



A study of the communication skills in health care and the role of demographic variables (a case study of the nurses at the Educational, Therapeutic and Research Center of Imam Reza Hospital, Kermanshah, Iran in 2018)

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Received: 23 May 2019 / Accepted: 17 July 2019

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Abstract

Purpose Nurses, as facilitators in hospitals, should be equipped with communication skills towards the realization of this goal. The present study aimed to investigate the status of communication skills in health care and the role of nurses' demographic variables at the Educational, Therapeutic, and **Research Center of Imam Reza Hospital**, Kermanshah, Iran in 2018.

Methods In this descriptive–analytic study, the statistical population was 926 nurses working at the Educational, Therapeutic, and **Research Center of Imam Reza Hospital** affiliated to **Kermanshah University of Medical Sciences, Kermanshah, Iran** in 2018. Moreover, the random sampling was used as the sampling method. As for data collection, a two-part questionnaire, containing the demographic questions and the Queendom Communication Skills Test, was used. Furthermore, the independent *t*-test and one-way ANOVA using SPSS Statistical Software Version 22.0 were used for data analysis.

Results The results of the present study demonstrated that the mean and standard deviation of the total score of communication skills measured 2.70 ± 0.43 . The results also indicated that assertiveness and understanding verbal and nonverbal messages had the highest and lowest mean scores (3.20 ± 0.64 and 2.30 ± 0.58 respectively). Further, there was a significant relationship between the mean scores of communication skills and variables such as marital status, employment background, department, work shift, and type of employment ($P < 0.05$).

Conclusions The results of the present study revealed that nurses' knowledge of communication skills was moderate. Therefore, it is recommended that courses on communication skills training be considered in their continuing education and on-the-job training, with the aim of improving the quality of nursing care.

Keywords Iran · Health worker · Nursing · Conversational skills

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Introduction

Enjoyment of communication skills is one of the vital needs and requisites for training (Kashani et al. 2015). Moreover, effective communication is an essential characteristic of nursing care, which has been taken into consideration as a necessity in patient-orientated goals (Bramhall 2014). Nurses, as the largest working group in health centers, require effective communication skills to carry out their professional responsibilities and provide quality care (Dinh et al. 2012). In the nursing profession, the communication between patients and nurses is highly emphasized in clinical care, and it is necessary for fostering the desired patient–nurse relationship (Nayeri et al. 2011). The need for proper communication, as the main element for nursing care, has been emphasized many times (Delgado 2017), and communication with patients is deemed by nursing experts to be at the heart of all nursing care (Kourkouta and Papathanasiou 2014). 'Communication skills' refers to behaviors that help you to express your emotions and needs correctly and achieve interpersonal goals. These skills are of such importance that their failure can be accompanied by loneliness, social anxiety, depression, low self-esteem, and job losses (Khadihzadeh et al. 2015). Communication skills are described as the most important attributes for those working in primary health care provision (Hagemeyer et al. 2014). Since nurses are the most important human resources in hospitals and the closest therapeutic workforce during admission, communication is the basis of their taking care of patients (Mafi and Asefzade 2014). Interpersonal skills are one of the major aspects of the nursing profession, whose importance is attributable to the fact that proper and effective communication can encourage patients to share their problems and conditions with nurses. Accordingly, equipping nurses with communication skills can provide hospitals with helpful information that can be used in fostering patient treatment (Kim and Kim 2014). In addition, training in and use of communication skills by nurses will not only result in some behavioral changes, they also lead to some positive changes in patients' clinical conditions (Nasiripour and Saeedzadeh 2012). Research indicates that effective communication can be achieved when nurses acquire communication skills and, more importantly, apply these skills in practice, not just knowing how to communicate (Curtis et al. 2013). Although nearly half of nursing education is conducted in clinical settings, and clinical education can provide a good basis for shaping nurses' professional skills, the weakness of the communication skills of nurses is still one of the most important gaps in nursing services (Karlsen et al. 2017). Some internal and external studies have been carried out to assess the communication skills

