

## Investigating the Effectiveness of Communication Skills Training on Nurses' Self-Efficacy and Quality of Care

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### Abstract

Not having adequate communication skills can impact the self-efficacy beliefs of nurses and harm the patient care quality. Thus, the current study was done to study the impact of communication skills training on the self-efficacy and care quality of nurses. This semi-experimental research was done on 42 nurses. Communication skills were taught to the test group during 4 2-hour sessions. The group of controls did not receive any training. The tools of data collection included a self-efficacy questionnaire (GSE-17), a demographic questionnaire, and a nursing care quality questionnaire (QUALPAC). SPSS version 23 software and inferential and descriptive statistics were utilized for data analysis. The findings of the current study revealed that there was a remarkable difference between the score of the psychosocial dimension, the communication dimension, and the physical dimension of the care quality in the test group after and before the intervention ( $P < 0.001$ ). In the group of control, no significant difference was reported in the communication dimension, psychosocial dimension, and physical dimension ( $P > 0.001$ ). There was a remarkable difference between the total quality of care score in the group of tests after and before the intervention ( $P < 0.001$ ). In the control group, after and before the intervention, there was no remarkable difference ( $P > 0.001$ ). There was a remarkable difference between the self-efficacy total score in the test group, after and before the intervention ( $P < 0.001$ ). There was no remarkable difference in the control group ( $P = 0.05$ ). Considering the positive impact of communication skills training on the nurses' care quality and self-efficacy in the current research, health policymakers must plan to improve the nurses' care quality and self-efficacy.

**Keywords:** Nurses, Self-efficacy, Quality of care, Communication skills

### Introduction

The hospital's emergency room is one of the busiest departments of medical centers, which includes the most visits of people on unusual days and hours. In general, up to 75% of hospitalized patients are admitted and cared for through the emergency department [1-3]. Nurses working in the emergency department are considered among the most important labor populations in the healthcare system and play a vital role in providing urgent medical care for patients at all times of the day and night [4, 5].

Care is considered a basic component in the field of health care services [6, 7] and the provision of care and services with appropriate quality has been proposed as a priority in the health care service system, especially in the field of nursing services. In most countries, the grading and accreditation of hospitals are influenced by nursing care and its quality [8, 9]. The quality of nursing care includes achieving physical needs, providing emotional and social support, ensuring attention to the mental and spiritual needs of patients, and their satisfaction with care [10]. The care efficiency of nurses also increases the quality of care for patients. This means patients get better results,

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recover faster, and spend less time in the hospital. This in turn increases patients' satisfaction, trust, and confidence in the care delivery system [11, 12].

Self-efficacy is the most important social-cognitive theory of Bandura and it means the feeling of sufficiency and ability to achieve goals [13]. Self-efficacy in clinical tests means judging the capability to manage care independently [14, 15]. Nurses' self-efficacy plays a vital role in the effective use of learned skills for successful performance [16]. Nurses with a higher self-efficacy perception provide better efficiency and better quality care than nurses who have a lower self-efficacy [17, 18].

Many duties of nurses, such as physical care of patients, emotional support, and information exchange with patients, are not possible without communication. Therefore, developing the communication skills of nurses can help them to be aware of the mistakes that occur in their interactions with patients. One of the basic measures of nursing managers to increase self-efficacy and improve care quality is to teach communication skills to nurses, and if it is designed and implemented according to the principles and educational needs of employees, we will see an improvement in the quality of nursing care [18-20]. Therefore, to perform their care and treatment services, nurses need to establish effective verbal and non-verbal communication, using which they can properly observe and check the patient's condition [19, 20].

Researchers consider communication to be the basic axis of the nursing profession in all nursing activities, such as prevention, treatment, rehabilitation, education, and health promotion, and refer to it as a vital element of care [21]. What nurses need most in the communication process is communication skills [11]. Considering that the treatment and care of the patient has long been a team work and the nurse as the main coordinator of this team plays a vital role in the completion of the patient's recovery process, without a doubt, communication skill is considered a vital element in providing nursing care [22].

