

*Original Article****Nurses Communication Skills Training and Its Effect on Patients' Satisfaction in Teaching Hospitals of Shiraz University of Medical Sciences***Parnian Nikmanesh¹ Behjat Mohammadzadeh² Samin Nobakht² **Ali Reza Yusefi**^{3*}

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Abstract

Background and Purpose: Communication skill is a key ability and an integral part of the nursing profession. This study aimed to investigate the effect of communication skills training of nurses on patients' satisfaction with nursing staff in teaching hospitals affiliated to Shiraz University of Medical Sciences.

Materials and Methods: This Cross-sectional study was carried out in 2017. The research population consisted of the patients visiting 13 SUMS-affiliated hospitals, 581 nurses who participated in communication skills training courses, and 2,207 nurses who did not receive this training. From this population, a total of 400 patients were selected through convenience sampling and 50 trained nurses and 50 untrained nurses were chosen randomly. The data collection instruments were the Nurse Quality of Communication with Patient Questionnaire (NQCPQ) and La Monica-Oberst Patient Satisfaction Scale (LOPSS). Data were analyzed in SPSS using T-test, ANOVA, Tukey test, and Pearson correlation coefficient at $\alpha = 5\%$.

Results: A significant correlation was found between nursing-patient communication (NQCPQ) score and patient satisfaction (LOPSS) score ($P=0.021$, $r = 0.647$). Patients under the care of trained nurses were also found to be more satisfied with nursing services than those served by untrained nurses ($P=0.011$, $t=2.56$). The results showed that patient satisfaction had a significant relationship with age and marital status ($p = 0.027$).

Conclusions: The results of the present study showed that the implementation of communication skills training courses for nurses can lead to improved patient satisfaction. Hospital directors were then recommended to hold regular communication skills training courses for their nursing staff.

Keywords: Education; Communication; Nurses; Patient Satisfaction

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1. Introduction

In the healthcare profession, the acquisition and use of communication skills play a key role in the accurate diagnosis of diseases, providing effective treatment, improving patient satisfaction, and resolving their problems (1). Communication is an essential tool for healthcare providers to gather critical information, make proper decisions, and send empathy signals to the recipients of these services (2). Providing quality nursing care requires a professional, but the one who can make empathic relationship with patients (3); thus, communication is a fundamental concept and an important part of nursing profession (4). Nurses have to overcome many challenges with varying degrees of difficulty, intensity, and personal impact depending on the type of treatment environment (5). They are given tasks to provide comprehensive healthcare in close contact with patients, and patients need nurses for self-care and nursing services (6). Thus, the quality of interaction between nurses and patients can be regarded as a metric for the care efficacy and dynamicity (7). As a result, an improvement in the nurses' communication skills will lead to positive changes in their professional behavior and, therefore, in clinical conditions of patients (8).

Research has shown that proper nurse-patient communication can improve the patient health not only in regard to disease, but also in physical, emotional, mental, and social sense (9). Studies also show that the source of many complaints about care services and incorrect implementation of physicians' orders by patients is the communication problems rather than the incompetence of healthcare staff (8). A study conducted by Cinar et al. indicated

that communication skills training programs led to improved communication skills of emergency medicine residents, increased patient satisfaction, and reduced complaints (10). In another study, Bays et al. found that improved communication skills improved the skills of trainees to deliver bad news and show empathy with patients suffering from severe conditions (11).

Another issue closely associated with the quality of healthcare services is how to measure the patient satisfaction. With the rising social pressure on healthcare systems to improve the care service quality, the increasing involvement of the media in confrontation to shortcomings, and the higher awareness of patients about their rights and consequently their rising expectations, these systems now have to pay closer attention to the results of patient satisfaction surveys, and give higher priority to patient rights (12). Patient satisfaction is the outcome of a complex set of factors and cannot be achieved without careful attention to several aspects of services, including the quality of nursing care (12). In this regard, the proper nurse-patient communication is a basic necessity for the trust between nurses and patients, and the provision of safe and high-quality service (13), which can lead to improved patient satisfaction. A study by Ozaras and Abaan indicated that the nurses' communication problems and inability to establish positive relationships with patients were among the causes of distrust between patients and nurses (6), which can lead to patient dissatisfaction. Given the importance of communication of service providers with patients and its role in shaping the patients' perception of nursing service, this study aimed to investigate the effect of communication skills training of

nurses employed in educational hospitals affiliated to Shiraz University of Medical Sciences on the patient satisfaction.

2. Materials and Methods

This Cross-sectional study was conducted in 13 hospitals affiliated to Shiraz University of Medical Sciences (SUMS) in 2017. The study population consisted of patients visiting these hospitals, nurses who received communication skills training (581 people), and nurses who did not receive this training (2047 people). In the beginning of the study, nursing personnel of hospitals were informed about the voluntary communication skills training courses to be held for nurses. A total of 581 nurses enrolled and completed all the courses. The courses were held by the training supervisor of each hospital under the supervision of the researchers. The courses consisted of nine two-hour sessions held over a period of three months. Communication skills topics covered in the courses included basic communication concepts, types of communication, communication process and components (in accordance with SMCR-F Model (Source, Message, Channel, Receiver-Feedback)), features of a positive communication, determinants of communication quality, basics of nurse-patient communication, stages of nurse-patient communication, barriers to communication, and nurse-patient communication framework and ethics. The training was conducted with active participation of nurses through mutual discussions.

