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# Examining the relationship between self-efficacy of nurses with communication skills of head nurses

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**ABSTRACT**

**Background:** self-efficacy is an important concept that can affect performance, results, and behavior. In a nutshell, self-efficacy improves nursing performance. Nurses need to communicate in particular with the members of the treatment team to perform job duties better. Several studies are available on the nurse's communication skills; however, communication skills of head nurses who have the closest contact have not been investigated yet.

**Objectives:** This study aimed to determine the relationship between communication skills of head nurses and self-efficacy of nurses in the educational hospitals of Sanandaj.

**Materials and Methods:** This Cross Sectional study was conducted on 51 head nurses who were selected through census method and 153 nurses who were selected through simple random sampling method in Sanandaj educational hospital wards of in 2015. Two instruments were used in this study, including Queendom Communication Skills inventory and Sherer's self-efficacy questionnaire. We used descriptive statistics, independent t-test and Pearson correlation coefficient to analyze the data by SPSS version 13**.**

**Results:** The Mean±SD scores of communication skills in the studied head nurses were 112.39 ± 8.19. The Mean±SD scores of self-efficacy in the studied nurses were 64.59 ± 8.64. Communication skills, including the ability to receive and send messages, emotional control, listening, insight into the communication process were higher than the average value (average value=3) and communication skills combined with the certainty was less than the average value. There was a significant relationship between the mean scores of communication skills in the head nurses and the mean scores of self-efficacy in nurses ($p<0.001$)

**Conclusion:** This study showed that there was a statistically significant relationship between communication skills of head nurses and self-efficacy of nurses. Therefore, the self-efficacy of nurses increased with the increasing communication skills of head nurses.

**KEY WORDS:** Interpersonal relations, Nursing, Supervisory, Hospitals, Teaching, educational hospital.

## 1. INTRODUCTION

Self-efficacy is a belief to organize and implement actions to achieve goals. in nursing, self-efficacy is quite critical for skill performance (Azam, 2014). According to the Bandura's theory, self-efficacy refer to the belief that an individual has in their ability to execute a task and thus to obtain the desired outcome or avoid a particular behavior in a variety of circumstance or setting, self-efficacy is one factor that has been shown to influence the response to negative events such as occupational stressors (Klaiman, 2013).

Self-efficacy is the highest effect among the factors effective in nursing performance (Laschinger, 1999). High self-efficacy increases the quality of care and consequently, improves the individual and organizational performance. Studies have shown that nurses with higher self-efficacy perform better and provide more qualified health care than nurses with low self-efficacy, these nurses are more committed to their work and are more persistent against difficult situations. Lauder reported the positive impact of self-efficacy on academic motivation, learning, skill development, professional behavior, and job progress in nursing students. Lee reported that self-efficacy was an important factor in the nurse's performance. Several factors such as environment, nursing colleagues, and clinical educators could influence the creation of clinical self-efficacy in the nursing students. The role of nursing as a profession is formed through communication; so, good communication is considered as a key factor in the care of the patients (McCabe and Sambrook, 2014). Having good communication skills is one of the main features of effective communication (Bonenberger, 2016; Jahangiri, 2016). Communication skills are those skills that help people to be involved in the interaction with individuals and communication processes (Jagzape, 2015). In this process people exchange their information, thoughts, and feelings through verbal and non-verbal messages. Many experts believe that one of the most important characteristics of healthcare staff is their ability to establish truthful communication. Communication skills are essential for nurses to maintain effective and sensitive relationships with their patients, care givers and other members of the medical teams.

Head nurse as one of the levels of management is in close contact with other nurses (Van Oostveen, 2015). Hence, the effectiveness of their activities and management skills could be beneficial for their health care organizations (Van Oostveen, 2015).

Improvement in the communication leads to healthcare system that can function optimally (Azam, 2016). Lack of communication skills reduces manager and organization successes.

The efficacy of our communication skills program is still under question and as Simonson has recommended, it needs something more than theoretical teaching. Providing effective communication skills in nursing, helping them to reflect this on work and personal life (Stuart, 2014).

