The Effect of Communication Skills Training on Quality of Care, Self-Efficacy, Job Satisfaction and Communication Skills Rate of Nurses in Hospitals of Tabriz, Iran

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ABSTRACT

Introduction: Having an effective relationship with the patient in the process of treatment is essential. Nurses must have communication skills in order to establish effective relationships with the patients. This study evaluated the impact of communication skills training on quality of care, self-efficacy, job satisfaction and communication skills of nurses.

Methods: This is an experimental study with a control group that has been done in 2012. The study sample consisted of 73 nurses who work in hospitals of Tabriz; they were selected by proportional randomizing method. The intervention was only conducted on the experimental group. In order to measure the quality of care 160 patients, who had received care by nurses, participated in this study. The Data were analyzed by SPSS (ver.13).

Results: Comparing the mean scores of communication skills showed a statistically significant difference between control and experimental groups after intervention. The paired t-test showed a statistically significant difference in the experimental group before and after the intervention. Independent t-test showed a statistically significant difference between the rate of quality of care in patients of control and experimental groups after the intervention.

Conclusion: The results showed that the training of communication skills can increase the nurse's rate of communication skills and cause elevation in quality of nursing care. Therefore, in order to improve the quality of nursing care it is recommended that communication skills be established and taught as a separate course in nursing education.

Introduction

Nursing is a profession that has multiple roles and each of these roles have general and specific duties. The important duty of professional nurses is maintaining and promoting of individuals and human societies health care. This can be done by using modern scientific principles, benefiting from humanitarian and religious principles, establishing suitable communication with clients, and caring based on medical ethics. Nurses are in the forefront of healthcare and communication with patients and their families. They have the primary and main role in maintenance and promotion of health, prevention from disease, and relieving the pain of clients.

Establishing an effective relationship with the patient in the process of treatment is
essential. Therefore, nurses must have the required knowledge and communication skills in order to establish effective relationships with the patients. Results from the studies show nurses have difficulty in establishing an effective relationship with patients and they do not have the necessary skills in this context.

According to McCabe, McGilton, Robinson and Boscart communication skills have long been recognized as an important element of nursing practice and nursing education, and establishing effective communication is clearly fundamental in quality of nursing practice. Researches addressing the nurse–client therapeutic relationship have contributed to our understanding of the importance of this dimension of nursing practice. For example, we know that clients place great importance on the nurse–client therapeutic relationship.

According to the Canadian Nurses Association establishing therapeutic relationships with clients is a cornerstone of nursing practice. The ability to establish an appropriate relationship is one of the basic social and life skills. The importance of Communication in the human life is to an extent that some experts believe that the entire human development, individual defects and human progress depend on communication process.

Many experts believe that the ability to establish an accurate communication is one of the most important characteristics of healthcare staff. Communicating correctly has positive effects on patients; including improving vital signs, relieving pain and anxiety, increasing satisfaction, promoting health outcomes and better participation of patients in treatment programs. On the other hand, impairment in communication leads to errors in diagnosis, reduction of patient participation in treatment and reduction in the amount of information received from patients.

Communication skills are adaptation skills that can modulate job stress. Communication skills refer to behaviors which can help individuals express their feelings and needs well, and so achieve their interpersonal goals. Skilled communication is essential for nurses in order to maintain effective and sensitive relationships with patients, carers, and other members of the medical team. This is reflected in studies which have related the communication skills and practices of nurses with patient trust and satisfaction, and even patient recovery.

Studies on perceptions of patient and caregiver show that problems in establishing communication medical staff are a key concern for health consumers, and highlight the need for more effective communication in a range of areas of nursing practice. Evidences suggest that learning communication skills on the work is not sufficient to fully master the necessary skills.

However, training in communication has been found to lead to skill acquisition and improvement of patient outcomes. In order to establish effective communication, nurses should learn the necessary skills for establishing a relationship with patients and other medical team members during nursing education, so that they can later experience them in practice in a clinical setting. Practical and theoretical learning can cause a more meaning learning. Parry believes that in order to development in communication skills, training must be both participatory and experiential.

