Research Article

Relationship between Nurses' Communication and Levels of Anxiety and Depression among Patient's Family in the Emergency Department

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Abstract

Background: Communication is an integral part in everyday life. Nurse's communication in a high pressure area like emergency department is challenging for the delivery of quality care.

Aim: To assess the relationship between communication of nurses, and level of anxiety and depression among patient's family in the emergency department in Riyadh.

Methods: A quantitative descriptive correlation cross section research design was utilized on a convenience sample of 307. Data collected using a questionnaire survey consisted of three parts: a demographic data sheet, Health Care Communication Questionnaire (HCCQ) and Hospital Anxiety and Depression scale (HADS). Prior to collecting the data IRB approval was granted and an informed written consent was secured from each participant. Participants were assured about the confidentiality and anonymity of all collected data. Data were analyzed using SPSS version 22.0.

Results: The nurses' communication questionnaire scores revealed the following: 82.1% reported nurses treated them with kindness, 74.3% reported that nurses were calm, 83% stated that nurses showed respect, 60.7% reported that nurses maintained eye contact and 74.3% reported that the information given by nurses was clear. HADS scores revealed that 21.5% had abnormal hospital anxiety, 28% had abnormal hospital depression, 24.8% had borderline hospital anxiety and 29.6% had borderline hospital depression.

Conclusion: Findings of this study suggest that one of the most essential needs of family members of a patient in the emergency department is accessing information, and this information should be communicated effectively by the nurses as this would help in reducing the anxiety and depression among family members.

INTRODUCTION

Communication is an integral part of people's everyday life as they interact with each other to fulfill their mutual needs. Communication is defined as exchanging of information, life experiences, emotions, thoughts, ideas and knowledge [1]. Effective communication and interpersonal skills are the fundamental principles essential for the delivery of quality healthcare; therefore, it is important to have clear communication Nurses' communication in a high pressure area like the hospital emergency department is challenging for the delivery of quality care. Studies have revealed that half of the medication error occurs due to miscommunication [2]. Consequently, it is important to have effective communication between the health care team and patients' family members to provide safe care and prevent harm to the patient. Health care providers' communication plays a crucial role in the effectiveness of care provided to a patient in the emergency department [2].

A pronounced quality family communication is the mainstay

of the art and science of nursing [3]. The hospital area especially the emergency department is considered as more stressful for both patients and their families. Visits to the emergency unit are critical; patients come there with life-threatening situations. Patients admitted to the emergency department may be conscious or unconscious, and in many instances the staff may not have any information regarding medical history, patient name, allergy, blood group even though the nurse in the emergency department is expected treat the patient effectively and quickly with the minimal information received [4].

It is expected that when a patient is being admitted to the emergency department, the patient's family might experience some psychological disturbances including anxiety and depression. Anxiety is a concept of being feared, worried or a response to a threat that is unknown and considered the most common and essential reaction toward stressful events such as diseases or life-threatening situations [5]. Depression is an alteration in mood that is expressed by a feeling of sadness, despair, inability to experience pleasure and pessimism [6]. In Arab countries, recent studies from Egypt, Saudi Arabia, and United Arab Emirates reported high rates of anxiety and depression in the general population [7]. A study on assessing the level of stress and anxiety in family members of patients hospitalized in the special care units showed that more than 50% of family members included in the study reported symptoms of depression, melancholy, suicide, low energy, and anxiety [8]. Moreover, it was found that in cases where enough time is not given for communication and when incomplete information was given to the patient's family which led to anxiety and depression among family members [8]. The family member of patient has a major part in supporting the patient in order to get a best treatment response. However, when the anxiety and depression level of the family is too high, they may not be able to support the patient [9].

Hospital anxiety and depression can occur either in patients themselves or in their family members. Elements that hint to anxiety and depression in a patient's family in an emergency department include life experiences, informational vagueness, unclear diagnosis, fear of death of patient, financial necessities, disruption of the routine, staff communication, new environment and the protocols of unit [8]. Nurse's communication plays an important role in the levels of anxiety and depression in the patient's family. When nurses communicate in a good manner and provide with adequate information about patient condition, it will be helpful for families to deal with stressful situations [10]. Effective communication between nurses and the patient's family is important; otherwise, the quality of care is at risk. Communication is introduced as one of the care pillars of emergency interventions [11].