of health staff and the effects of education on improving such skills. For example, the results of a study performed by Ak et al. (2011) showed that increasing the communication skills could affect the patients' satisfaction with nurses and boost the mutual respect and trust between patients and nurses. In a study performed by Gholami et al. (2015), it was demonstrated that the mean score of communication skills of nurses was moderate, and it was shown that communication skills had meaningful relationships with age, education, and position. Similarly, Ahmadi et al. (2013) showed that the nurses of the educational-therapeutic hospitals based in Sari, Iran, had higher than average levels of communication skills.

Hemmati-Maslakpak et al. concluded that the communication skills of the majority of nurses in Urmia-based hospitals were at desirable levels (Hemmati-Maslakpak et al. 2014). In another study done by Safavi et al. (2016), it was shown that communication skills positively and significantly correlated with age, marital status, work experience, department, and employment type. The results of a study carried out by Siamian et al. (2014) indicated that the mean score of communication skills of health care personnel was moderate. In this study, there was a significant relationship between communication skills and marital status. In contrast, Bakhjani Moghadam et al. showed that there was no significant relationship between communication skills and age, sex, and work experience (Baghiyani Moghadam et al. 2012). Other studies have also reported that nurses working in educational centers have poor communication skills and often do not maintain a proper relationship with patients (Nogueira de Goes et al. 2017; Nørgaard et al. 2012; Ziapour et al. 2016). Given the importance of communication between patients and nurses, it is necessary for nurses to increase their skills in establishing communication. Reports indicate that the communication between patients and nurses has been inadequate in health care. Wherever the health care workers have deficiencies in communication skills, the solution is to train skills continuously (Turkelson et al. 2017).

In medical sciences, communication skills are introduced as essential features for all medical disciplines. Indeed, high levels of communication skills in health care workers, as a prerequisite for providing high quality health services, have always been a major challenge for policymakers and managers. Since no prior studies have been carried out on the communication skills of nurses in hospitals affiliated to Kermanshah University of Medical Sciences, it is obvious that realizing this goal will be only possible through assessing the levels of these skills. Therefore, the present study aimed to investigate the status of communication skills in health care and the role of nurses' demographic variables at the Educational, Therapeutic and Research Center of Imam Reza Hospital, Kermanshah, Iran in 2018.

Methods

Study design

In this descriptive–analytic study, the statistical population was 926 nurses working at the Educational, Therapeutic and Research Center of Imam Reza Hospital affiliated to Kermanshah University of Medical Sciences, Kermanshah, Iran in 2018. Moreover, the sample volume was determined through the Cochran’s sample size formula ($n = 271$), but 300 subjects were studied as the final sample, with the aim of increasing the reliability of the study. In addition, the random sampling was used as the sampling method in the present study. After getting the official permits from Kermanshah University of Medical Sciences and making arrangements with the hospital managers, nursing office, training supervisor, and head nurses, the researcher visited the units under study, and informed consent was obtained from nurses with more than 1 year of work experience before the study began. The inclusion criteria were willingness to participate in the study, holding at least a bachelor’s degree, and at least 1 year of work experience in clinical units. However, those working part-time in hospitals were excluded from the study.

Further, for data collection, a demographic questionnaire and the Queendom Communication Skills Test were employed.

Demographic questionnaire. This comprised nine items: gender, age, marital status, education, employment background, position, department, shift work, and type of employment.