Carson et al. showed in their study that effective communications training causes an increase in the communication skills rate. Unfortunately, poor communication choices made by staff members may anger or insult patients and impact the quality of healthcare.

The quality of care is not an independent variable, but it is the complex structure of values, beliefs and attitudes of people who are interacting together in the health care systems. According to Neishabory et al. caring is an essential component of health services. Nursing care is more important
among health care providers in health settings such as hospitals.
Hence, providing high quality care and services is discussed as a priority in the health care system, particularly in the field of nursing services. Therefore attending to the patients' perspective is an important factor on curriculum purposes in order to improve the quality of care. Moreover, according to Merkouris et al. The quality of nursing care is influenced by the relationship between nurse and patient and active participation of patients in making decisions during the caring process.

Self-efficacy is one of the discussed concepts in Bandura's social-cognitive theory that is a basic concept in understanding human behavior. This concept has been used in various fields such as academic improvement, affective disorders, physical and mental health, job selection and socio-political changes. Self-efficacy creates differences in sensation, thought and action of individuals. In the context of sensation, low self-efficacy is related with depression, anxiety, learned helplessness and low self-esteem. In the context of thought, high self-efficacy will facilitate the cognitive process and academic performance. Finally the level of self-efficacy has a direct correlation with act motivations.

Self-efficacy beliefs affect the individuals’ thought style, how to deal with problems, emotional health, decision making, coping with stress and depression. Self-efficacy affects individuals’ belief about their ability in motives management, cognitive resources and controlling specific events.

One of the basic aspects of individuals’ self-efficacy is the belief that they can affect their life by controlling their actions. Especially when dealing with stressors, having a sense of control is an important factor in coping with various situations. Communication skills are critical to effective job performance, professional achievement and organizational success. Oral communications are particularly considered to be an important competency in making decisions.

Soft skills include effective communication, demonstration of skills, analytical thinking, diplomacy, change management, problem solving, team building, and listening. Hence, good oral communication skills will enhance soft skills.

Job satisfaction is a multi-dimensional complicated concept. Job satisfaction in general, being an emotional reaction and behavioral expression, is established as a result of an individual’s assessment of their work performance, work environment, and living with their work. According to Adams and Bond, the common point of job satisfaction definitions is the degree of positive approach to work or to the elements of work. It is also referred to one's positive attitude on his or her assigned tasks or job.

Recent studies indicated the relationship between job satisfaction of nurses and some factors such as age, marital status, gender, organization or institution worked for, level of responsibility, employment type, worked duration and payments. Nursing is a kind of occupation delivering service to Individuals, families, and societies of all conditions. High level job satisfaction is important for nurses in order for the quality of their services to also be high.

Nurse’s job satisfaction is not just their satisfaction with the income, but also the joy they get from doing their job. Moreover, it is related to them having a good relationship with colleagues, existence of suitable conditions for serving and the joy of doing a specific kind of nursing services. According to Monjamed et al. Job satisfaction is an important factor for performance and quality of services provided by hospital staff including nurses. The nurses’ job satisfaction is associated with improving the quality of patient care and increasing their productivity.

Job satisfaction depends on various factors such as opportunity of external testimonials, good salary, testimonial or professional support, respect or rewards. The other
element in job satisfaction is the feeling of having control on all aspects of work. When personnel feel that they have control on the work which they perform, it is more likely that they have satisfaction from their job and will continue it. However, job satisfaction also depends on individual characteristics. For example, people who have a more cheerful mood than others are satisfied with their job more than people who have a negative view. Job and life satisfaction affect each other mutually.31

At least half of nursing education courses is done in clinical environments and clinical education has a basic role in forming professional skills in nursing students. In recent years, communication skills training has been the main component of nursing education curriculums in advanced countries. However, in our country, Iran, there is no specific position for training of communication skills for nursing students during clinical education. Nursing students learn communication skills by indirect patternning and experiential method from clinical staff and masters. As expected the nursing students are unable to establish effective communications with patients.8

Results of one research conducted by Rezaee et al. (2008) in Iran, showed that communication skills training in nurses causes an increase in their communication skills level.32 Furthermore, the results of two studies conducted by Katherine Rowan (2008) in the United State of America33 and Edwards et al. (2006) in Canada34 showed that communication skills training is effective on communication skills rate.

