

Design and validating the nurse-patient communication skills questionnaire

Saadat Marhamati¹, Mitra Amini^{2*}, Houri Mousavinezhad³, Parisa Nabeiei²

Received 10 Oct 2015; Accepted 22 Sep 2015

ABSTRACT

Introduction: Evaluation of nurse-patient communication skills have been strongly emphasized in order to ensure the possibility of effective communication as well as assessment of the effect of communication skills training programs. Reaching this goal requires the use of standard instruments which is based on the native culture of the target group. Due to the absence of native instruments in this field, the aim of this study was to design and assess the validity and reliability of interpersonal communication skills, among nurses at Shiraz Educational Hospitals.

Method: A mixed method (Qualitative, Quantitative) was used in two phases. The first phase was designing a descriptive questionnaire for nurse-patient communication skills (consisting of “brain storming” and “Delphi quantitative Research Method”). The next phase was defining the validity and reliability of the questionnaire based on confirmatory factor analysis and Cronbach’s alpha. The target population for the first phase was 15 faculty members of Shiraz University of Medical Sciences and for the second phase, 130 members of nursing staff of both educational and private hospitals of Shiraz. The data were analyzed using SPSS 14 and LISREL software after fulfilling the questionnaires.

Results: The findings of the study demonstrated the reliability of the nurse-patient communication skills questionnaires ($\alpha=0.810$). Except for question No. 17, the others had a significant relationship with the agent based on their validity and T-value.

Conclusion: Like other clinical skills, communication requires the theoretical knowledge, evaluation and practice. The findings of this study are the most important indicators from the nurses’ view point which can be assessed in terms of communication skills. These options, as demonstrated, had an acceptable reliability and validity.

Keywords: Communication skills, Questionnaire, Validity, Reliability

► Please cite this paper as:

Marhamati S, Amini M, Mousavinezhad H, Nabeiei P. Design and validating the nurse-patient communication skills questionnaire. *J Health Man & Info.* 2016;3(2):57-63.

Introduction

Communication is a sophisticated subject which consists of written texts and verbal or non-verbal cues (1).

Communication is such an important subject that some experts name it as the basis of all the human growth, individual damages and improvement (2). Communications make a kind of junction in the organization and cause unity. Making a proper communication in the organization is the manager’s duty. The managers coordinate everything via communication and manage their staff, and do planning and controlling. As communication is the most important factor in the emergence of organizations, it is necessary for their sustainability.

Communication is a vital and dynamic process in the organization. If the personnel of an organization do

not have an influential communication with each other, the clienteles and other organizations, they won’t have enough abilities for performing their duties and their motivations will reduce gradually because the relationship is an appropriate reason for the exchange of information, knowledge and experiences. Communication has cultural and conceptual definitions and values which play the most important role between the presenter (physician nurse) and the recipient of the services (patients) (3).

Communication skills have been known as a major part of medical services for many years and there are many debates on influential communication, which is the basis of clinical skills for presenting ideal medical care and the central core of suitable medical activities (4, 5).

The weakness of communication skills among nurses reduces the chance of achieving success and increases the

¹ Shiraz University of Medical Sciences, Shiraz, Iran

² Quality improvement in clinical education research center, Education Development Center, Shiraz University of Medical Sciences, Shiraz, Iran

³ Cardiovascular Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

*Corresponding Author: M Amini, Quality improvement in clinical education research center, Education Development Center, Shiraz University of Medical Sciences, Shiraz, Iran, Email: mitraamini51@yahoo.com

possibility of complaint and litigation (6).

Indeed, the weakness of communication with patients can raise some problems, such as missing the patients' important information, wrong interpretation of patients' data, and causing an unreliable atmosphere between patients and paying more attention to the pharmacological improvements and life care technologies considered in treatment of diseases; also, the best measures to be taken with regard to non-technological skills are mostly dismissed. Although we are aware of the fact that suitable communication skills which can help the patients in improving their status, having better psychological condition, and satisfying their families, these problems occur (6).

So, communication is one of the most fundamental skills (7) and the appropriate communication skills are the best guarantee to prevent litigations (8).

In health occupations, having a suitable communication guarantees the better psychological position of the recipient of health services (9, 10) and success in treating the disease, controlling the pain (11), remembering the history of the disease, and enhancing life quality and satisfaction of the patients (9, 12).