Nurses are the largest human resources of health care organization and they have an essential role to provide high quality healthcare for patients. Nurses' self-efficacy has an important role in accomplishing health system, social experience influence self-efficacy thus it is necessary to identify the factors affecting on nurses self-efficacy, including head nurses communication skills that have closest contact and most of the times with the nurses among other nursing managers. Various information sources indicated that the relationship between communication skills of head nurses and self-efficiency in the nursing profession has not been studied (Rahimaghaee, 2015). This study aimed to determine the relationship between communication skills of head nurses and nurses' self-efficacy in educational hospitals.

## 2. MATERIALS AND METHODS

This Analytical Cross Sectional study was conducted on head nurses and nurses in the nursing wards of educational hospitals in Sanandaj (Besat, Tohid and Qods hospitals) since September to December 2015. All of the 51 head nurses in these hospitals entered into the study using the census method. 153 nurses from each ward 3 nurses who any of them was in any shift the work (morning, evening, night) entered into the study using simple random sampling. Inclusion criteria consisted of working in the nursing wards of educational hospital in Sanandaj and willingness to participate in the study. Exclusion criteria were decision to withdraw from the study and incomplete response to the study questionnaire.

**Instruments:** A 3-part instrument was used to gather the study data. The first part included head nurses demographic characteristics questions, including age, gender, hospital, department, academic degree, field of study, marriage status, work experience and employment status. The Queendom Communication Skills inventory was the second part, this tool consisted of 34 questions that measure the individual's levels of communication skills in 5 domains of the ability to receive and send messages, emotional control, listening, insight into the communication process and communication skills combined with the certainty. These items are rated on a 5-point Likert-type scale from never (=1) to always (=5), three questions including questions 2-4-6 were reversed. The range of the total score were from 34 to 170 and higher scores indicated more communication skills. The Queendom Communication Skills inventory is used frequently in nursing research (its validity index is 0.71 and reliability coefficient by Cronbach's α is reported as 0.66 and 0.69), and in our study it was 0.69. The third part included Sherer's self-efficacy 17-items questionnaire. All these items are responded on a 5-point Likert-type scale from strongly disagree (=1) to strongly agree (=5), questions 1-3-8-9-13-15 were reversed. The range of the total score is 17-85 and higher scores indicate more self-efficacy. The validity index of the Sherer's self-efficacy questionnaire by Cronbach's α was 0.79 and its validity is 0.61 After obtaining permission, the corresponding author referred to 3 educational hospitals in Sanandaj and selected the participants and explained the study objectives, distributed the Queendom Communication Skills inventory to head nurses and then distributed the Sherer's self-efficacy questionnaire to the nurses and explained them how to answer the questions, then she request them to complete the questionnaires in the working setting and return it to researcher when the researcher referred to them.

**Ethical Considerations:** The Ethics Committee of the Qazvin University of Medical Sciences approved the study protocol. The approval letter was issued on 1 July 2015 with the code No.IR.qums.REC.1394.77. To assure the confidentiality, they requested from the participants not to write their name on the questionnaire.

**Data Analysis:** Data analysis was performed using SPSS version 13. Descriptive statistics, including percentage, mean, and standard deviation were used to describe the data, including age, gender, hospital, department, academic degree, field of study, married status, work experience and employment status. The Kolmogorov-Smirnov test used to examine the normal distribution of the quantitative variables. The distribution of quantitative variables in this study was normal. Independent t-test was used to test the statistical relationship between communication skills score mean and self-efficacy score mean with average value [average test value was considered as 3, obtained from Lykert-scale range mean (1+2+3+4+5=15÷5=3), We used this value to uniform compare of means in all of the 5 domains of communication skills and mean self-efficacy scores]. The significance level was considered less than 0.05 in all tests. The Pearson correlation coefficient was used to test the association between communication skills with self-efficacy in this study.

## 3. RESULTS

All of the 204 questionnaires were distributed, completed, and returned to the researcher, and finally 204 questionnaires were analyzed (51 of head nurses and 153 of nurses).

Among 51 head nurses participating in this study in educational hospital, 44 persons (86.3%) were females, aged from 30 to 45 years (The Mean±SD were 42.16±5.91), 49 (96.1%) had a bachelor's degree in nursing, 47 (92.2%) were married, 44 (86.3%) had a regular employment contract, The work experience was in the range of 6 to 28 years (The Mean±SD were 17.98±6.23).