At the end of the courses, the sample size was determined using the sampling method of the rule of thumb and based on the opinion of the statistical advisor. In this way, in less than two months from the end

of the courses, 50 trained and 50 untrained nurses were randomly chosen for comparison. For this purpose, the total sample size was divided among 13 hospitals in proportion to hospital size, and then in each hospital, the nurses were chosen at random based on their employee code with the help of a random number table. For patients, the sample population was formed through convenience sampling based on a preliminary study and the rule of thumb on 400 patients (200 patients under the care of trained nurses and 200 patients served by untrained nurses). The inclusion criteria were as follows: patients older than 18 years of age with at least 3 days of hospitalization and the ability to participate in the study and without severe mental problems. In the case of patients lacking sufficient consciousness or those admitted to ICU, the questionnaires were filled out by the patient accompaniment (close relative/guardian).

Data collection instruments included two standard questionnaires: The Nurse Quality of Communication with Patient Questionnaire (NQCPQ) developed by Vokovic et al. (14), and Patient Satisfaction Scale developed by La Monica and Oberst (15). The NQCPQ consisted of two sections, one covering the demographic information of patients, and the other one containing questions about nurse-patient communication. The second section contained 24 questions on verbal, non-verbal, and general communication with responses provided based on 6-point Likert scale (Don't know=1, Never=2, Rarely=3, Sometimes=4, Often=5, Always=6). Based on the obtained total score, which could range from 24 to 144, the result of this questionnaire was interpreted as poor nurse-patient communication (scores between 24 and 64), moderate nurse-patient

communication (scores between 65 and 104), or good nurse-patient communication (scores between 100 and 144). La Monica-Oberst Patient Satisfaction Scale (LOPSS) contained 41 questions with responses provided based on 7-item Likert scale (from completely agree to completely disagree). Based on the total score (ranging from 41 to 287), the result of the scale was interpreted as poor patient satisfaction (41-123), moderate patient satisfaction (124-205), or good patient satisfaction (206-287). The face and content validity of these questionnaires were verified by 8 members of the faculty of medical and health services management at SUMS. The reliability of NQCPQ and LOPSS was assessed by pre-testing 60 questionnaires, which resulted in Cronbach's alpha of 0.87 and 0.89, respectively. Participation in the study was completely voluntary. All participants were briefed about the research objectives, were

assured about the confidentiality of information and responses given during the study, and asked to give oral consent. The questionnaires were distributed and collected anonymously. For illiterate patients, questionnaires were filled through private interviews. The data collected from completed questionnaires were entered into SPSS23 for analysis using T-test, ANOVA, Tukey test, and Pearson correlation coefficient at a significance level of $\alpha = 5\%$.

3. Results

The demographic features with most frequency among the participating patients were: being male (66.8%), being in the age group of 27-35 (27%), being married (77.3%), having a high school education (36.5%), being self-employed (24.5%), having two past visits to the hospital (42.3%), and having a hospital stay duration of 8-14 days (52.3%) (Table 1).

Table 1. Demographic characteristics of participating patients

Variable	Class	Number	Percent
Age	18-25	80	20.0
	26-35	108	27.7
	36-45	102	25.5
	46-55	84	21.0
	>55	26	6.5
Gender	Male	267	66.8
	Female	133	33.2
Marital status	Single	66	16.5
	Married	309	77.2
	Widow(er)/divorced	25	6.3
Education	Illiterate	5	1.3
	Elementary school	39	9.7
	Middle school	72	18.0
	High school	146	36.5
	College	138	34.5
Occupation	Teacher	34	8.5
	Office employee	61	15.2
	Military	33	8.2
	Farmer	67	16.8
	Self-employed	98	24.5
	Housewife	70	17.5
	Others	37	9.3
Number of past hospital visits	Once	151	37.7
	Twice	169	42.3
	Three times	58	14.5
	Four times	22	5.5
Duration of stay	3-7 days	155	38.7
	8-14 days	209	52.3
	15 days and more	36	9.0

As shown in Table 2, the mean satisfaction (LOPSS) scores of the patients under the care of trained nurses and those served by untrained nurses were 174.27 ± 21.14 and 165.55 ± 42.10 , respectively. A significant relationship was found between the

communication skills training of nurses and the satisfaction of participating patients ($P=0.011$), in the sense that the patients who received care from trained nurses were significantly more satisfied with nursing service (Table 2).

Table 2. Mean and standard deviation of LOPSS score and its relationship with the communication skills training of nurses

Nurse	Number of patients	Mean	SD	t-statistic	P-value	Difference in means	SD of difference
Trained	200	174.24	23.14	2.56	0.011	8.71	3.39
Untrained	200	165.55	42.10				

According to the results, patients who received care from trained and untrained nurses had mean NQCPQ scores of 91.53 ± 23.06 and 82.84 ± 20.94 , respectively. Also, given the

results of the test of difference in means at 5% significance level ($P = 0.000$), improvement in the nurses' communication skills can be attributed to the training courses (Table 3).