Queendom Communication Skills Test. This 34-item questionnaire was developed by Queendom in 2004 to assess communication skills in adults (Queendom 2004). This scale comprised five dimensions: listening skills (questions 5, 6, 7, 8, 22, 23, and 27), understanding verbal and nonverbal messages (questions 2, 11, 12, 13, 14, 18, 19, 21, and 28), insight to communication (questions 16, 24, 25, 29, and 34), emotional regulation (questions 4, 9, 15, 17, 20, 26, 30, and 31), and assertiveness (questions 1, 3, 10, 32, and 33). Additionally, the questions were scored using the five-point Likert scaling (1 = never, 2 = seldom, 3 = sometimes, 4 = usually, 5 = always). As a result, each respondent receives a score between 34 and 170 depending on the given answers. It should be noted that questions 2, 4, 6, 9, 10, 12, 13, 17, 19, 24, 25, 28, 32, and 33 were reversed because of their nature. In other words, the “Always” option received a score of 1, while the “Never” option received a score of 5. Therefore, the total score of each of the subscales was the sum of the scores of their respective questions, and the overall score for communication skills of each person was calculated through the sum of all scores of subscales.

The validity of the communication skills test was assessed using confirmatory factor analysis (CFA) and principal

components (Hosseinchari and Fadakar 2006). Furthermore, the numerical value of the Kaiser–Meyer–Olkin Measure of Sampling Adequacy and the χ^2 index in the Bartlett’s test measured 0.71 and 2318.01 respectively. Moreover, they were significant at > 0.001 , an indication of the adequacy of the sample and the selected variables to perform the factor analysis.

Data analysis

To assess the reliability of the questionnaire, a pilot study was conducted on 30 nurses with demographic characteristics similar to the target population. As a result, the internal correlation coefficient of the questions measured 0.91. The collected data were analyzed using SPSS Statistical Software Version 22.0, and the data were analyzed through descriptive (mean, frequency, standard deviation) and inferential statistics (variance analysis and *t*-test). Additionally, the significance level was set at $P < 0.05$.

Results

Of the total of 300 subjects in the present study, 140 students (46.7%) were male and 160 (53.3%) were female. The average age of the subjects was 31 ± 6.2 , and the majority of subjects were aged 20–30 (153 subjects or 51%). In terms of marital status, 215 of the participants (71.7%) were single. In addition, the majority of students held bachelor’s degrees (155 students or 51.7%). Further, half of the participants had under 10 years of work experience (46.7%). Moreover, 75.7%, 19%, and 5.3% of the participants were nurses, head nurses, and supervisors respectively. In addition, the majority of nurses were in the emergency department (22%), 45.3% of the participants were doing morning and evening shifts, and most of the sample population (51.3%) were doing their internships ($p < 0.05$) (Table 1). The results of the present study revealed that the mean and standard deviation of total communication skills were 2.70 ± 0.43 . The results also indicated that assertiveness and understanding verbal and nonverbal message had the highest and lowest mean scores (3.20 ± 0.64 and 2.30 ± 0.58 respectively). Further, there was a significant relationship between the mean scores of communication skills and variables such as marital status, employment background, department, work shift, and type of employment ($P < 0.05$) (Table 2).

Discussion

In the system of providing health services and treatment, service providers are faced with a wide range of clients, each of which requires a different method of communication. Among

Table 1 The demographic characteristics of participants ($n = 300$)

Variable	Groups	N (%)
Gender	Female	160(53.3%)
	Male	140(46.7%)
Age group (years)	20–30	153(51%)
	31–40	121(40.3%)
	41–50	21(7%)
	≥ 51	5(1.7%)
Marital status	Single	215(71.7%)
	Married	76(25.3%)
	Divorced	9(3%)
Education	Bachelor	155(51.7%)
	MSc	145(48.3%)
Employment background	≤ 10	146(48.7%)
	11–20	85(28.3)
	> 20	69(23%)
Position	Nurse	227(75.7%)
	Head nurse	57(19%)
	Supervisor	16(5.3)
Department	Internal medicine	66(22%)
	Surgery	55(18.3%)
	Pediatrics	12(4%)
	Emergency	98(32.7)
	Special care unit	21(7%)
Work shift	Women	48(16%)
	Morning and evening	136(45.3%)
	Night	52(17.3%)
	Evening and night	39(13%)
Type of employment	Rotational	73(24.3%)
	Internship	154(51.3%)
	Contract	49(16.3%)
	Part-time	19(6.3%)
	Full-time	78(26%)

