

**RESEARCH ARTICLE**

# Assessment of nurse–patient communication and patient satisfaction from nursing care

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**Abstract**

**Aim:** Professional communication between nurse and patient has a significant role in patient satisfaction with nursing care. The aim of this study was to assess nurse–patient communication and patient's satisfaction from nursing services in the burn wards of women and men.

**Design:** Participants were all patients admitted to the Burn wards at the Sina Hospital of Tabriz between September–December 2018. Nurse–patient communication and patient's satisfaction were assessed using at the time of discharge. Data were analysed by SPSS applying descriptive and inferential statistics.

**Results:** The results show that most patients were dissatisfied with nursing care. More than 80% did not know their nurse. There was a correlation between nurse–patient communication and patient satisfaction with nursing care and the sex variable was found to be significantly correlated with patients' satisfaction level. The weakness of nurses' communication with patients was evident in our study and patients were dissatisfied from this kind of communication, and consequently, patients' satisfaction was reported very low. Improving the satisfaction of patients in the hospital should be the priorities of the hospital managers. Therefore, by educating staff, especially nurses, identifying motivating factors as well as identifying dissatisfaction factors, improved patient satisfaction.

**KEYWORDS**

burn patient, nurse–patient communication, patient, satisfaction

## 1 | INTRODUCTION

The feeling of satisfaction from the services provided by the hospital is the most important right of each patient (Liu, Mok, & Wong, 2006). For this reason, patient satisfaction is considered as one of the important indicators of healthcare quality and there have been considered many plans to create, maintain and enhance it in recent years (Kol, Arıkan, İlaslan, Akıncı, & Koçak, 2018). Increasing patient

satisfaction reduces the risk of malpractice lawsuits, increases the profitability of hospitals in the competitive market, increases patient involvement in their own treatment and has a better chance of improving their health condition (Alam, Sikdar, Kumar, & Mittal, 2018), but despite the importance of this issue, most Iranian hospitals managers are unwittingly paying the least attention to it (Joolaei, Hajibabaei, Jafar Jalal, & Bahrani, 2011; Mogadasiyan, Abdolazadeh, Rahmani, Nikanfar, & Firoziyan, 2013).

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Patient satisfaction with care is a complex set of different factors, and to achieve this, it is necessary to examine the various dimensions of structural, medical, nursing and support services (Aiken et al., 2018; Noro, Roter, Kurosawa, Miura, & Ishizaki, 2018).

The importance of the professional communication of hospital staff with patients and their families is clear in their satisfaction rate with received care (McGilton, Irwin-Robinson, Boscart, & Spanjevic, 2006). Lack of communication can result in a lack of trust in the patient–nurse relationship (McGilton et al., 2006). The studies showed that communication between patients and their healthcare providers can affect patient outcomes and behaviour (Stewart, 1995).

Communication plays the most important role between the presenter (nurses and other staff) and the recipient of the services (patients) (Itri, Yacob, & Mithqal, 2017). The use of appropriate communication skills can help the patients in improving their status, having better psychological condition and satisfying (Bakker, Fitch, Gray, Reed, & Bennett, 2001).

In clinical settings, having an appropriate communication guarantees the better psychological position of the recipient of health services and success in treating the disease, controlling the pain, remembering the history of the disease and enhancing the satisfaction of the patients (Kruijver, Kerkstra, Bensing, & Wiel, 2000; Marhamati, Amini, Mousavinezhad, & Nabeiei, 2016).

Effective and professional communication is one of the key elements in the integrated implementation of nursing care (Bowles, Mackintosh, & Torn, 2001; McGilton et al., 2006). Several studies in Iran have shown that the quality of nursing care in the aspect of communication is poor from the point of view of patients (Marhamati et al., 2016; Matin, Parvin, Raeisi, Deris, & Raeisi, 2012; Neishabory, Raeisdana, Ghorbani, & Sadeghi, 2011; Rostami, Golchin, & Mirzaei, 2012).