Communication can increase the awareness of patients' problems and issues, improve decision-making regarding discharge and patient transfer, provide suitable health solutions, increase the attitude of supporting people and employees, increase the participation and cooperation sense in the treatment team, increase skills, attitude, and knowledge, improving the care quality, and decreasing treatment errors, reducing the length of the patient's stay in the hospital, reducing treatment costs, reducing stress and burnout, increasing job satisfaction, and increasing productivity [22, 23]. Considering that the impact of nurses' services, especially hospital emergency personnel, on the care quality and patient satisfaction is not hidden from anyone, therefore it is necessary to carry out interventions that maintain and improve the care quality provided by nurses. The current study aims to study the communication skills training effect on the nurses' care quality and self-efficacy.

## Materials and Methods

This semi-experimental study had a statistical population of 100 working nurses, of which 42 nurses were selected and included in the study by simple random sampling. Then these people were randomly specified to two test groups (12 people) and a control group (21 people).

The inclusion criteria included: not participating in training classes related to communication skills 6 months before conducting the research, and having at least 6 months of work experience. And the exclusion criteria included: not completing the questionnaire, and not participating in a session of educational workshops. The tools used in this study included several questionnaires. The first questionnaire contained demographic information related to gender, age, education, marital status, turnover, employment status, and work experience. Another tool was the Quality patient care scale questionnaire. This questionnaire contains 65 questions, 28 questions in the psycho-social dimension, 13 questions in the communication dimension, and 24 questions in the physical dimension, respectively. The questionnaire scoring is on a Likert scale (rarely (1), sometimes (2), most of the time (3), always (4), and never (0)). The minimum possible score was 65 and the maximum was 260. The distribution of nursing care quality scores is such that a score of 65 to 87 is low, a score of 87 to 174 is average, and a score above 174 is high.

General Scharr-Self-Efficacy-Questionnaire 17 (GSE-17) was designed by Sherer colleagues (1982) to measure self-efficacy that is not specific to a specific situation of behavior. This 17-question questionnaire has four areas, including clinical area, theoretical area, motivational area, and organizational area. Each question is awarded 5 points. The total score varies from 17 to 85. 17-34 Scores are weak self-efficacy, 34-51 scores mean self-efficacy and scores above 51 are very high self-efficacy [14, 24]. The validity and reliability of this questionnaire have been validated in the study of Sherer *et al.* and Cronbach's alpha coefficient was reported as 0.76 [24].

After introducing himself, stating the objectives of the research, and obtaining the consent and participation of the samples, the researcher asked the research units to complete the research tools. Then demographic questionnaires, quality of nursing care (QUALPAC), and general self-efficacy (GSE-17) were completed before the intervention by both experimental and control groups. For the exam group, a communication skills training program that includes 4 sessions, 2 hours and weekly (twice a week) with the main axes of communication and its main elements and how to communicate effectively, non-verbal communication (body language, and sign language) and codes), verbal communication (openness in verbal communication and effective listening), communication

barriers (judgment, observation without evaluation, denial of responsibility, demanding requests), communication bridges (disarming, empathy, caressing, how to resolve interpersonal conflicts, loving, commitment, and communication) were held in the hospital's educational hall. In this study, people were trained face-to-face in groups of up to 11 and 10 people. After completing the training, the questionnaires were completed by control and test groups. People in the group of control did not participate in any of the communication skills training sessions.

In this study, the number, percentage, and Mean $\pm$ SD were utilized to describe the data, and chi-square, paired t-test, independent t-test, and covariance analysis were utilized to analyze the data. A significance level was considered  $P < 0.05$ . Data analysis was done by SPSS23 software.

## Results and Discussion

The average age of the nurses in the total sample was  $36.78 \pm 8.48$  years (range of 22-54 years). In gender terms, 64.3% of the sample were women, 35.7% were men, and most of them were married (69%). The average work experience in the whole sample was  $11.47 \pm 7.14$  years (range of 1-28 years). The majority of them were at the undergraduate level (71.4%) with formal employment (59.5%) and 83.3% were shift workers. The findings of the chi-square test revealed that there is no remarkable relationship between any of the demographic variables of age, education, gender, work experience, marital status, employment status, and turnover (**Tables 1 and 2**).