the hospital staff, nurses should have extensive communication with patients due to their roles. Hence, communication skills can be considered an important element in the provision of nursing care. As for the status of communication skills in nursing care, the results of the present study showed that the mean score of nurses' communication skills measured 2.70 ± 0.43 in the teaching hospitals based in Kermanshah, which was relatively desirable. Similarly, the results of a study performed by (Amiri et al. 2013) demonstrated that the mean score of nurses' communication skills was in good condition in hospitals based in Tehran. Likewise, Matin et al. and Kashani et al. reported that the mean score of nurses' communication skills was desirable in Hamedan Bouali Hospital and the educational centers of Isfahan University of Medical Sciences respectively (Matin et al. 2012; Kashani et al. 2015). Comparably, Cheraghi et al., Amiri et al., and Barati

et al. reported the same positive results about the status of nurses' communication skills (Cheraghi et al. 2016; Amiri et al. 2013; Barati et al. 2012).

In contrast, Rostami et al., Nørgaard et al., and Włoszczak-Szubsza reported that nurses working in educational–therapeutic centers have poor communication skills and most often do not establish proper communication with patients (Rostami et al. 2012; Nørgaard et al. 2012; Włoszczak-Szubsza and Jarosz 2013). Although the concept of communication and communication skills is an essential element in the provision of care and one of the effective tools in the nursing profession, nurses' communication skills develop and maintain cooperative behaviors because of relying on mutual interactions between individuals, discussions, and exchanging viewpoints on issues relating to patients. However, nurses do not receive any training in this regard, and they gain medium-level communication skills due to the necessity of working and attending in treatment teams, and regular responses to clients and patients. In the present study, there was no significant relationship between the nurses' communication skills and age, marital status, education, or position, which was consistent with results of studies performed by Ahmadi et al. and Amiri et al. (Ahmadi et al. 2013; Amiri et al. 2013), but inconsistent with results of a study conducted by Barati et al. in which it was reported that there was a significant relationship between the nurses' communication skills and age, gender, education, place of work, employment status, and work experience (Barati et al. 2012). In another study done by Gholami et al., it was concluded that there was a significant relationship between the nurses' communication skills and age, education, and position (Gholami et al. 2015).

The results of a study conducted by Safavi et al. about the nurses at Gilan-based hospitals revealed that there was a positive and significant relationship between their general communication skills and each of the demographic variables, such as age, marital status, work experience, work place, and type of employment (Safavi et al. 2016).

Similarly, Siamian et al. reported that there was a significant relationship between the nurses' communication skills and marital status (Siamian et al. 2014). Comparably, Matin et al. concluded that there was a positive and significant relationship between the nurses' communication skills and department and employment type (Matin et al. 2012). In addition, Ahmadi et al. showed that there was a meaningful relationship between gender and communication skills, and that men had better communication skills than women (Ahmadi et al. 2013). In a study carried out by Amiri et al., the mean score of female nurses' communication skills was higher than that of male nurses (Amiri et al. 2013). Similarly, the results of a study done by Barati et al. about the medical professionals were indicative of the overall superiority of the scores of women's communication skills over that of male employees (Barati et al. 2012).