The evaluation of nurse-patient communication skills, to make sure about the possibility of making an influential communication and evaluate the effect of programs on learning the communication skills, is considered vital to researchers. Achieving such a goal requires the use of appropriate means which are based on the target group's culture (12).

Mirzaei et al. (2011) in their study concluded that patient expect the nurses to start communication, so they suggested that communication skills training courses which can improve the necessary skills should be held (13). Also, Nasiri-Pour et al. (2012) came to the conclusion that improving the communication skills of hospital staff can increase the quality of medical services of the universities (14).

The results of Karimi Moonaghi (2013) showed that training the communication skills is an effective way to improve the quality of care and it is recommended that the managers and officials should pay attention to this issue in order to improve the quality of patient care (15).

With regard to the lack of a local, reliable and valid means in this field, the necessity of designing it is based on collecting the experts' comments which are considered by the researcher. In the case of having access to such a tool, we can use it due to the related reliable evidence.

The aim of this study was to design and evaluate the validity and reliability of evaluation of communication skills among nurses of Shiraz educational hospitals.

Methods

This is a mixed method (qualitative and quantitative) with the design of exploratory and sequential study performed in two phases.

The main method in the first phase of this study aimed to reach a list of items for evaluating nurse-patient behavior skills based on Delphi; the method was conducted in two rounds (1st round: Brain Storming and 2nd one: Delphi

method). In this study, in the first phase, statistical population consisted of some of the senior faculty members of Shiraz University of Medical Sciences in the field of communication skills who were selected due to special reasons.

The brain storming meeting was held and 18 faculty members of Shiraz University of Medical Sciences were invited to participate in the study. The meeting had 2 steps: producing ideas and evaluating them. Some of the best items were announced as suggestions and achievements of this meeting. After finishing the workshop, we got the participants' emails for sending the questionnaires and later letters.

In Delphi Method, the viewpoints of medical education experts in brain storming meeting were discussed by the supervisor and researcher and some Standard non-native questionnaires such as Calgri-Cambridge Guide for communication skills and some similar studies were selected as a model.

Thus, the communication skills questionnaire with 25 questions in 5 dimensions (4 questions about basic communications, 4 questions regarding paying attention to the patient, understanding the patients with 4 questions, 5 questions on job duties, and 5 questions on medical ethics) were prepared ed considering similar studies and medical education experts' opinion and the experienced supervisors of the university. Then, its reliability and validity were evaluated.

In the second phase, the questionnaire was emailed to all participants and its face validity (easy comprehension) and content validity (with scoring of 3 aspects: importance, clearance and accountability based on Likert scale) were confirmed.

For inferential analysis of the data, with regard to our statistical consultant idea, the sample size for filling out the questionnaires was 130 (the head nurses of two educational and private hospitals of Shiraz who were selected randomly).

Target population was calculated using the following formula:

$$N = \frac{\alpha^2 pq}{d^2} = \frac{4 \times 0.50 \times 0.50}{0.01} = \frac{1}{0.01} = 100$$

The data were analyzed using SPSS version 14 (SPSS Inc, Chicago, IL, USA) after the questionnaires were filled out. Statistical analysis included descriptive statics (mean, standard deviation) and analytical statistics (Cronbach's alpha, factor analysis). The Cronbach's alpha coefficient was used to define the internal consistency in dimensions and nurse-patient communication skills questionnaire and the confirmatory factor analysis was used for defining the validity of the study.

Ethical consideration:

This study did not have any risk for the participants and its purpose was only to improve communication skills between patients and nurses. This issue is announced in the introduction, questionnaire and at brain storming meetings, so there was no need to take any informed consents from the participants.

It is also worth mentioning that, in the present study, there was no disclosure of the participants' name or any other information; the participants were informed about the results of the study or probable use of its results in any section of the study.

Results

First phase: Brain Storming Results

As we discussed in the methods section, after reviewing the texts and references, some experts were invited to the specialists' panel meeting.

The population mixture, their ages, genders, and job history of participants in this step of the study are shown in Table 1.

After the brain storming meeting was finished, we collected the most important items for evaluation of nurse-patient communication skills based on the participants' idea in a Table.

As mentioned, we collected the participants' emails at the end of the meeting and asked their comments via email after the meeting on content validity of the items

Based on the participants' comments, the mean scores of the item in 3 aspects (importance, clearance, being countable based on Likert's method) were considered as the final score of that item.