Everything in an emergency department happens quickly in order to save the patient's life and to provide maximum health care within a limited time. As a result, the basic communication between health care providers, the patient and patient's family is given less importance [12]. A cross-sectional study on acuity and anxiety from patient's perspective in emergency department showed that during the waiting time in an emergency department, the effective communication between the nurse and patient's

family is very important and can play a major role for both, the patient's family's satisfaction and reduction of anxiety levels [10].

A study revealed that accomplishment of therapeutic communication among the emergency department nurses decreased the level of anxiety and depression among family members which helped in decision making [13]. Hence, effectiveness of communication between nurses and the patient's family needs a special attention in order to improve delivery of health care, develop satisfaction in patient's family and decrease anxiety and depression. The communication between nurses and patients' families impacts patient comfort as well as the fineness and effectiveness of nursing care [14].

The engagement of the family in the nursing care of a patient with an emergency condition was highlighted by the American Association of Critical Care Nurse (AACN) [15]. The roles of an emergency nurse to the patient's family include identifying their strength, communicating with them, being realistic and honest, and giving positive hope and trust. Furthermore, communication is recognized as a part of nursing care in order to help family through the adverse situation [16]. Therefore, when the family members are in a difficult situation, it is essential that nurses in the emergency department have an effective communication so that the nursing care of the patient will be ideal [17].

Review of the current literature revealed that there are only few studies about the influence of nurses' communication on patient' family in the emergency department [8]. Burden of the hospital experience among patient's family is so high in the emergency department. In addition, the critical condition of the patient is a trigger to increase the risk for development of anxiety and depression in the patient's family. Hence, nurses' communication is one of the essential skills to support the patient and his/her family and consequently reduce family member's anxiety and depression. Additionally, fewer research evidences were found in this regard in Saudi Arabia. Therefore, it is mandatory to study the relationship between communication of nurses and level of anxiety and depression among patient's family in the emergency department in the Saudi community.

MATERIALS AND METHODS

Aim of the Study

The aim of the current study was to assess the relationship between nurses' communication and levels of anxiety and depression in the patient's family in the emergency department at King Abdulaziz Medical City (KAMC-R), National Guard, in the central region of the Kingdom of Saudi Arabia.

Research objectives

1. Assess the communication patterns of nurses working in the emergency department at KAMC-R.

2. Assess level of anxiety among attending family members of patients in the emergency department at KAMC-R.

3. Assess level of depression among attending family members of patients in the emergency department at KAMC-R.

4. Evaluate the relationship between nurses' communication

pattern and levels of anxiety and depression among family members of patients in the emergency department at KAMC-R.

Research design

A quantitative descriptive correlation cross section research design was utilized to conduct this study with the aim to examine the relationship between nurses' communication and level of anxiety and depression among patient's family in the Emergency department at King Abdulaziz Medical City - Riyadh (KAMC-R), National Guard.

Study Area/Setting

This study was conducted at King Fahd hospital affiliated to King Abdulaziz Medical City/Riyadh (KAMC), principally in the Emergency Department. KAMC is a tertiary care center that is considered one of the largest health care centers in the Middle East. It is divided into 3 main hospitals; King Fahd hospital, King Abdullah Specialist Children hospital and King Abdulaziz Cardiac Center with a total capacity of 1230 beds. It commenced its operations in May 1983. Since then, it has continued expanding, while providing services for rapidly growing patient populations in all catchment areas. The Emergency Care Center (ECC) is considered to be the 4th best trauma care center worldwide following three centers in the United States of America, as it provides Pre-Hospital Trauma and Life Support program (PHTLS). King Fahd Hospital is a part of King Abdulaziz Medical City with many other prominent medical centers. Since its inauguration in February 2001; and within a short period, KAMC has been recognized as the largest health care institution in the central area. The families reporting to the hospital represent diverse economical, ethnic, and geographical backgrounds.

Sample size

Using the sample size calculator software to determine the sample size for the current study from the average number of ECC visits (700 patients per day) with some seasonal variations with a confidence level of 95% and confidence interval of 5% the calculated sample size is 248. A sample of 307 adults was included in the study to ensure representativeness of the total population.

Sampling technique

A convenience sampling technique was utilized in the current study to recruit 307 accompanying family members from the emergency department, King Fahd Hospital, KAMC-R. The inclusion criteria for this study were: Saudi, adult, at least 18 years or older, Ability to speak and read either Arabic or English and agree to voluntarily participate in the study.