Therefore, with consideration of the current situation and based on nursing clinical experiences, the researcher realized that nurses are not able to communicate effectively with patients and their families. This may be due to lack of information and education in this field. The importance of communication skills related to nursing performance led the researchers to study the impact of communication skills training on communication skills, self-efficacy, quality of care, and job satisfaction rate in nurses.

Materials and methods

The present Study is an experimental study (pretest–posttest with a control group) that evaluated the impact of communication skills training on communication skills, quality of care, self-efficacy, and job satisfaction of nurses. Experimental study is a kind of research design in which the researcher is dealing with both experimental and control groups and intervention is conducted only on the experimental group. Finally the results of the two groups are compared with each other and the study hypothesis will be tested. The study population consisted of all nurses who were employed in health centers affiliated to Tabriz University of Medical Sciences in 2012. The sample size was determined by a pilot study and then randomly divided into control and experimental groups.

The inclusion criteria consisted of: 1- having a bachelor's degree or higher degree in nursing, 2- having at least one year working experience in surgical-medical wards, 3- having consent for participating in this study. The exclusion criteria consisted of: 1- working in another ward such as intensive care unit (ICU, CCU, and NICU) and operation room, and having a management responsibility in the hospital, 2- not having consent for participate in this study.

The sample consisted of 73 nurses who were selected through random proportional sampling method; 31 nurses in the control group and 42 nurses in the experimental group. Proportional sampling is a method in which the samples of study are selected through clusters which are determined randomly from the entire population of nurses who work in hospitals. Then the number of clusters is selected based on the proportion of nurse's population in that hospital. Selected clusters are divided into control and experimental groups randomly.

Environment of this study was all internal and surgical wards of hospitals affiliated to...
Tabriz University of Medical Sciences. In order to collect data, first, in coordination with the authorities, the questionnaire was delivered to nurses who work in surgical and internal wards. After presenting the information and obtaining informed consents and ethical authorization the nurses were asked to complete questionnaires. Before beginning the study all participants were given needed information about study goal, methods, voluntarily participating, the confidentiality of their information, and that if they desired at any time they can be excluded from the study.

The pre-test was done on both groups (control and experimental), then the intervention (communication skills training) was performed for two months on experimental groups, and then post-test was done on both groups.

The intervention of this study was the establishment of lectures and providing educational pamphlets about communication skills only for nurses of the experimental group during two months. The control groups were receiving their hospital education program that had no interference with our intervention. Finally the results of the two groups were compared to one another, and data analysis was performed by using SPSS for Windows (version 13). P-value of less than 0.05 was considered as significant. The data collection tools include:

1- Personal and social characteristics questionnaire of nurses. This questionnaire includes 10 items that measure the personal and social characteristics of participants such as age, sex, educational level, marital status, duration and type of work experience in which they are employed (internal or surgical), the type of shift and hospital, being interested in the nursing profession, and a history of participating in communication skills training workshop.

2- Communication skills questionnaire of nurses. This questionnaire was developed in 2003 by Takahashi and Kosaka and consists of two levels (verbal and nonverbal). This questionnaire includes 29 questions that are based on Likert scale grading 1 (weak) to 4 (excellent). Higher scores indicate a higher level of communication skill. Content validity was used to validate this questionnaire. In order to evaluate the questionnaire’s reliability Cronbach's alpha coefficient was use and the questionnaire’s reliability was confirmed at 0.91.

3- Job satisfaction questionnaire of nurses. This questionnaire includes 21 items consisting of two parts (internal and external) that measure the job satisfaction level of participants, is formed on self-report method, and its scoring is from 1 to 6; lowest rating of 1 to the highest rating of 6. Content validity was used to validate this questionnaire. In order to evaluate this questionnaire’s reliability Cronbach's alpha coefficient method was used and the questionnaire’s reliability was confirmed at 0.86.