The Mean±SD communication skills scores compare with average value (average value =3) were 3.47±0.27, 3.18±0.3, 3.48±0.44, 3.56±0.44, 2.79±0.5 for domains of the ability to receive and send messages, emotional control, listening, insight into the communication process and communication skills combined with the certainty and the Mean±SD total communication skills scores in head nurses were 3.3±0.24 and the Mean±SD self-efficacy in nurses were 3.8±0.51 compare with average value.

The level of significance was investigated between the mean scores of communication skills with age, gender, and education degree and work experience in head nurses. T-test test showed no significant relationship between 5 domains of communication skills with the age, gender, education degree and work experience of head nurses ($p>0.05$) Table 2.

The significant between mean self-efficacy score of nurses with mean 5 domains of communication skills score and sum communication skills score of headiness was investigated by Pearson correlation coefficient and showed that there was significant relationship between the ability to receive and send messages skill, emotional control skill and communication combined certainty in head nurses with self-efficacy in nurses ($p<0.05$). There was no significant relationship between listening skill and insight into the communication process in head nurses with self-efficacy in nurses ($p>0.05$).

The Result showed that there was a significant relationship between the total scores of communication skills of head nurses with self-efficacy of nurses in the educational hospital of Sanandaj ($p<0.001$).

**Table.1.Distribution of Demographic Characteristics of Head nurses in Educational Hospitals In Sanandaj, Iran**

| Variables studied | Frequently (%) |
|---|---|
| **Gender** | |
| Male | 44 (86.3) |
| Female | 7 (13.7) |
| **Working in Educational Hospital** | |
| Besat | 23 (45.1) |
| Tohid | 22 (43.1) |
| Quds | 6 (11.8) |
| **Education Degree** | |
| Bachelor Degree | 49 (96.1) |
| Master Degree | 2 (3.9) |
| **Field of Study** | |
| Nursing | 49 (96.1) |
| Critical care Nursing | 2 (3.9) |
| **Married Status** | |
| Married | 47 (92.1) |
| Single | 2 (3.9) |
| Divorced | 1 (2) |
| Widow | 1 (2) |
| **Employment Status** | |
| Regular Employment Contract | 44 (86.3) |
| Treaty | 3 (5.9) |
| Contracted Employment | 4 (7.8) |

**Table2: comparison significant relationship between the communication skills with individual characteristics of headnurses**

| Variables | Age | Gender | | Education Degree | | Work Experience |
|---|---|---|---|---|---|---|
| | | Male | Female | Bachelor Degree | Master Degree | |
| Ability to receive and send Message | | | | | | |
| Mean±SD | 42.16±5.91 | 3.51±0.22 | 3.46±0.28 | 3.46±0.27 | 3.67±0.001 | 17.98±6.23 |
| P-Value | 0.27 | 0.66 | | 0.29 | | 0.44 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Emotional Control Mean±SD | 42.16±5.91 | 3.05±0.31 | 3.2± 0.3 | 3.18±0.31 | 3± 0.16 | 17.98±6.23 |
| P-Value | 0.29 | 0.23 | | 0.41 | | 0.3 |
| Listening Mean±SD | 42.16±5.91 | 3.19±0.34 | 3.52±0.44 | 3.49±0.44 | 3.17±0.47 | 17.98±6.23 |
| P-Value | 0.63 | 0.06 | | 0.31 | | 0.29 |
| Insight into the Communication process Mean±SD | 42.16±5.91 | 3.46±0.44 | 3.57±0.44 | 3.56±0.44 | 3.5± 0.42 | 17.98±6.23 |
| P-Value | 0.65 | 0.52 | | 0.85 | | 0.92 |
| Communication combined with the certainty Mean±SD | 42.16±5.91 | 2.97±0.74 | 2.76±0.45 | 2.79±0.51 | 2.8± 0.001 | 17.98±6.23 |
| P-Value | 0.39 | 0.31 | | 0.98 | | 0.34 |
| Sum of all communication skills Mean±SD | 42.16±5.91 | 3.24±0.26 | 3.32±0.24 | 3.31±0.25 | 3.2± 0.1 | 17.98±6.23 |
| P-Value | 0.84 | 0.47 | | 0.74 | | 0.85 |