Studies published in Iran show that studies have been done on the satisfaction of patients with cancer, internal medicine, surgery, heart and lung (Abbasi, Moatari, & Pourahmad, 2015; Jannati, Motlagh, Kolbadezhad, & Jafarnejad, 2016; Mogadasiyan et al., 2013), but the least attention has been paid to the nurse–patient communication and satisfaction of patients with burns from health-care services.

With increasing attention to the aggressive approach in the management and care of burn wounds, survival and life expectancy has increased in these patients (Gómez Martín, García Morato, de los Reyes Cortés, Fernández-Cañamaque, & Holguín, 2018).

The care provided by nurses is very important because they are constantly in the hospital and in charge of the care and treatment provided for the patients throughout the day and night. They are known as the biggest cause of progress or difficulty for the burn patient (Herndon, 2018). Therefore, patient's satisfaction from nursing services is one of the most important criteria for evaluating the quality of nursing care in patients with burn (Joolaei et al., 2011).

The nurses that responsible care for patients with burn injury have to need the high level of knowledge about physiological and psychological changes after burning, careful assessment skills to determine minor changes in patient's condition, rehabilitation, the

### What does this paper contribute to the wider global clinical community?

Based on our findings, the following were identified:

- Weakness in nursing care
- Patient dissatisfaction with nursing care
- Weakness in the interaction between the patient and the nurse
- The lack of attention of nursing and hospital managers to satisfaction patients

ability to communicate effectively with the patient, his fellows and the treatment team. These abilities lead to the high quality of care and increase the likelihood of patient survival and good quality of life (Brunner, Smeltzer, Bare, Hinkle, & Cheever, 2017).

Considering that the patients' complaints about the weakness of nursing care in the burn wards, increased readmissions and mortality of patients with burns, and also so far no study has been done on the satisfaction of patients with burns from nursing services and nurse communication with these patients in Iran, this study aims to describe the quality of nurse–patient communication and the patient's satisfaction from nursing services in the burn wards of women and men.

## 2 | METHODS

### 2.1 | Design of the study

This descriptive-correlational study was conducted to investigate the professional communication between nurses and patients with burns, patients' satisfaction with nursing care and also the relationship between these two variables using the La Monica Oberst Patient Satisfaction Scale (LOPSS) and Nurse Quality of Communication with Patient Questionnaire (NQCPQ). We obtained institutional review board approval for this study to collect and analyse data from the Committee of Ethics at Tabriz University of Medical Sciences with number IR.TBZMED.REC.1397.170.

### 2.2 | Participants

This study was carried out in the burn wards of women and men in Sina Hospital of Tabriz at the September 2018–December 2018. Sina Hospital is the Northwest Burn Center of Iran and has 78 active beds for patients with burn (the women's burns ward has 19 beds and the men's burns ward has 18 beds). The families speak Persian, Azerbaijani and Turkish.

In order to calculate the sample size, using Morgan's table and G\*Power with 0.80 power at the 0.05 alpha level, the average hospitalization of 1,100 patients with burns annually in this hospital and an estimated effect size of 0.30 were considered and the sample size of 291 was required. Since all patients hospitalized during the three

months were 295 people and all participated in the study, four additional contributors were also included in the study.

Using the convenient sampling method, all patients participated in this study at the time of discharge. Participants gave informed consent after explaining the study's objectives. The inclusion criteria included patients with relative or good self-confidence, patients admitted to the men and women burn wards, and satisfied to participate in the study. Having psychological problems, low self-confidence and self-immolation cases were included exclusion criteria for this study. Written informed consent was obtained from patients being discharged in the men and women burn wards. After receiving the ethical code, a researcher at Sina Hospital invited all patients with burns being discharged to take part in the study after explaining the goals of the study and obtaining informed consent from them. During three-month assessment, 295 patients filled in the NQCPQ and LOPSS at the time of discharge.

### 2.3 | Description of instrumentation

Three questionnaires were used for this study which included LOPSS (La Monica, Oberst, Madea, & Wolf, 1986) and NQCPQ (Vukovic, Gvozdenovic, Stamatovic-Gajic, Ilic, & Gajic, 2010).