Data collection methods and instruments used

Data was collected using data collection survey questionnaire that consisted of three parts:

Socio demographic Data Sheet: Developed by the researchers and include the following variables: age, education, occupation, income, marital status and relationship to the patient.

Health Care Communication Questionnaire (HCCQ): HCCQ was utilized to measure the effectiveness of communication between health care providers and patients' family. The scale is a self-administered brief measure that consists of 13 items rated on a 5-point Likert scale, ranging from 1 (not at all) to 5 (very much). The questionnaire started with: "During the course of the brief encounter with the hospital professional you met just a few minutes ago, to what extent did each of the following events occur?" Examples of items were: "He/she turned to me with a smile", "He/she was able to resolve my problem". The questionnaire encompassing four components: problem solving (four items), respect (four items), lack of hostility (three items), and nonverbal immediacy (two items) [18]. Item-total correlation and Cronbach's alpha were used to assess internal consistency, with an alpha 0.70 as recommended value [19]. A bilingual Arabic-English speaking translator had translated the questionnaire into Arabic. Back translation was performed by another professional bilingual Arabic-English speaking translator. The Arabic version of the questionnaire was piloted on five native Arabic speaking adults to test the feasibility and applicability of the tools. The result of the pilot study was helpful in refining the survey questionnaire form and confirmed the face validity of the questionnaire.

Hospital Anxiety and Depression Scale (HAD): The HAD scale was used to measure the anxiety and depression levels. The questionnaire consists of 14 items on a scale ranging from 0 to 3, with 3 indicating that feeling or sign of anxiety and depression happened most of the time and zero indicating that anxiety and depression are not experienced. The scale was validated in many languages including Arabic language. Cronbach's alpha for the instrument was 0.83. The overall Cronbach's alpha measures of internal consistency were 0.7836 and 0.8760 for anxiety and depression, respectively [20-24].

Ethical consideration

Approval from the research unit at college of nursing at King Saud bin Abdulaziz for Health Sciences was obtained. Ethical approval of the Institutional Review Board Committee (IRB) at King Abdullah International Medical Research Center (KAIMRC) was also granted. All participation was voluntary and participants had the right to withdraw from the study at any time without any penalty. The data was collected after explanation of the purpose and nature of the study. There was neither any known harm resulted from participation in the study nor any gained entitlement. The questionnaire was totally anonymous. All collected data were confidential and used only for the purpose of the current research.

Data collection

Unit managers supervising the emergency units in the aforementioned hospital were contacted to request permission to collect the data after revealing the obtained institutional IRB approval. Each participant was provided with a consent form. The researchers met and subsequently gave a brief oral explanation about the purpose of the study to the potential participants who were present at each location and each participant received the survey questionnaires to complete and return back to the researcher. The data was collected over a three-month period from March 2017 until June 2017.

Table 1: Sociodemographic Data of the Participants (n = 307).

Variable	Frequency (N)	Percent (%)
Gender		
Male	216	70.4
Female	91	29.6
Marital Status		
Single	115	37.5
Married	183	59.6
Divorced	7	2.3
Widowed	2	0.7
Level of Education		
Illiterate	9	2.9
Elementary education	6	2.0
Secondary education	15	4.9
High school	103	33.6
University Education	174	56.7
Occupation		
Student	50	16.3
Working	196	63.8
Retired	7	2.3
Unemployed	54	17.6
Relationship to the Patient		
Husband	15	4.9
Wife	3	1.0
Father	32	10.4
Mother	35	11.4
Sister	22	7.2
Brother	25	8.1
Son	100	32.6
Daughter	40	13.0
Neighbor	2	0.7
Others	33	10.7

Data management and analysis plan

The Statistical Package of the Social Scientists (SPSS) Version 22.0 was utilized to analyze the quantitative data. Once the surveys were received from the participants, the data were immediately coded and entered into SPSS. Descriptive statistics were utilized to describe the sample characteristics and to evaluate whether the results were normally distributed. Pearson's correlation coefficients were used to determine the strength and direction of relationships among variables. Appropriate statistical tests were utilized to compare between different groups. The significance level was chosen as ($p < 0.05$).

