	
Work shift		0.859
Fixed	101.74 ± 13.04	
Rotating	102.34 ± 14.05	

Variables	Mean ± SD	P-Value
Employment status		0.571
Permanent employee	101.88 ± 14.47	
Temp-to-hire employee	102.26 ± 13.29	
Contractual employee	111.83 ± 8.84	
Agency employee	101.75 ± 15.30	
Bonded employee	102.00 ± 12.70	
Communication skills training		0.401
Yes	102.90 ± 14.31	
No	101.08 ± 13.14	

Table 3 summarizes the findings of the four domains that affect nurse-patient communication. The nurses reported that the most significant barrier in the personal-social factors domain was the patient's excessive expectations. Other barriers in this domain, ranked from high to low importance, included the nurses' bad temper, the patients' unfamiliarity with the nurse's job description, the nurse's problems outside work, the nurse's lack of local language proficiency, and nurse-patient differences in gender, social class, and age.

Table 3. Mean and Standard Deviation of Barriers to Nurse-patient Communication Questionnaire Domains

Questions Related to Each Domain	Mean ± SD
Personal-social factors' factors	
Nurse-patient age difference	2.28 ± 1.1
Nurse-patient gender difference	2.55 ± 1.1
Nurse's unfamiliarity with the local language	3.10 ± 1.2
Nurse-patient social class difference	2.47 ± 1.2
Nurse's problems outside the work environment	3.40 ± 1.1
Patient's unfamiliarity with the nurse's job description	3.70 ± 1.10
Nurse's bad temper	3.74 ± 1.1
The patient's excessive expectations	4.05 ± 0.88
Occupational characteristics	
Insufficient welfare facilities for nurses	3.82 ± 1.1
Nurse's low salary	4.03 ± 1.1
Difficulty of nursing tasks	4.15 ± 1.0
Heavy workload	4.32 ± 0.90
Work shift	3.29 ± 1.3
Nurse's disinterest in work	3.57 ± 1.2
Physical and mental fatigue of nurses	4.11 ± 0.99
Patients' interaction with nurses with different spirits	3.13 ± 1.13
Lack of information and skill of nurses regarding communication with patient	3.58 ± 1.2
Patient's clinical condition	
History of hospitalization	2.67 ± 1.20
Presence of companion	3.17 ± 1.2
The severity of the illnesses	2.83 ± 1.2
Patient's exposure to communicable diseases	2.97 ± 1.2

Questions Related to Each Domain	Mean ± SD
Lack of communication skills training during nursing education	3.51 ± 1.13
Lack of in-service training on communication skills	3.49 ± 1.08
Lack of amenities (medical welfare) for patients	3.41 ± 1.16
The staff's not performing their tasks properly	3.43 ± 1.07
The unsanitary patient's room	3.27 ± 1.14
High cost of treatment	2.97 ± 1.25
A sense of injustice in the workplace	3.47 ± 1.14
Lack of acknowledging nurses by the authorities	3.96 ± 1.09
Not involving the nurses in decision-making in the workplace	3.56 ± 1.13

In the occupational characteristics domain, the main barrier was the nurse's heavy workload. Other barriers in this domain, in descending order of importance, were the difficulty of nursing tasks, nurses' physical and mental fatigue, low salary, insufficient welfare facilities for nurses, lack of information and skills for communicating with patients, disinterest in work, work shift, and patients' interaction with different nurses.

In the patient's clinical condition domain, the presence of a companion was the most crucial factor. Other factors in this domain, from high to low importance, were the patient's exposure to communicable diseases, severity of illnesses, and history of hospitalization.

In the environmental factors domain, the lack of acknowledgment for nurses by the authorities was the foremost barrier. Other barriers in this domain, in order of importance, were the sense of injustice in the workplace, lack of communication skills training during nursing education, lack of involvement of nurses in decision-making, lack of in-service training on communication skills, lack of amenities for patients, improper performance of other staff, unsanitary patient rooms, and high cost of treatment.

Linear regression was employed to investigate the simultaneous effect of all demographic variables on the total score of barriers to nurse-patient communication. However, the results from the regression analysis indicated that none of the demographic variables had a significant correlation with the total score.