With regard to the scores given by the selected professors and the supplementary comments, the professors suggested that the items should be reduced and some of them should be unified.

So, we edited the 30 collected items and reduced them to 25. These 25 items were selected based on the total score and each item scored up to 100. This way, we provided the 25 final items and it was provided again for checking its validity.

From 130 people who participated (the randomly selected head-nurses of 2 private and educational hospitals) in the second phase of study (the validity confirmation of the study and reliability of the questionnaire), 20 men (15%) and 110 women (85%) took part in the study. Based on the findings, most of them were 41-50 years old and the job history of 68 participants was 11-20 years. Also, 50% of them were head-nurses.

After the questionnaires were distributed and filled out, we analyzed the collected data using SPSS, version 14 (SPSS Inc, Chicago, IL, USA).

Table 3 shows the results of confirmatory factor analysis of nurse-patient communication skills questionnaire in which all the questions had significant relations and just the relationship of question No 17. (summarizing the interview and asking the patients questions by the nurse) was not significant with job duties.

The results of the collected questionnaires were used to assess the reliability of the questionnaire and its dimensions using Cronbach's alpha coefficient in SPSS, 14 (SPSS Inc, Chicago, IL, USA); the results are shown in Table 4.

Based on the results shown in Table 9, the nurse-patient communication skills questionnaire has an acceptable inner consistency ($\alpha = 0.810$). In checking the consistency of each small piece of the questionnaire, the results showed that the lowest α was related to the small dimensions of preliminary relationship ($\alpha=0.745$) and the highest related to the small dimension was job duties ($\alpha=0.874$).

Table 1. The Demographic Information of Brain Storming Participants

Variable	Number	Percent
Age(Total participants:15)		
30-40	1	%6.7
41-50	7	%46.6
51-60	6	%40
60<	1	%6.7
Gender(Total participants:15)		
female	5	%33.3
male	10	%66.7
Faculty status		
Teacher	1	%6.7
Assistant prof.	4	%26.6
Associate prof.	6	%40
professor	4	%26.6
Working history (years) Total 175 years/15 participants		
10 \geq	1	%6.7
11-20	8	%53.3
21-30	6	%40
30<	-	-

Table 2. The mean score of importance, clearance and accountability

No	Factors	Total score from 100	The mean of averages from 5	The average of importance score from 5	The average of clearance score from 5	The average of accountability score from 5
1	The role of greetings is important in making relationship with patient.	92.4	4.62	4.53	4.6	4.73
2	Self-Introducing the nurse to the patient is not necessary.	93.2	4.66	4.73	4.73	4.53
3	Asking the patient's name and calling him by the nurse is suitable for making relationship.	83.8	4.19	4.46	4.13	4
4	Self-explanation of nurse's role with regard to patient is not necessary.	83.8	4.33	4.19	4.06	4.2
5	The nurse can ease patient's answers with using verbal techniques.	83	4.15	4.4	4.06	4
6	Using the non-verbal techniques by the nurse (eye-contact, facial expressions, sitting gestures, volume) is not effective in easing patient's answers.	87.8	4.66	4.39	4.33	4.2
7	Visiting the pt by the nurse without patient's request is not necessary.	86	4.30	4.26	4.4	4.26
8	Answering patient's questions and his worries about his problem is important.	83.4	4.2	4.17	4.2	4.13
9	Asking patient's comment on his problem and disease by the nurse is not necessary.	81.6	4.08	4.2	4.13	3.93
10	The nurse should encourage patient to self-explain of his problem.	81.2	4	4.06	4.06	4.13
11	The way that nurse listen to the patient without interruption is important.	80.8	4.04	4.13	4	4
12	Understanding and accepting patient's emotions and non-justifying behavior of the nurse is important.	82	4.10	4.13	4.06	4.13
13	Asking patient's health history by the nurse is not necessary.	85.2	4.26	4.13	4.46	4.2
14	The nurse checks the medicine and health status of the patient.	85.6	4.28	4.26	4.26	4.33
15	Defining the history and quality of patient's symptoms by the nurse is important.	85.6	4.28	4.26	4.33	4.26
16	Presenting the necessary guidance to the patient is not the nurse's responsibility.	90.2	4.51	4.6	4.33	4.6
17	Summarizing the interview and asking patient's by the nurse is necessary.	72.8	3.64	3.73	3.6	3.6
18	Expressing respect and attention to the patient by the nurse is efficient in making relationship.	79	3.95	4.13	3.93	3.8
19	The patient's privacy is not necessary in all stations.	88.4	4.42	4.53	4.4	4.33
20	The nurse should ask for patient's permission before any treatment and they should separate men and women.	83	4.15	4.13	4.26	4.06
21	Being honest in each step makes reliability between the nurse and patient.	80.8	4.04	4.13	4.06	3.93
22	The nurses don't have to do spiritual care.	85.2	4.46	4.26	4.13	4.2
23	Being confident makes a better relationship between the nurse and patient.	85.2	4.26	4.26	4.26	4.26
24	The nurses' discrimination causes the non-reliable relationship.	85.6	4.28	4.33	4.26	4.26
25	The pre-calming by the nurse is very important.	84.8	4.24	4.46	4.2	4.06