### 2.4 | La Monica oberst patient satisfaction scale

This scale was developed by La Monika and Abreast in 1986 and measures patient satisfaction with nursing care, and this scale with extensive reliability and validity data has 41 items. Each item has seven responses with a Likert form from "totally opposite" to "fully agreeable." The minimum score is 41, and the maximum score is 287. A higher score reflects more satisfaction with nursing services. LOPSS has three domains that include dissatisfaction (17 items), interpersonal support (13 items) and good impression (11 items).

### 2.5 | Nurse quality of communication with patient questionnaire

This questionnaire was designed by Vekovich et al. in 2012 (Vukovic et al., 2010). The questionnaire includes 24 items that examine verbal, non-verbal communication and general communication between nurses and patients. The answer to each item is fluctuates in a Likert spectrum 6 options of "I do not know" to "always." The minimum score is 24, and the maximum score is 144. A higher score reflects is better nurse Communication with the patient.

The content and face validity of the instruments were confirmed by a panel of experts consisting of 10 faculty members of Tabriz University of Medical Sciences (three with M.S. in nursing, seven with Ph.D. in nursing) and two experienced nurses in burn care. Some minor changes were applied according to experts' recommendations. The final version of the instruments was piloted on

30 patients with burns for which Cronbach's alpha was calculated as 0.87 and 0.9 in NQCPQ and LOPSS.

All questionnaires were completed in the room where the patient was admitted, and 20–30 min before, the patient was discharged from the hospital. Patients who had read and write literacy self-completed the questionnaires, but those who did not read and write literacy, the researcher read all the questionnaires items one by one and the patient responded to their desired option.

### 2.6 | Data analysis

SPSS 24.00 program was used to input, manage the data and statistical analysis. Data were summarized using mean and standard deviation for quantitative variables and frequency (%) for qualitative variables. Pearson correlation coefficient was used to determine the relationship between the patient satisfaction and nurse–patient communication. All tests were two-sided, and statistical significance level was set at 0.05.

## 3 | RESULTS

Over the 3-month study period, 295 patients were hospitalized in two burn wards and they all participated in the study with informed consent. Most of the patients were aged between 16–44 years old, and most of the burn victims were male, marriage and illiterate or elementary. More than 50% of them were hospitalized for more than 9 days (Table 1).

Of the 295 hospitalized patients, more than 80% did not know their nurse and only 60% of patients knew their doctor (Table 1).

The mean total LOPSS was  $154.51 \pm 10.13$ , and the average response of patients to each option of the nursing care satisfaction questionnaire is presented in Table 2.

The most patient dissatisfaction from nursing services was "fails to consider my opinions and preferences regarding plans for my care," "should be more thorough," "neglects to be sure I understand the importance of my treatments" and "makes me feel like a case, not an individual," respectively.

The results of the NQCPQ showed that the mean score of nurse–patient communication was  $90.33 \pm 7.18$ . The most mean of patients' communication with nurses was related to the "being active in maintaining individual health" and "patient co-operation with the nurse on mobility, diet and change of bedclothes" options, respectively (Table 3).

The relationship between LOPSS and NQCPQ using Pearson correlation test showed that there is a significant positive and relationship between these two variables ( $r = 0.73$ ,  $p < 0.003$ ), according to the coefficient of determination between two variables, the quality of nurse–patient interaction explains 53% of changes in the variance of satisfaction with nursing services.

In examining the relationship between demographic characteristics with the level of satisfaction and quality of nurse–patient communication, it was revealed that, except for the gender variable,