**Table 1.** Comparing the Mean $\pm$ SD of age and work experience in the test and control groups.

Variable	Group				P-value
	Control (N = 21)		Test (N = 21)		
	Mean	SD	Mean	SD	
Age	34.42	7.58	39.14	8.86	0.071
Work Experience	9.90	6.04	13.04	7.92	0.156

**Table 2.** Distribution of frequency and percentage of research samples based on demographic characteristics in the control and test groups.

Variable		Group				P-value
		Control (N = 21)		Test (N = 21)		
		N	%	N	%	
Gender	Male	8	38.1	7	33.3	0.747
	Female	13	61.9	14	66.7	
	Total	21	100	21	100	
Marital status	Single	7	33.3	6	28.6	0.739
	Married	14	66.7	15	71.4	
	Total	21	100	21	100	
Education	Diploma	5	23.8	2	9.5	0.509
	Associate degree	1	4.8	1	4.8	
	BSc	14	66.7	15	71.4	
	MSc	1	4.8	3	14.3	
	Total	21	100	21	100	
Type of employment	Official	15	71.4	10	47.6	0.047
	Treaty	4	19.0	2	9.5	
	Contractual	2	9.5	9	42.9	
	Total	21	100	21	100	
Workflow	Fixed morning	1	4.8	6	28.6	0.038
	Shift work	20	95.2	15	71.4	
	Total	21	100	21	100	

The findings of the paired t-test showed that there was a remarkably significant difference between the average score of the psychosocial dimension of quality of care in the test group after (94.42%) and before (69.09%) of the

intervention ( $P<0.001$ ). While there was no statistically remarkable difference in the score of the psycho-social aspect of care quality in the control group before (78.66%) and after (76.19%) ( $P=0.295$ ).

The findings of the paired t-test revealed that there is a statistically remarkable difference between the average score of the communication dimension of care quality in the test group after (46.52%) and before (35.90%) of the intervention ( $P<0.001$ ), while There was no statistically remarkable difference in the quality of care communication dimension score in the control group before (37.66%) and after (38.52%) ( $P=0.469$ ).

The findings of the paired t-test revealed that there is a statistically remarkable difference between the average score of the physical dimension of the care quality in the test group after (86.42%) and before (69.23%) the intervention ( $P<0.001$ ). While there was no statistically remarkable difference in the score of the physical aspect of care quality in the control group after (72%) and before (70.23%) ( $P=0.460$ ).

The findings of the paired t-test demonstrated that there is a statistically remarkable difference between the average score of the total quality of care in the test group before (174.57%) and after (228.33%) the intervention ( $P<0.001$ ), while the difference There was no significant statistical significance of the average score of the total quality of care in the control group before (186.47%) and after (186.71%) ( $P=0.958$ ) (Table 3).

**Table 3.** Comparing the Mean $\pm$ SD of the quality of care in the control and test groups.

Variable	Group				Independent T-test (P-value)	Covariance analysis (P-value)	Effect size	
	Control		Test					
	Mean	SD	Mean	SD				
Psychosocial dimension of care quality	Before	78.66	10.32	69.09	13.84	0.015	-	-
	After	76.19	9.12	94.42	8.41	<0.001	<0.001	0.561
	Paired t-test (P-value)	0.295		<0.001		-	-	-
Communication dimension of quality of care	Before	37.66	3.98	35.90	6.67	0.305	-	-
	After	38.52	4.79	46.52	3.86	<0.001	<0.001	0.461
	Paired t-test (P-value)	0.469		<0.001		-	-	-
The physical dimension of care quality	Before	70.23	8.97	69.23	11.74	0.758	-	-
	After	72.00	8.10	86.42	7.70	<0.001	<0.001	0.431
	Paired t-test (P-value)	0.460		<0.001		-	-	-
Paired t-test (P-value)	Before	186.47	17.63	174.57	28.52	0.112	-	-
	After	186.71	18.48	228.33	16.10	<0.001	<0.001	0.627
	The overall quality of care score	0.958		<0.001		-	-	-

The findings of the paired t-test demonstrated that there is a statistically significant difference between the mean total score of self-efficacy in the test group after (70.09%) and before (59.71%) of the intervention ( $P<0.001$ ). In the group control, there was no statistically significant difference in the average total score of self-efficacy before (61%) and after (64.85%) of the study ( $P=0.05$ ) (Table 4).