RESULTS AND DISCUSSION

As presented in Table (1), 307 caregivers (originally 313, six participants were excluded as they were non-Saudi). 216 (70.4%) were males and 91 (29.6%) were females. Participants' age ranged between 18 and 67 years with a mean age of 31.92 + 9.16 years. About a third of the participants of the study (59.6%) were married while more than a third of them (37.5%) were singles. With regard to the level of education, analysis of data revealed high educational level as more than half of the participants completed their university education and about one third of the participants completed high school. Majority of the participants (63.8%) were working. In exploring the relationship to the patients, about one third (32.6%) were sons followed by daughters, mothers, fathers and brothers.

Analysis of the participants' responses to the health care communication questionnaire showed that 60.7% of participants reported that the nurses maintained eye contact with them during conversation, three quarters of the participants (74.3%) said that the information that was given to them was clear and precise. A very significant proportion (82.1%) of patients' family was treated with kindness by the nurses. Almost three quarters (74.3%) of the nurses were calm during consultation. 83% of the nurses showed respect for relatives' privacy. On the other hand, the survey finding reveled that during asking and answering the questions 14% of the participants reported that their questions were answered in an aggressive manner and 16.6% reported that the nurses treated them in a rude and hasty manner. A detailed description of the participants' responses to the HCCQ is listed in Table (2).

The HCCQ is divided into four subscale categories as problem solving, respect, lack of hostility and nonverbal intimacy. The total HCCQ scores ranged between 19 and 65 with the scale subcategories as described below on Table (3).

Using item-total correlation and Cronbach's alpha to assess internal consistency of the HCCQ in a study revealed an alpha of 0.70 [19], in the current study Cronbach's alpha was calculated to assess the internal consistency of the scale and found to be 0.85 which reflects high consistency and reliability of the HCCQ.

(Table 4) presents the detailed responses to the HADS.

The total HADS scores ranged between 0 and 37 with a mean score of 15.58 + 7.31. According to the original HADS scoring, scores of 0-7 in respective anxiety and depression subscales are considered normal, scores of 8-10 borderline and scores of 11 or over indicating clinical caseness. In the current study, analysis of the data showed that the minimum score was 0 and the maximum score was 19 for both anxiety and depression subscales of the HADS with a mean score of 7.20 + 4.09 for anxiety subscale and 8.35 + 4.01 for depression subscale.

As shown in Table (5), results of the current study indicated that more than one fifth of the participants reported scores of 11 and above that indicates abnormal level of hospital anxiety and almost one third of the participants reported abnormal levels of hospital depression that require attention. Almost one fourth reported scores indicating borderline abnormal hospital anxiety scores and about one third of the participants reported borderline abnormal hospital depression scores reflecting the need for attention to prevent them from turning to abnormal cases.

Data analysis revealed a highly statistically significant negative relationship between nurses' communication scores and hospital anxiety, depression scores and the total hospital anxiety and depression scale score (r = -0.344, -0.293, -0.353, P = 0.000) respectively indicating that more proper way of communication reduced participants' anxiety and depression. There was also a strong association between hospital anxiety and depression (r = 0.629, p = 0.000), (Table 6).

In examining the relationship between selected demographic criterias and hospital depression and anxiety scores, Pearson corelation revealed that participants' age had no relationship

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Table 2: Participants' Responses to the Health Care Communication Questionnaire (HCCQ) (n=307).

Thinking to the health care professional/ worker you have just encountered, how did you feel?	Not at all	A little	Somewhat	Very much	Completely	M (SD)
1. The healthcare professional gave me eye contact when I was talking.	13 (4.2%)	44 (14.3%)	63 (20.5%)	65 (21.2%)	121 (39.5%)	3.77 (1.23)
2. I felt my needs were being respected.	5 (1.6%)	21 (6.8%)	57 (18.8%)	68 (22.1%)	156 (50.8%)	4.14 (1.05)
3. I was asked questions in a clear manner.	8 (2.6%)	20 (6.5%)	28 (9.1%)	86 (28.0%)	165 (53.7%)	4.24 (1.04)
4. I was asked questions in an aggressive manner.	31 (10.1%)	12 (3.9%)	24 (7.8%)	20 (6.5%)	219 (71.3%)	4.25 (1.34)
5. I received clear and precise information.	12 (3.9%)	23 (7.5%)	44 (14.3%)	70 (22.8%)	158 (51.5%)	4.10 (1.14)
6. I have been given answers in an aggressive manner.	216 (70.4%)	27 (8.8%)	20 (6.5%)	13 (4.2%)	31 (10.1%)	4.25 (1.34)
7. I have been treated with kindness.	9 (2.9%)	16 (5.2%)	29 (9.4%)	69 (22.5%)	183 (59.6%)	4.31 (1.04)
8. I have been treated in a rude and hasty manner.	180 (58.6%)	38 (12.4%)	38 (12.4%)	23 (7.5%)	28 (9.1%)	4.04 (1.36)
9. The healthcare professional addressed me with a smile.	15 (4.9%)	46 (15.0%)	81 (26.4%)	68 (22.1%)	97 (31.6%)	3.61 (1.21)
10. The healthcare professional was able to resolve my problem.	12 (3.9%)	44 (14.3%)	70 (22.8%)	77 (25.1%)	103 (33.6%)	3.70 (1.19)
11. The healthcare professional was able to cope with any difficulties during the consultation.	15 (4.9%)	34 (11.1%)	64 (20.8%)	86 (28.0%)	108 (35.2%)	3.78 (1.18)
12. The healthcare professional was calm throughout the consultation.	8 (2.6%)	21 (6.8%)	50 (16.3%)	77 (25.1%)	151 (49.2%)	4.11 (1.07)
13. The healthcare professional showed respect for my privacy.	11 (3.6%)	16 (5.2%)	25 (8.1%)	60 (19.5%)	195 (63.5%)	4.34 (1.07)