**TABLE 1** Demographic information of patients with burns in Sina Hospital of Tabriz at 2018

Variable	Group	N (%)
Age	<16	11 (3.7)
	16–44	171 (57.2)
	45–64	88 (29.4)
	>64	25 (8.4)
Gender	Female	100 (33.4)
	Male	195 (66.6)
Marital status	Single	41 (13.9)
	Married	214 (71.9)
	Divorced	13 (4.5)
	Widow	27 (9.7)
Education	Illiterate/Elementary	125 (42.12)
	Middle school	47 (16.01)
	Diploma	61 (20.75)
	Associate Degree/bachelor	62 (21.12)
Employment Status	Housewife	82 (27.63)
	Unemployed	40 (13.65)
	Worker	61 (20.63)
	Employee	40 (13.65)
	Student	13 (4.52)
	Free job	59 (20.92)
The ratio of income to spend	Negative	191 (64.37)
	Equals	94 (31.88)
	Positive	10 (3.75)
Cause of burn	Scald	127 (42.82)
	Fire	103 (35.07)
	Electric burn	28 (9.56)
	Chemical	37 (12.55)
TBSA (%)	<10	168 (56.55)
	10–120	82 (27.75)
	>20	45 (15.7)
Location burns	Home	110 (37)
	Workplace/Open environment	185 (63)
Hospitalization	1–9 day	156 (52.64)
	10–19	110 (37.23)
	>20	29 (10.13)
Do you know your nurse's name?	Yes	52 (17.63)
	No	243 (82.37)
Do you know your doctor's name?	Yes	178 (60.34)
	No	117 (39.66)

other variables did not show a meaningful statistical relationship. There was a significant direct relationship between gender variable with the quality of communication and patients' satisfaction ( $p < 0.05$ ) (Table 4).

## 4 | DISCUSSION

Satisfaction of patients from nursing services is an important indicator for evaluating the quality and quantity of providing nursing care to patients (Mogadasiyan et al., 2013; Wolf, Colahan, & Costello, 1998). To improve or promotion nursing care, many experts emphasize that results of patient satisfaction will need to be reported by subordinate institutions (nursing organization, nursing board, nursing managers and insurance companies) and also must be reflected by nurses to change the method of their care and interacting with the patient (Mogadasiyan et al., 2013; Porter, 2009).

Our results indicate that patients' satisfaction was low from nursing services. The mean overall satisfaction score was 3.76 of 7. The average scores of patients were low in all three domains of LOPSS (dissatisfaction, interpersonal support and good impression). Most patients did not know their nurse, and nurses were only on the patient's bedside when they were taking medicine and doing dressing. The findings of this study were inconsistent with the Gomez et al. study (Gómez Martín et al., 2018). This study assessed the satisfaction of patients with burns in a Spanish burn unit, and 164 patients participated in this study. They found that had very high overall satisfaction with mean scores 3.7 from 4. This difference may be due to the high participation rate of patients with burn in our study, high expectations of patients and less interaction of nurses with patients.

During the three months of the study, all patients admitted to men and women participated in the study. In fact, the rate of patient participation in the study was 100% and was almost consistent with Arrebola-Pajares et al study (Arrebola-Pajares et al., 2014) but participation rates in other studies were lower than the present study (Andrews, Browne, Wood, & Schug, 2012; Gómez Martín et al., 2018). By increasing the participation of patients in the study, the reliability of the study results will increase, and the true problems of these patients can be more easily identified and addressed to solve these problems.

Assessing the nurse quality of communication with patient indicated that nurses' communication with their patients was weak, and patients were dissatisfied from this kind of communication. Patients with burns depending on the type of burn need more communication to recognize and adapt to new situations especially those who have burned in the areas of the head, face, neck and hands. One of the most important factors in patients' dissatisfaction with nursing services was the poor quality of nurses' communication with patients.

In 2013, Moghaddasian et al. found that the quality of nurses' communication with patients was low and the average score of nurse-patient communication was 94.7, which is almost like our study, but in the study of Akhtari et al. It was found that the quality of nurses' communication in patients with cancer was satisfactory (Akhtari-Zavare, Yunus Abdullah, Syed Hassan, Binti Said, & Kamali, 2011), that was contrary to our study, and this inconsistency may be due to the different questionnaire or the nature of the disease.