Table 3. The relationship between the items and selected dimensions of confirmatory factor analysis

No	Questions	Dimensions	The amount of relationship	The coefficient of determination	T-value	Result
1	Q1	Preliminary relationship	0.025	0.079	3.93	confirm
2	Q2		0.19	0.041	2.8	confirm
3	Q3		0.32	0.10	4.51	confirm
4	Q4		0.45	0.19	6.35	confirm
5	Q5	Attention	0.37	0.16	5.79	confirm
6	Q6		0.29	0.089	4.18	confirm
7	Q7		0.28	0.090	4.21	confirm
8	Q8		0.17	0.043	2.86	confirm
9	Q9	Understanding	0.27	0.086	4.11	confirm
10	Q10		0.37	0.15	5.45	confirm
11	Q11		0.22	0.056	3.3	confirm
12	Q12		0.29	0.088	4.17	confirm
13	Q13	Job duties	0.23	0.050	3.11	confirm
14	Q14		0.2	0.051	3.13	confirm
15	Q15		0.12	0.019	1.98	confirm
16	Q15		0.18	0.032	2.47	confirm
17	Q17		0.017	0.00021	0.20	Reject
18	Q18	Medical Ethics	0.39	0.17	5.94	confirm
19	Q19		0.22	0.088	4.16	confirm
20	Q20		0.2	0.041	2.79	confirm
21	Q21		0.37	0.23	7.04	confirm
22	Q22		0.44	0.18	6.10	confirm
23	Q23		0.52	0.22	6.84	confirm
24	Q24		0.41	0.14	5.22	confirm
25	Q25		0.35	0.088	4.15	confirm

Table 4. The Cronbach's alpha coefficient results about the nurse-patient communication skills questionnaire's inner consistency

No	Next Title	No.of questions	Cornbaeh's alpha
1	Preliminary relationship	4	0.745
2	Attention	4	0.832
3	Under standing	4	0.868
4	Job duties	4	0.874
5	Medical Ethics	8	0.780
6	Total questions	24	0.810

Discussion

The basis of health care is the nurse-patient communication. The patients consider their communication with the nurses based on their treatment (13). The effective communication is the most important part of nursing cares and it is considerable as a necessity in the history (14).

In case the patients had a suitable communication with the health personnel, the satisfaction and the efficient treatment would be enhanced.

The results of this study were similar to Mozaffari et al.'s study (2006) which showed that the appropriate therapeutic communication with patients reduces their pain and ultimately improves the quality of nursing services (16).

Also, a study by Muser et al. (2003) on communication skill showed that supporting the patients and increasing their information through appropriate communication with them has been suggested as one of the most important strategies to reduce anxiety and improve the quality of hospital services to the officials (17).

In a study conducted by Butene et al. (2010), aim in gap improving the nurse-patient communication studies, a multi-lingual and multi-cultural care team assessed the quality of this concept in nurses; this is consistent with the main purpose of the present study (18).

The items in the nurse-patient communication skills questionnaire were collected in a brain storming meeting in which some of the selected faculty members of Shiraz

University of Medical Sciences and nursing and midwifery college who were expert in the field of communication skills participated. The items and content validity were also confirmed by this group. The number of items after scoring, eliminating repeated

and less important items, and unifying some of the items, the researcher reduced them from 30 items to 25.

In Brain storming meeting, 5 dimensions of “preliminary relationship, understanding, attention, job duties and medical ethics” were selected as the questions in the questionnaire.