4- Quality of nursing care questionnaire from patient's perspective based on psychosocial and communicational aspects. This questionnaire is a standard questionnaire (QualPaC) that includes 46 questions. Six questions include demographic characteristics of patients, 28 questions include psychosocial aspect, and 12 questions measure communicational aspect of quality of care. This questionnaire is based on the Likert scale grading in 3 ranks, rarely (1), sometimes (2) and often (3). Higher scores indicate better quality of care.

The mentioned questionnaire was evaluated in 2003 in Tabriz and has been collated with Iranian culture. In the study by Neishabory et al., validity of the questionnaire has been evaluated and its reliability confirmed with Cronbach's alpha coefficient at 0.80.

5- Self-efficacy questionnaire of nurses. This questionnaire has been developed by Sherer et al. and includes 17 items which measure self-efficacy of the participants and is formed on self-report method. Its scoring is from 1 (strongly disagree) to 5 (strongly agree). Content validity was used to validate
this questionnaire. Therefore, it was evaluated by 8 faculty members of Tabriz University of Medical Sciences. In order to evaluate the questionnaire’s reliability, Cronbach’s alpha coefficient method was used which confirmed the questionnaire’s reliability and determined its correlation coefficient at 0.88.

**Results**

73 nurses participated in this study and were divided into control group (31) and experimental group (42). The average age of nurses was 34.25 (7.37) years. The majority of

<table>
<thead>
<tr>
<th>Factors</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Statistical indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23-30</td>
<td>14 (45.2)</td>
<td>15 (35.7)</td>
<td>t= 1.33</td>
</tr>
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<td>31-35</td>
<td>6 (19.4)</td>
<td>11 (26.2)</td>
<td>df= 71</td>
</tr>
<tr>
<td>36-40</td>
<td>7 (22.6)</td>
<td>4 (9.5)</td>
<td>P= 0.188</td>
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<tr>
<td>41-45</td>
<td>4 (12.9)</td>
<td>7 (16.7)</td>
<td></td>
</tr>
<tr>
<td>46-50</td>
<td>0 (0.0)</td>
<td>5 (11.9)</td>
<td></td>
</tr>
<tr>
<td><strong>History of work</strong></td>
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<tr>
<td>1-5</td>
<td>13 (41.9)</td>
<td>13 (31.0)</td>
<td>t= 1.536</td>
</tr>
<tr>
<td>6-10</td>
<td>7 (22.6)</td>
<td>12 (28.6)</td>
<td>df= 71</td>
</tr>
<tr>
<td>11-15</td>
<td>4 (12.9)</td>
<td>4 (9.5)</td>
<td>P=0.147</td>
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<tr>
<td>16-20</td>
<td>6 (19.4)</td>
<td>4 (9.5)</td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>1 (3.2)</td>
<td>4 (9.5)</td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>0 (0.0)</td>
<td>5 (11.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>2 (6.5)</td>
<td>6 (14.3)</td>
<td>(\chi^2= 1.21)</td>
</tr>
<tr>
<td>Female</td>
<td>29 (93.5)</td>
<td>36 (85.7)</td>
<td>df= 1</td>
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<tr>
<td><strong>Marital status</strong></td>
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<td></td>
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<tr>
<td>Single</td>
<td>11 (35.5)</td>
<td>8 (19.0)</td>
<td>(\chi^2= 3.72)</td>
</tr>
<tr>
<td>Married</td>
<td>20 (64.5)</td>
<td>32 (76.2)</td>
<td>df= 2</td>
</tr>
<tr>
<td>Widow</td>
<td>0 (0.0)</td>
<td>2 (4.8)</td>
<td>P=0.195</td>
</tr>
<tr>
<td><strong>Type of ward</strong></td>
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<td></td>
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<tr>
<td>Surgical</td>
<td>22 (71.0)</td>
<td>36 (85.7)</td>
<td>(\chi^2=2.43)</td>
</tr>
<tr>
<td>Internal</td>
<td>9 (29.0)</td>
<td>6 (14.3)</td>
<td>df=1</td>
</tr>
<tr>
<td><strong>Type of shift</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning</td>
<td>9 (29.0)</td>
<td>14 (33.3)</td>
<td>(\chi^2= 1.46)</td>
</tr>
<tr>
<td>Night</td>
<td>1 (3.2)</td>
<td>0 (0.0)</td>
<td>df=2</td>
</tr>
<tr>
<td>In cycling</td>
<td>21 (67.7)</td>
<td>28 (66.7)</td>
<td>P= 0.418</td>
</tr>
<tr>
<td><strong>Interesting to nursing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18 (58.1)</td>
<td>21 (50.0)</td>
<td>(\chi^2=3.18)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>13 (41.9)</td>
<td>17 (40.5)</td>
<td>df=2</td>
</tr>
<tr>
<td>No</td>
<td>0 (0.0)</td>
<td>4 (9.5)</td>
<td>P= 0.221</td>
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<td><strong>Having education in the past</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2 (6.5)</td>
<td>6 (14.3)</td>
<td>(\chi^2= 1.12)</td>
</tr>
<tr>
<td>No</td>
<td>29 (93.5)</td>
<td>36 (85.7)</td>
<td>P=0.213</td>
</tr>
</tbody>
</table>
them (65 nurses, 89%) were female. The majority of nurses were married (52, 71.2%). 60 (82.2%) of the nurses were in the surgical ward and the rest (13, 17.8%) were employed in the internal ward. All nurses (73, 100%) had a bachelor’s degree in nursing. Average work experience of nurses was 10.47 (7.91) years.