Table 3. Mean and standard deviation of NQCPQ scores and results of the test of difference in means

Nurse	Number of patients	Mean	SD	t-statistic	P-value	Difference in means	SD of difference
Trained	200	91.53	23.06	3.94	0.000	8.68	2.20
Untrained	200	82.84	20.94				

The results showed a direct and significant correlation between patient satisfaction represented by LOPSS score and nursing-patient communication represented by NQCPQ score ($P = 0.021$, $r = 0.647$).

According to the results, patient satisfaction score had no statistically significant relationship with gender, education, occupation, stay duration, and the number of past visits ($P > 0.05$). However, patient

satisfaction showed a significant relationship with both age and marital status ($P=0.027$). The post hoc Tukey test showed that the mean satisfaction score was significantly lower in the age group of 36-46 than in the age group of 46-55. Also, the mean satisfaction score was significantly higher among married patients than single ones (Table 4).

Table 4. Relationship between the respondents' demographic variables and their satisfaction with provided nursing services

	Demographic variables	Test of significance	
		Test statistic	P-value
Patient satisfaction with provided nursing services	Age	F=6.012	0.000
	Gender	t=1.353	0.177
	Marital status	F=3.647	0.027
	Education	F=1.461	0.213
	Stay duration	F=9.245	0.084
	Occupation	F=1.231	0.290
	Number of past visits	F=0.632	0.594

4. Discussion

Proper communication between nurses and patients is a basic necessity for the effective provision of nursing services in the healthcare system. The aim of this study was to investigate the effect of communication skills training of nurses on the patient satisfaction with nursing services in the teaching hospitals affiliated to SUMS. The results showed that the mean nursing-patient communication (NQCPQ) score was significantly higher among trained nurses than untrained ones. This result demonstrated the effectiveness of such training on the quality of communication between nurses and patients, which was found to be consistent, in this respect, with the results of Norgaard (16) and Hausberg's studies (17). A study carried out by Raingruber et al. also found that communication skills and effective communication with patients had a significant impact on the care quality (18). Another study on the effect of training programs on interpersonal communication skills of nurses conducted by Zarei et al. also reported a significant difference in the nurses' attitudes and knowledge about communication skills before and after the intervention (19). Also, in a study carried out by Tanabe et al. in Japan, life skills training (which included communication skills training) increased the nurses' communication skills (20). Our results also showed a direct and significant correlation between nursing-patient communication (NQCPQ) score and satisfaction (LOPSS) score of the respondents, in the sense that the patients who received care from trained nurses were significantly more satisfied with nursing services than those who received care from untrained nurses. Patients' satisfaction can be influenced by

their mental perception, their awareness about their rights, communication skills of healthcare staff (especially nurses), and other factors, such as cultural, social, and economic contexts, as well as personality and demographic characteristics (21). Thus, nurses should be able to communicate with patients effectively in such a way that they understand their needs, determine the nursing measures most suitably for each patient, and adjust these measures as needed to improve the patient's comfort and wellbeing.

A study conducted by Yazdi et al. also found a significantly higher satisfaction scores among the patients under the care of nurses who participated in the communication skills training courses (22). In contrast, Rask et al. reported that there was no significant relationship between patient satisfaction and communication skills scores before and after the intervention (23). The cause of this inconsistency could be the type of skills covered in the training sessions, the follow-up after the intervention, or other related factors.

Our investigation of the relationship between patient satisfaction and demographic variables showed that patient satisfaction score had a significant relationship with age and marital status. A study carried out by Lee et al. in Canada also showed a significant relationship between the patient satisfaction and age, in the sense that older patients were more satisfied with services (21). The most important limitation of this study was the potential role of confounding variables, such as income level, in the patient satisfaction. Further studies are recommended to investigate the impact of communication skills on patient

satisfaction with proper control for such factors.

Implementation of communication skills training courses followed by the proper use of these skills by nurses in interactions with patients can improve the patients' satisfaction with nursing care. Hence, hospital directors and senior officials are recommended to hold coherent and continuous communication skills training courses for nurses, to enable them to learn the principles and techniques of emphatic and professional communication within a systematic and structured framework designed specifically for the acquisition of such skills. Naturally, the subsequent enhancement in the nurse-patient communication throughout the hospital system could result in significant improvement in the overall patient satisfaction with the provided care.

Conflicts of Interest

The authors declare that there is no conflict of interest.

Authors' Contribution

Parnian Nikmanesh and Ali Reza Yusefi developed the study concept and design. Samin Nobakht and Behjat Mohammadzadeh collected the data. Maryam Radinmanesh, Behjat Mohammadzadeh and Ali Reza Yusefi analyzed and interpreted the data. Parnian Nikmanesh and Ali Reza Yusefi wrote the manuscript. Samin Nobakht and Maryam Radinmanesh revised and edited the manuscript. All authors read and approved the final manuscript.

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