The confirmation of the questionnaire’s validity and reliability was computed through distribution of them among 130 participants (head nurses of 2 private and educational hospitals).

As seen in the brain storming session, “the preliminary communication” was one of the most important areas. It seems that the communication between the therapist and patient is the basis of the health care. Patients consider their interaction with nurses as the base of their treatment (8).

Cobb believes that the suitable relationship between medical personnel and patients guarantees the patients’ satisfaction and treatment acceptance (19).

Another aspect of the questionnaire was attention which includes the usage of verbal and non-verbal techniques. The results of various studies show that over 50% of the messages in each relationship are transferred by non-verbal signs, about 40% by the tone of voice, and less than 10% via the words. Arnold and colleagues’ studies showed that patient satisfaction is significantly correlated with the use of verbal and non-verbal communication skills (20).

One of the other dimensions of the questionnaire was “understanding” which seems to be a combination of asking patients about the illness, being a good listener to the words of the patient and the patient’s perception and not to judging about them. The results of Cobb’s study in 2004 on hospitalized patients showed that the patients were grumbling and dissatisfied about the lack of communication, having no attention and sympathy to the nurses (19).

The “professional duties” was the other aspect of the questionnaire which included history, physical and medical condition of the patient, determination of the sequence of events and the quality of the patient’s symptoms, awarding the patient, and the summary of the interview (19). The studies of Lerman et al. (2000) showed the technical aspects of care such as nursing care on patients’ total satisfaction (9).

The medical ethics aspect was the most important one in nurse-patient communication skills questionnaire, consisting of eight questions. Different studies show that patients need spiritual support along with medical care (21).

Thus, as the results showed, the communication skills are important competencies which require one as coordinator to attend the hospital (21).

So, it is recommended that the health planners and managers who have the responsibility of training the personnel of the health services to ensure that employees

are able to communicate more effectively with patients and realize the ultimate goal of improving public health. Also, the results of the study conducted by Taghizadeh et al. (2006) suggest that nurses’ communication skills training is effective on patients’ satisfaction and improves the efficiency (22).

As shown in the paper, item 17 of the questionnaire from Delphi “summarizing the interview and asking the patient” was rejected in confirmation factor analysis result and eliminated from the questionnaire. It seems that as the final step and the other steps of the interview were not different issues, and rather they are dependent on each other and used together, this item has an overlap with other items and also summarizing the interview consists of presenting pre-awareness and defining the patients’ treatment program which is the physician’s duty. With regard to the mentioned issues, this item was removed from the questionnaire.

As there has been no study in order to design and assess the validity and reliability of the communication skills questionnaire with the native questions, in this part of the study, it was not possible to compare the results of the questionnaire with similar studies in this field.

Conclusion

So, similar to other nursing skills, communication requires the theoretical knowledge and its consideration as something valuable to be practiced. It seems that the aspects and criteria resulting from this study are the most important indications that can be used for assessing the nurses’ communication skills. These options, as mentioned before, have appropriate and acceptable reliability and validity. So, we have tried to help the colleagues achieve these goals by emphasizing the basics of communication science in brief. It seems that the widespread use of this questionnaire in the inpatient parts of the hospital and the hospitals all around the country is very important to assess the current situation and the respected manager and officials of the university should pay attention to useful and effective activities in order to improve communication skills between nurse and patients in healthcare environments. Of course, we do not claim that the questions and statements obtained in this questionnaire are complete and without any defects, but they are valid for us since . So, it seems that using these questions can be helpful for accessing and evaluating communication skills. Certainly, we agree that if this project had been done at the national level, it surely had had a more complete set of items that could be used for the above mentioned purpose. It is recommended that further larger scale studies be conducted at the national level in order to achieve a more complete conclusion.

Study limitations:

This study had several limitations, the most important of which are as follows:

1. Failure to take advantage of all specialists’ comments in designing and evaluating this questionnaire
2. The effect of nurses’ performance and their answer on the performance of others
3. Lack of similar studies in related fields for comparison in this study

Acknowledgment

This manuscript was extracted from the thesis of the first author (grant No. 6963). The authors therefore thank the vice-chancellery of research and technology at Shiraz University of Medical Sciences, Shiraz, Iran, for the financial support. The authors are grateful to the hospitals' deans and nurses for their cooperation in the study.