The relationship between two variables of satisfaction and nursing communication was a direct and significant relationship. In other

**TABLE 2** The mean and standard deviation response of patients with burns to nursing care satisfaction questionnaire options in Sina Hospital of Tabriz at 2018

Item	M ± SD	Item	M ± SD
Is not as attentive as (s)/he should be	4.66 ± 1.52	Is pleasant to have around	4.05 ± 1.31
Appears to be skillful at her/his work	2.69 ± 1.37	Does not keep promises to return to do things for me	3.62 ± 1.72
Makes helpful suggestions	3.17 ± 1.51	Would know what to do in an emergency	4.41 ± 1.77
Does nothing with information I give	2.89 ± 1.28	Shows me how to follow my treatment program	3.42 ± 1.92
Treats me with respect	3.18 ± 1.31	I can share my feelings when I need to talk	3.02 ± 1.65
Seems more interested in completing tasks than in listening to concerns	5.28 ± 1.36	Does things to make me more comfortable	3.19 ± 1.61
Does not follow through quickly enough	5.01 ± 1.41	Should be more thorough	5.60 ± 1.24
Sees that I get physical assistance when I need it	2.91 ± 1.27	Seems disorganized and flustered	5.35 ± 1.20
Is not as friendly as (s)/he should be	5.16 ± 1.34	Neglects to be sure I understand the importance of my treatments	5.56 ± 1.03
Explains things in an understandable manner	2.98 ± 1.32	Just talking makes me feel better	2.51 ± 1.39
Appears to enjoy caring for me	2.94 ± 1.28	Helps me to understand my illness	2.90 ± 1.73
Gives impression my care is the top priority	2.66 ± 1.17	Is available when I need support	3.07 ± 1.56
Is impatient	4.96 ± 1.45	Seems to know what s/he is talking about	3.47 ± 1.88
I feel free to ask questions	3.10 ± 1.62	Acts like I cannot understand the medical explanation of my illness	4.32 ± 1.76
Gives complete explanations	2.80 ± 1.45	Fails to consider my opinions and preferences regarding plans for my care	5.86 ± 0.73
Makes me feel like a "case," not an individual	5.50 ± 1.13	Is gentle in caring for me	2.87 ± 1.50
Talks down to me	4.54 ± 1.47	Seems reluctant to give assistance when I need it	4.47 ± 1.67
If I needed nursing care again, I'd want to come back to this hospital	2.81 ± 1.68	Gives directions at just the right speed	3.95 ± 1.88
Does not answer my call signal promptly enough	4.80 ± 1.30	Understands me when I share my problems	2.67 ± 1.64
Tells me what treatment effects to expect	2.33 ± 1.18	Makes me feel secure when giving me care	4.01 ± 1.81
Tells me things which conflict with what my doctor tells me	1.61 ± 0.76		

words, by increasing the communication between nurses with patients and improving their relationships, their satisfaction increases, and by decrease the communication between nurses with patients, their satisfaction is also reduced. The results of our study were consistent in terms of the type of relationship between variables with other studies. However, the quality of nurse–patient communication was low in our study but this communication was high in other studies (Akhtari-Zavare et al., 2011; Griffith, Wilson, Langer, & Haist, 2003; Mogadasiyan et al., 2013). For example, Akhtari-Zavare et al. (2011) states that high level of the nurse quality of communication with patients revealed high satisfaction of patients from nursing services and the quality of their communication with patients is relatively well-suited. This difference may be due to the sampling method, measurement tool, nature of disease and time to complete the questionnaire. Most studies in Iran showed that most patients had moderate satisfaction from the provided services (Joolae et al., 2011). Perhaps the reason for this is to make patients aware of their rights to the past more than before, poor interaction of nurses with patients, and consequently to increase their expectations of the

healthcare system; on the other hand, this may be precisely due to the decline in the quality of services provided, which itself reflects a shortage of nursing staff and nurses' dissatisfaction with their working conditions.

In this study, the patients' satisfaction was significantly correlated with sex. The highest degree of dissatisfaction was observed in men and patients who were hospitalized for a longer time. But in other studies, there was no significant relationship between gender or hospitalization time with patient satisfaction from nursing services (Abbasi et al., 2015; Joolae et al., 2011; Mogadasiyan et al., 2013).