The majority of nurses (29, 39.7%) were in the circulating shift. 17 nurses (23.3%) were from Imam Reza Hospital, 12 (16.4%) from Shohada Hospital, 13 (17.8%) from Sina Hospital, 13 (17.8%) from Madani Hospital, 9 (12.3%) from Taleghani Hospital, and 9 (12.3%) of them were from Alzahra Hospital. 8 (10.95%) nurses had experience in training communication skills. 40 (54.8%) of them were interested in nursing and 32 (43.8%) were somewhat interested in nursing. Table 1 shows the personal and social characteristics of the participants in the two groups.

Covariance analysis, confirms that there are no differences between the two groups and the results of the two groups are consistent with one another.

Results showed that the mean of pre-test communication skills score in the control group is 80.96 (2.93) and in the experimental group is 79.47 (11.19), and that their difference is not statistically significant. Results also showed that the mean of pre-test quality of care score in the control group is 77.72 (7.36) and in the experimental group is 77.80 (8.20), and that their difference is not statistically significant.

Results of this study showed that the mean of post-test communication skills score in control and experimental groups are 81.06 (2.98) and 86.80 (11.35), respectively, and that their difference is statistically significant.

Moreover, the results showed that the mean of post-test quality of care score in the control and experimental groups was 77.80 (6.99) and 81.57 (7.00), respectively, and that their difference is statistically significant.

Table 2 shows the statistical results of communication skills, quality of care, self-efficacy, and job satisfaction variables of nurses after and before the intervention in control and experimental groups.

Paired t-test showed that the mean difference of communication skills scores in the control group before and after the intervention is not statistically significant.

Paired t-test also showed that the mean difference of communication skills scores in the experimental group before and after the intervention is statistically significant.

Student’s independent t-test showed that the mean difference of quality of care scores in the control group before and after the intervention is not statistically significant. Student’s independent t-test also showed that the mean difference of quality of care scores in the experimental group before and after the intervention is statistically significant.

Table 2 shows the mean of communication skills, quality of care, self-efficacy and job satisfaction after and before the intervention in the control and experimental groups.

Table 3 t-test results showed that the difference between mean of communication skills in control and experimental groups after intervention was statistically significant (p = 0.008). Moreover, t-test results showed that the difference between mean of quality of care in control and experimental groups after intervention was statistically significant (p = 0.018).