Conflict of Interest

None declared.

References

- Chant S, Jenkinson T, Randle J, Russell G. Communication skills: some problems in nursing education and practice. *J Clin Nurs*. 2002;11(1):12-21.
- Shives LR. Basic concepts of psychiatric-mental health nursing. Lippincott Williams & Wilkins; 2008.
- Goske MJ, Reid JR, Yaldeo-Poltorak D, Hewson M. RADPED: an approach to teaching communication skills to radiology residents. *Pediatr Radiol*. 2005;35(4):381-6.
- Gauntlett R, Laws D. Communication skills in critical care. *Continuing Education in Anaesthesia, Critical Care & Pain*. 2008;8(4):121-4.
- McGilton K, Irwin-Robinson H, Boscart V, Spanjevic L. Communication enhancement: nurse and patient satisfaction outcomes in a complex continuing care facility. *J Adv Nurs*. 2006;54(1):35-44.
- Bakker DA, Fitch MI, Gray R, Reed E, Bennett J. Patient-health care provider communication during chemotherapy treatment: the perspectives of women with breast cancer. *Patient Education and Counseling*. 2001;43(1):61-71.
- Stiefel F, Barth J, Bensing J, Fallowfield L, Jost L, Razavi D, et al. Communication skills training in oncology: a position paper based on a consensus meeting among European experts in 2009. *Ann Oncol*. 2010;21(2):204-7.
- Vincent C, Young M, Phillips A. Why do people sue doctors? A study of patients and relatives taking legal action. *Lancet*. 1994;343(8913):1609-13.
- Lerman C, Daly M, Walsh WP, Resch N, Seay J, Barsevick A, et al. Communication between patients with breast cancer and health care providers. Determinants and implications. *Cancer*. 1993;72(9):2612-20.
- Razavi D, Delvaux N, Marchal S, De Cock M, Farvacques C, Slachmuylder JL. Testing health care professionals' communication skills: the usefulness of highly emotional standardized role-playing sessions with simulators. *Psychooncology*. 2000;9(4):293-302.
- Loge JH, Kaasa S, Hytten K. Disclosing the cancer diagnosis: the patients' experiences. *Eur J Cancer*. 1997;33(6):878-82.
- Kruijver IP, Kerkstra A, Bensing JM, van de Wiel HB. Nurse-patient communication in cancer care. A review of the literature. *Cancer Nurs*. 2000;23(1):20-31.
- Mirzaei A, Golchin M, Rostami H. [Nurses communication skills about view points of patients]. *Urmia Journal of Nursing and Midwifery*. 2012;10(1):27-34.
- Nasiripour A, Saeedzadeh Z. [Correlation between nurses' communication skills and inpatient service quality in the hospitals of Kashan University of Medical Sciences]. *Journal of health promotion management*. 2012;1(1):45-54.
- KarimiMoonaghi H, Taheri N, Voshani H, Vaghee S, Yavari M. [The effect of communication skills training on the quality of nursing care of patients]. *Journal of Evidence based Care*. 2013;2(4):37-46.
- Manzari Z, Memariyan R, Vanaki Z. [The Effect of Implementing Therapeutic Communication Plan on Burned Patients' Pain]. *ZUMS Journal*. 2006;14(54):6-10.
- Moser DK, Chung ML, McKinley S, Riegel B, An K, Cherrington CC, et al. Critical care nursing practice regarding patient anxiety assessment and management. *Intensive Crit Care Nurs*. 2003;19(5):276-88.
- Bonnie R, Teleten O, Curry H, Vang-Yang B, Kuzmenko L, Marquez V. Improving Nurse-Patient Communication and Quality of Care The Transcultural, Linguistic Care Team. *JONA*. 2010;40:258-60.
- Cabe C. Nurse patient communication. patients experieren *JCN Nurse*. 2004;13(1):41.
- Arnold E, Boggs K. Interpersonal relationship. professional communication skills for nurses. 2003;4th ed .stlowis : saunders.
- Enjoo SA, Amini M, Tabei SZ, Mahbudi A, Kavosi Z, Saber M. The main indicators for Iranian hospital ethical accreditation. *Journal of advances in medical education & professionalism*. 2015;3(3):117.
- Taghizadeh Z, Rezaeepour A, Mehran A, Alimoradi Z. [Communication skills between patients and nurses]. 2006;12(4):47-55.