**Table 4.** Mean $\pm$ SD comparison of total self-efficacy score in two test and control groups.

Variable	Group				Independent T-test (P-value)	Covariance analysis (P-value)	Effect size	
	Control		Test					
	Mean	SD	Mean	SD				
Total self-efficacy score	Before	61.00	8.31	59.71	9.15	0.636	-	-
	After	64.85	5.70	70.09	7.25	0.013	0.008	0.175
	Paired t-test (P-value)	0.05		<0.001		-	-	-

The current study was done to study the impact of communication skills training on the self-efficacy and care quality of nurses working in the hospital's emergency department. The findings of the chi-square test revealed that all demographic information was the same in the control group and the test group and no statistically significant remarkable was reported between the two test and control groups. Therefore, the absence of a remarkable difference in any of the demographic variables indicates that they are ineffective in changing the nurses' care quality and self-efficacy.

According to the findings of the paired t-test, there was a statistically remarkable difference between the average score of the psychosocial dimension of quality of care in the test group after and before the intervention. Thus, the training of communication skills in the test group has remarkably increased the psychosocial dimension score of the care quality compared to the control group. The findings of the current study demonstrated that there is a statistically significant difference between the average score of the communication dimension of care quality in the test group after and before the intervention. Thus, the training of communication skills in the test group has significantly increased the score of the communication dimension of the quality of care compared to the control group. Effective communication skills form the foundation of quality services and care. Jin and Cho [25] stated in their study that there is a statistically significant and positive correlation between the nursing care quality and the communication skills of nurses. Therefore, it can be said that to improve the nurses' care quality, it is necessary to provide solutions to improve nurses' communication skills.

In the present study, it was found that there is a statistically remarkable difference between the average score of the physical dimension of the care quality in the test group after and before the intervention. Thus, the training of communication skills in the test group has significantly increased the physical dimension score of the care quality compared to the control group. In explaining the findings, it can be said that the key themes of the quality of nursing care include achieving physical needs, providing psycho-social support, ensuring that patients' mental and spiritual needs are taken care of and their satisfaction with the care, responsiveness, and responsibility of nursing care to the needs of the patients, and ensuring the provision of comprehensive and holistic care for the patient [10, 26, 27].

Based on the findings of the current study, there was a statistically remarkable difference between the average score of the total quality of care in the test group after and before the intervention. Thus, teaching communication skills in the test group increased the total quality of care score compared to the control group. Based on this, it can be stated that effective communication is a vital element of efficient nursing care and has a significant effect on the care quality in the healthcare system [28, 29].

According to the findings of the paired t-test, there was a statistically remarkable difference between the average total score of self-efficacy in the test group after and before the intervention. Thus, communication skills training in the test group has significantly increased the score of self-efficacy compared to the control group. Based on this, nurses with a higher self-efficacy perception provide better efficiency and better quality care than nurses who have a lower self-efficacy [30, 31]. Based on the findings of the current study, it can be acknowledged that the acquisition of communication and human skills to improve the competence and ability of nurses in providing care has been placed at the forefront of nursing education. Providing quality and safe care is only possible in light of correct, clear, and accurate communication for observation, review, data collection, and patient education. Therefore, teaching communication with the patient is a vital thing for nurses to improve the nurses' care quality and self-efficacy.

## Conclusion

The current study was done to determine the impact of communication skills training on the nurses' self-efficacy and care quality. The results of this study revealed that there was a remarkable difference between the score of the psychosocial dimension, the communication dimension, and the physical dimension of the care quality in the test group after and before the intervention. In addition, there was a remarkable difference between the total quality of care score in the group of tests after and before the intervention. In addition, there was a remarkable difference between the self-efficacy total score in the test group, after and before the intervention. Considering the positive impact of communication skills training on the nurses' self-efficacy and care quality in the current research, health policymakers must plan to improve the nurses' self-efficacy and care quality.

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