Table 3 paired t-test showed that the increase in mean of communication skills in the experimental group after the intervention compared with before the intervention is statistically significant (p = 0.004). Therefore, the results of t-test showed that there is a statistical significance between mean of quality of care in experimental group after the intervention compare with before the intervention (p = 0.03).
Table 2. The statistical results of communication skills, quality of care, self-efficacy, and job satisfaction variables of nurses after and before the intervention in control and experimental groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Mean (SD)</th>
<th>Confidence Interval 95%</th>
<th>Statistical Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before intervention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Communication skills</td>
<td>Control</td>
<td>80.96 (2.93)</td>
<td>-5.60 to 2.62</td>
<td>t = -0.722 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>79.47 (11.19)</td>
<td></td>
<td>p = 0.472</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Control</td>
<td>55.74 (4.41)</td>
<td>-1.18 to 3.51</td>
<td>t = 0.986 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>56.90 (5.35)</td>
<td></td>
<td>p = 0.328</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Control</td>
<td>80.58 (11.22)</td>
<td>-5.08 to 6.63</td>
<td>t = 0.264 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>81.35 (13.20)</td>
<td></td>
<td>p = 0.792</td>
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<tr>
<td>Quality of care</td>
<td>Control</td>
<td>77.72 (7.36)</td>
<td>-3.40 to 3.54</td>
<td>t = 0.043 df = 78</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>77.80 (8.20)</td>
<td></td>
<td>p = 0.966</td>
</tr>
<tr>
<td><strong>After intervention</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Communication skills</td>
<td>Control</td>
<td>81.06 (2.98)</td>
<td>1.57 to 9.92</td>
<td>t = 2.74 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>86.80 (11.35)</td>
<td></td>
<td>p = 0.008</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Control</td>
<td>55.12 (3.91)</td>
<td>-1.05 to 4.26</td>
<td>t = 1.20 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>56.73 (6.61)</td>
<td></td>
<td>p = 0.232</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Control</td>
<td>81.41 (9.33)</td>
<td>-3.04 to 6.42</td>
<td>t = 0.979 df = 71</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>84.35 (14.64)</td>
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<td>p = 0.331</td>
</tr>
<tr>
<td>Quality of care</td>
<td>Control</td>
<td>77.80 (6.99)</td>
<td>-0.65 to 6.90</td>
<td>t = 2.41 df = 78</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>81.57 (7.00)</td>
<td></td>
<td>p = 0.018</td>
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</table>

Table 3. The statistical results of communication skills, quality of care, self-efficacy and job satisfaction variables of nurses after and before the intervention in control and experimental groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time</th>
<th>Mean (SD)</th>
<th>Confidence Interval 95%</th>
<th>Statistical Indicators</th>
</tr>
</thead>
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<tr>
<td><strong>Control group</strong></td>
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<td></td>
</tr>
<tr>
<td>Communication skills</td>
<td>Before</td>
<td>80.96 (2.93)</td>
<td>-1.72 to 1.53</td>
<td>t = -0.121 df = 30</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>81.06 (2.98)</td>
<td></td>
<td>p = 0.904</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Before</td>
<td>55.74 (4.41)</td>
<td>-1.41 to 2.63</td>
<td>t = 0.618 df = 30</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>55.12 (3.91)</td>
<td></td>
<td>p = 0.541</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Before</td>
<td>80.58 (11.23)</td>
<td>-1.41 to 4.83</td>
<td>t = -0.302 df = 30</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>81.41 (9.33)</td>
<td></td>
<td>p = 0.765</td>
</tr>
<tr>
<td>Quality of care</td>
<td>Before</td>
<td>77.72 (7.36)</td>
<td>-3.27 to 3.12</td>
<td>t = -0.047 df = 78</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>77.80 (6.99)</td>
<td></td>
<td>p = 0.963</td>
</tr>
<tr>
<td><strong>Experimental group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication skills</td>
<td>Before</td>
<td>79.47 (11.19)</td>
<td>12.17 to -2.50</td>
<td>t = -3.06 df = 41</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>86.80 (11.35)</td>
<td></td>
<td>p = 0.004</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Before</td>
<td>56.90 (5.35)</td>
<td>-2.13 to 2.47</td>
<td>t = 0.146 df = 41</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>56.73 (6.61)</td>
<td></td>
<td>p = 0.885</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Before</td>
<td>81.35 (13.20)</td>
<td>-4.15 to 2.30</td>
<td>t = -1.010 df = 41</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>84.35 (14.64)</td>
<td></td>
<td>p = 0.318</td>
</tr>
<tr>
<td>Quality of care</td>
<td>Before</td>
<td>77.80 (8.20)</td>
<td>-7.17 to -0.37</td>
<td>t = -2.213 df = 78</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>81.57 (7.00)</td>
<td></td>
<td>p = 0.03</td>
</tr>
</tbody>
</table>
Discussion