**Table.3.The Significant relationship* between the communication skills of head nurses with Self-efficacy of nurses**

| Communication skills domains of Head nurses | Self – efficacy of nurses | |
|---|---|---|
| | Pearson Correlation | Significant relationship |
| Ability to receive and send Messages | 0.394 | 0.004 |
| Emotional Control | 0.356 | 0.010 |
| Listening | 0.183 | 0.199 |
| Insight into the Communication Process | 0.212 | 0.136 |
| Communication combined with the Certainty | 0.378 | 0.006 |
| Sum of all communication skills | 0.466 | 0.001 |

* Significant relationship ($p<0.05$)

## DISCUSSION

This Study showed that communication skills scores and self-efficacy scores were higher than average, this results indicate that head nurses had a favorable communication in working. Ahmadi, in their study in Iran reported that the amount of communication skills in nurses was higher than average. Although, Tabibi, reported that the communication skills of head nurses in different wards of moddaere's hospitals of Tehran were within an average level.

Communication skill domains, including the ability to receive and send messages, emotional control, listening, and insight into the communication process in head nurses was higher than average; however communication skill combined with the certainty was slightly lower than the average, its reasons could be some parameters that are known important for head nurses in working with nurses such as problem-solving, leadership, delegation, conflict management, and team-building. Ahmadi and Norouzinia, in their studies obtained the score of ability to receive and send messages, emotional control, and listening skills higher than the average. While, the score of communication skill combined with certainty in their study was less than average level (Ahmadi, 2013; Norouzinia, 2015).

According to the results, there was no significant difference between age, gender, educational level, work experience, and communication skills; there for, this parameters have no effect in communication skills of head nurses in this study. Several studies confirmed these results in participants.

The average score of self-efficiency of nurses in the present study was higher than average, which indicates that nurses have a favorable self-efficacy in working. Hajloo, in their study reported that the score of self-efficiency of nurses was higher than the average value. While, the score of self-efficiency of nurses reported by Naboreh, which self-efficacy nurses was average in their study (Hajloo, 2011; Naboureh, 2015).

In this study, we found a statistically significant relationship between communication skills of head nurses and the average self-efficacy scores of nurses, this result showed an increase in the level of communication skills in head nurses can increase their self-efficacy nurses in working.

This result is in line with several studies that confirmed communication skills training lead to increased self-efficiency in health care providers; including doctors, nurses and other health providers and jobs.

Presumably other variables of communication skills of head nurses such as knowledge management, communications and importance of self-efficacy for nurses can affect communication skills of head nurses and consequently self-efficacy of nurses in educational hospital of Sanandaj, there for further investigation on factors affecting the communication skills of head nurses and self-efficacy of nurses are necessary. However, the direct association between communication skills of head nurses and self-efficacy of nurses shows the necessity to implement strategies to increase the occupational factors identity which affected in communication skills and self-efficacy. We suggested other researcher to investigate the impact of communication skills, learning, team working, problem solving, and decision making methods and management style of head nurses on the self-efficacy of nurses and identity organizational factors that affected self-efficacy in nurses.

In conclusion, there was a significant relationship between communication skills of head nurses and self-efficiency of nurses in educational hospital of Sanandaj. Therefore, identifying the strengths and weaknesses in communication skills of head nurses and self-efficacy of nurses can provide the necessary background to solve the individual and organizational problems and improve the communication skills in head nurses and self-efficacy in nurses in clinical practice and avoid the nurses to leave or relocate the duty. However, identifying and providing appropriate solutions to improve communication skills of head nurses during management is essential. Therefore, suggested the manager hospitals to Planning for development of communication skills and management ability in head nurses and self-efficacy in nurses by holding effective workshops with the participation of experienced professors and application of supportive and incentive programs (encouragement and appreciation) for head nurses with high communication skills in working with nurses can promote head nurses in their effective communication and nurses' self-efficacy.

This study was performed only in educational hospitals in one city, therefore the results might not be generalized to head nurses and nurses in all hospitals countrywide. We could not investigated all variables affecting the communication skills and self-efficacy, therefore larger studies in several hospitals considering more important variable are suggested.

## 4. CONCLUSION

This study showed that there was a statistically significant relationship between communication skills of head nurses and self-efficacy of nurses. Therefore, the self-efficacy of nurses increased with the increasing communication skills of head nurses.

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