Table 2 Comparison of the mean score of the nurses' communication skills based on demographic characteristics

Variable	Groups	Number	Mean \pm SD	<i>P</i> value
Gender	Female	388	2.68 \pm 0.40	$t = 1.403$
	Male	265	2.73 \pm 0.47	$p = 0.161$
Age group (years)	20–30	342	2.68 \pm 0.45	$F = 0.633$
	31–40	230	2.72 \pm 0.37	$p = 0.594$
	41–50	66	2.74 \pm 0.48	
	≥ 51	15	2.70 \pm 0.56	
Marital status	Single	244	2.54 \pm 0.42	$F = 29.313$
	Married	384	2.80 \pm 0.41	$p = 0.000$
	Divorced	25	2.67 \pm 0.37	
Education	Bachelor	365	2.72 \pm 0.44	$t = 1.421$
	MSc	288	2.67 \pm 0.42	$p = 0.156$
Employment background	≤ 10	323	2.72 \pm 0.45	$F = 3.394$
	11–20	185	2.71 \pm 0.41	$p = 0.034$
	> 20	145	2.61 \pm 0.41	
Position	Nurse	495	2.69 \pm 0.44	$F = 0.69$
	Head nurse	86	2.71 \pm 0.45	$p = 0.934$
	Supervisor	72	20.70 \pm 0.43	
Department	Internal medicine	154	2.75 \pm 0.40	$F = 17.938$
	Surgery	143	2.66 \pm 0.41	$p = 0.000$
	Pediatrics	68	2.38 \pm 0.30	
	Emergency	98	2.97 \pm 0.26	
	Special care unit	106	2.64 \pm 0.49	
	Women	84	2.67 \pm 0.49	
Work shift	Morning and evening	195	2.80 \pm 0.41	$F = 16.592$
	Night	169	2.57 \pm 0.43	$p = 0.000$
	Evening and night	157	2.60 \pm 0.39	
	Rotational	132	2.83 \pm 0.45	
Type of employment	Internship	188	2.80 \pm 0.40	$F = 7.503$
	Contract	173	2.60 \pm 0.46	$p = 0.000$
	Part-time	157	2.66 \pm 0.43	
	Full-time	135	2.72 \pm 0.40	

Independent sample *t*-test

Analyse of variance (ANOVA) test

p value < 0.05 is significant

In contrast, no significant relationships were found between communication skills and variables such as age, marital status, work experience, job interest, satisfaction with workplace, experience of giving birth, and life satisfaction (Khadivzadeh et al. 2015). The results of Brunero et al. showed that gender, as an effective variable in nurses' communication skills and learning, was an influential factor (Brunero et al. 2010).

Women and men communicate differently. In other words, women seek approval and confirmation, reduce differences and establish intimacy through communication, whereas men seek independence and to gain ability (Kozier et al. 2004). Therefore, in the process of communication between nurses and patients, both men and women interpret the communication process differently. Accordingly, this fact affect the ability of nurses to communicate with patients

(Kounenou et al. 2011). According to the results of the present study, there was a significant relationship between the mean score of work shift and communication skills of nurses, while it was concluded that the communication skills of nurses did not correlate significantly with their positions.

Conclusion

The results of the present study revealed that the nurses' knowledge of the communication skills was moderate. It must be stressed that training nurses in communication skills is of vital importance in health care, and effective communication skills should be provided to them, as the greatest resource of human interaction, especially in terms of playing roles as coordinators in treatment teams. Therefore, to improve the

quality of nursing care, it is recommended that courses on communication skills training be considered in their continuing education and on-the-job training.

Limitation of the study

The present study had some limitations. First, the data were collected through a self-reporting method, possibly affecting the accuracy of the results. Second, because the sample consisted of nurses working in Imam Reza Hospital, the results could not be generalized to other organizations. Finally, it is suggested that further studies be conducted in this respect to draw comparisons towards reaching a consensus on this matter.

Acknowledgements The authors hereby bestow much gratitude to all nurses working at the educational, therapeutic and **research center of Imam Reza Hospital for their participation in the present study. In conclusion, our grateful thanks go to the Clinical Research Development Center of Imam Reza Hospital.**

Compliance with ethical standards

Ethics approval and consent to participate This study was drawn from a research project (No. IR.KUMS.REC. 1397.113) sponsored by deputy of research and technology of KUMS. The cost of the payment is spent on the design and implementation of the study.

Conflict of interest The authors declare that there is no conflict of interest regarding the publication of this article.

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