According to the results of paired t-test the difference between mean of communication skills scores in the experimental group after the intervention had a statistically significant increase compared with before the intervention. The difference between mean of communication skills scores in experimental and control groups after the intervention was also significant.

In a research conducted by Rezaee et al. in 2008, the level of communication skills in the experimental group after intervention (communication skills training) was significantly higher than the control group; which is consistent with the results of present study. In another study conducted by Rowan in the United State of America, the communication skills training was conducted on medical staff that ultimately caused an increase in their level of communication skills. This is consistent with the results of the present study.

In a study conducted by Edwards et al. in Ottawa University, Canada, the "Therapeutic relationships" intervention was implemented on the nurses’ practice and then the nurses’ communication skills were evaluated. Results showed that communication skills training leads to increasing of communication skills level in nurses which is consistent with the results of the present study.

In the study conducted in 2004 by Merkouris et al., factors effective in quality of nursing care were evaluated and the results showed that the quality of nursing care is influenced by the relationship between nurse and patient and active participation of patients in the treatment process. This is consistent with our results.

There is no significant difference between mean of self-efficacy scores of the two groups and its reason may be the effect of other factors on self-efficacy, except the independent variables in our study. According to Bandura’s social-cognitive theory the rate of individual self-efficacy is due to some factors such as self-esteem and social relationships. Although the results of the present study does not emphasize this theory, they have probably been influenced by other factors such as cultural and social context of participants.

There is no significant difference between mean of job satisfaction scores of the two groups. Therefore, the researcher believes our nursing society’s cultural differences in comparison with other societies may be the cause of this, and also there is relationship between job satisfaction with stronger factors than independent variable of our study such as salary rate, working environment, and respect received from superiors.

Conclusion

The goal of the present study was to evaluate the impact of communication skills training on communication skills, quality of care, self-efficacy, and job satisfaction of nurses.

The results of the present study showed that communication skills training can increase nurse’s communication skills rate and elevate quality of nursing care in patients. Therefore, in order to improve the quality of nursing care it is recommended that communication skills training be established and be taught as a separate course in nursing education by the related educational authorities. Results of this study can provide the context and background for subsequent researches.

The present study had some limitations. This study was conducted only on nurses in hospitals of Tabriz University of Medical Sciences that can restrict the results generalizability; therefore, it is suggested that future researches be executed with a bigger sample size and longer time duration in other cities and different provinces until we can rely on results of the present study with more authority.

Considering that our study was only conducted in surgical and internal wards it is suggested that future researches be executed in other clinical wards with a larger sample
size until quality and quantity of results can be compared with one another in a better and stronger condition.

In this study, the communication skills rate and quality of care were evaluated by the self-report method. Therefore it is suggested that similar researches use the observational checklist method in order to evaluate the mentioned cases. Ultimately, it is suggested that similar research be conducted; including one study in which the intervention (communication skills training) is conduct on graduate nursing students and is compared with practitioner nurses in the same unit at entrance period in clinical setting.

Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

Acknowledgments

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