#### 4.1 | Clinical implications

The results of this study revealed that the least attention was paid to the professional communication between the nurse and the patient and the satisfaction of patients from nursing care. Hospital and nursing managers should reconsider their activities priorities and reforming and improving communication of the hospital staff

Item	M ± SD
Assessment of patient current condition based on the quality of communication with the patient	3.61 ± 1.13
Showing interest in hospital regimen and the lifestyle During the conversation with me	2.97 ± 1.02
Acceptance of medication Through the conversation with the nurse	2.80±0.70
Showing a willingness to treat at home through talking to a nurse	3.37 ± 1.38
The patient accepts and understands my presence related to illness	3.55 ± 1.30
Talking nurses about the severity of the disease	3.70 ± 1.28
Not having the power to answer nursing questions about the disease	2.84 ± 0.98
Talking to the nurse about health issues	3.45 ± 1.48
Conversation with the nurse about medication	3.43 ± 1.50
Prescribed pharmacotherapy	3.66 ± 1.47
Understanding The Patient By The Nurse	4.34 ± 1.48
Understanding Hospital Regimen	3.26 ± 1.42
The effectiveness of the treatment based on the patient reactions	3.56 ± 1.32
Asking about the details of the burn restoration during dressing	3.41 ± 1.30
Being active in maintaining individual health	5.26 ± 0.69
Listening to the nurse but not being able to work with him	3.96 ± 1.43
Asks from a nurse for appropriate help during meals	2.88 ± 1.20
Understanding the presence and role of nurses in the course of illness	3.57 ± 1.50
Understanding the symptoms of the disease by the nurse in examining the mental and physical condition	3.14 ± 1.32
Nurse's relationship with the severity of the reaction	4.18 ± 1.41
Communication At The Time Of The Severity Of The Patient's Illness	4.15 ± 1.51
The Level Of Communication With The Patient During Care Procedures	2.72 ± 1.47
Resolving needs without questioning due to the severity of the patient condition,	3.10 ± 1.26
Communication With The Patient While Carrying Out Or Monitor Medication	4.58 ± 1.35
Patient co-operation with the nurse on mobility, diet, and change of bedclothes	4.73 ± 1.17

**TABLE 3** The mean and standard deviation response of patients with burns to Nurse Quality of Communication with Patient Questionnaire (NQCPQ) in Sina Hospital of Tabriz at 2018

	LOOPS		NQCPQ	
	Pearson correlation	p Value	Pearson correlation	p Value
Age	-0.002	0.96	0.006	0.91
Gender	0.132	0.02	0.167	0.00
Education	-0.035	0.55	0.053	0.36
Marital status	-0.145	0.09	-0.015	0.80
Employment status	0.067	0.24	-0.104	0.07
Income/spend	0.252	0.06	-0.006	0.91
Depth of burn	-0.034	0.55	-0.090	0.12
TBSA	0.93	0.11	0.018	0.75
Cause of burn	-0.049	0.40	0.069	0.23
Hospitalization	0.025	0.66	-0.045	0.44

**TABLE 4** The relationship between demographic information with La Monica Oberst Patient Satisfaction Scale (LOPSS) and Nurse Quality of Communication with Patient Questionnaire (NQCPQ) in patients with burns of Sina Hospital of Tabriz at 2018

and patients' satisfaction put at the top of their activities. Therefore, by educating staff, especially nurses, identifying motivating factors, as well as identifying dissatisfaction factors, improved patient satisfaction.

#### 4.2 | Study limitations

This research was carried out in the northwest of Iran, and given the low sample size, its results cannot be generalized to other regions of

Iran. The present study was conducted in a clinical burning environment, and therefore, its findings cannot be generalized to nursing care of other areas or diseases.

## 5 | CONCLUSION

This study found that most of the participants were not satisfied with nursing care, and the quality of nurse–patient communication was also very weak. The study concluded that should pay special attention to professional communication between nurses and patients, and use of appropriate communication skills may increase patients' level of satisfaction towards nursing care. Given that Sina Hospital Tabriz is the only burn centre for treatment in the northwest of the country, and patients have a limited choice for received treatment and care, and therefore, training courses including communication skills, specialized care in the burn, attention to patient privacy and the needs of patients for nurses in this hospital should be held and these courses are essential. It is also necessary to train hospital staff, especially nurses, and motivate them to participate actively in satisfying patients in the priorities of hospital management.

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## CONFLICTS OF INTEREST

None.

## ETHICAL APPROVAL

Approval code of ethics with number: IR.TBZMED.REC.1397.170.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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