5. Discussion

The findings showed that, from the perspective of emergency nurses, the biggest obstacles to communication between nurses and patients, according to personal-social characteristics, were patients' excessive expectations and the quick temper of nurses. The least significant obstacles were the class and

identified high expectations from patients and strict morals of nurses as the most important individual and social factors affecting communication (1). In contrast, the research by Alahmari et al. found that linguistic and cultural differences between patients and nurses created communication barriers (19), which is inconsistent with our study. This discrepancy may be due to cultural, social, and linguistic differences among the research samples, which can lead to different results.

Regarding the job characteristics of nurses, the findings indicated that a heavy workload and the difficulty of nursing tasks were the main communication barriers emphasized by the nurses. This aligns with the research of Amoah et al., which identified a low number of nurses and high workload as obstacles to effective communication between nurses and patients (14). Similarly, Appiah et al. (2023) highlighted increased workload and stress as barriers to nurse-patient communication (20).

From the point of view of emergency nurses, the most significant obstacle related to patients' clinical conditions was the presence of a companion. Abdi et al. identified the severity of the disease as an obstacle to effective communication between patients and nurses (2), which differs from our study. This difference may be due to variations in the research environment and sample populations. While our study focused on emergency nurses, Abdi et al.'s study included nurses from all hospital departments.

From the perspective of emergency nurses, in terms of environmental factors, the most significant barrier was the authorities' lack of appreciation for the nurses. This finding aligns with the results of Maleki et al.'s research, which also identified the lack of appreciation from authorities as the most important obstacle to the nurse-patient relationship (1).

The study found that emergency nurses ranked occupational factors as the most significant barriers to followed nurse-patient communication, by environmental factors, personal-social factors, and patients' clinical conditions. These findings are consistent with those of Ramezanli et al., who identified heavy workloads, challenging tasks, insufficient resources, and fatigue as the primary occupational barriers to effective communication (21). Additionally, Abdi et al. emphasized that the most significant barrier nurse-patient communication with individuals was related to occupational characteristics. followed by environmental, personal-social, and clinical factors (2). Habibzadeh et al. also showed that students ranked occupational characteristics as the highest

barrier and patients' clinical conditions as the lowest barrier to communication (22).

Furthermore, Amoah et al. and Al-Kalaldeh et al. both revealed that an inadequate number of nurses and a heavy workload were among the main barriers to effective communication, while demographic characteristics such as age, gender, and cultural and religious differences between nurses and patients were among the least important barriers (14, 23).

The study did not find any significant correlation between communication barrier scores and the demographic variables of emergency nurses, including age, work experience, and overtime hours. However, a few studies have identified significant relationships hetween some demographic variables communication barriers. For example, Ramezanli et al. found that age and working hours affected the communication barriers between nurses and patients (21). Abdi et al. found that age, gender, and marital status influenced the communication barriers between nurses and elderly patients in different domains (2). The difference in the findings of the mentioned studies and our study could be due to the differences in the study samples.

5.1. Limitations and Strengths of the Study

Among the strengths of the present study is that it was the first project carried out in the north of Iran, specifically focusing on identifying the weaknesses in the interaction and communication between nurses and patients in this region. On the other hand, one of the limitations is the reliance on self-reported questionnaires, which is inherent to this type of study and beyond the control of the researcher.

5.2. Conclusions

The findings of this research can help nursing managers identify and address communication barriers between nurses and patients, facilitating effective nursepatient communication. Given the importance of communication in the treatment process, providing amenities and facilities to reduce nurse fatigue, reducing working hours, and appreciating nurses with effective communication skills can enhance nursepatient interactions. Additionally, nursing managers should implement methods to improve and promote organizational justice, thereby increasing nurses' sense of organizational fairness. The findings of this research can also assist nursing managers in adopting effective strategies for training and evaluating communication skills of nursing personnel.

According to the study results, the lack of communication skills training during nursing education ranked third among the environmental barriers to nurse-patient communication. Therefore, nursing education officials can use these findings to introduce nurses to the latest advancements in human communication science and its importance. By holding in-service training classes and incorporating communication skills into the educational curriculum for nursing students, they can take effective steps towards improving nurse-patient communication.

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Footnotes

Authors' Contribution: R.E and Z.A.K suggested the study conception and design. Z.A.K, O.K, performed material preparation, data collection and performed data analysis. R.E, Z.A.K, O.K, A.H.N wrote the first draft of the manuscript. All authors read and approved the final manuscript.

Conflict of Interests Statement: There is no conflict of interest in conducting the study, extracting the data, and reporting the results.

Data Availability: Availability of data and materials: The dataset supporting the conclusions of this article is included within the article and its additional file.

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