Table 3: Participants Minimum and Maximum Score on the Health Care Communication Questionnaire (HCCQ) (n= 307).

HCCQ Categories and Total Scores	Mean (SD)	Minimum Score	Maximum Score
Problem solving	15.94 (3.58)	4	20
Respect	16.81 (3.35)	4	20
Lack of hostility	12.55 (3.42)	3	15
Nonverbal intimacy.	7.38 (2.05)	2	10
Total HCCQ	52.68 (9.23)	19	65

Table 4: Participants' Responses to the Hospital Anxiety and Depression Scale (HADS) (n=307).

Statement	N (%)	N (%)	N (%)	N (%)	M (SD)
1. I feel tense or 'wound up'	Not at all 94 (30.6%)	From time to time, occasionally 131 (42.7%)	A lot of the time 48 (15.6%)	Most of the time 32 (10.4%)	1.06 (0.94)
2. I still enjoy the things I used to enjoy	Hardly at all 26 (8.5%)	Only a little 101 (32.9%)	Not quite so much 92 (30%)	Definitely as much 87 (28.3%)	1.22 (0.95)
3. I get a sort of frightened feeling as if something awful is about to happen	Not at all 135 (44.0%)	A little, but it doesn't worry me 83 (27%)	Yes, but not too badly 79 (25.7%)	Very definitely and quite badly 10 (3.3%)	0.88 (0.90)
4. I can laugh and see the funny side of things	Not at all 35 (11.4%)	Definitely not so much now 85 (27.7%)	Not quite so much now 107 (34.9%)	As much as I always could 80 (26.1%)	1.24 (0.97)
5. Worrying thoughts go through my mind	Only occasionally 136 (44.3%)	From time to time, but not too often 108 (35.2%)	A lot of the time 39 (12.7%)	A great deal of the time 24 (7.8%)	0.84 (0.93)
6. I feel cheerful	Most of the time 62 (20.2%)	Sometimes 111 (36.2%)	Not often 102 (33.2%)	Not at all 32 (10.4%)	1.34 (0.92)
7. I can sit at ease and feel relaxed	Not at all 62 (20.2%)	Not Often 117(38.1%)	Usually 63(20.5%)	Definitely 65 (21.2%)	1.57 (1.03)
8. I feel as if I am slowed down	Not at all 86 (28.0%)	Sometimes 147 (47.9%)	Very often 45 (14.7%)	Nearly all the time 29 (9.4%)	1.06 (0.90)
9. I get a sort of frightened feeling like 'butterflies' in the stomach	Very Often 11 (3.6%)	Quite Often 41 (13.4%)	Occasionally 133 (43.3%)	Not at all 122 (39.7%)	1.81 (0.80)

10. I have lost interest in my appearance:	I take just as much care as ever 163(53.1%)	I may not take quite as much care 87(28.3%)	I don't take as much care as I should 31(10.1%)	Definitely 26(8.5%)	0.74 (0.95)
11. I feel restless as I have to be on the move	Not at all 81 (26.4%)	Not very much 123 (40.1%)	Quite a lot 71 (23.1%)	Very much indeed 32 (10.4%)	1.18 (0.94)
12. I look forward with enjoyment to things	Hardly at all 27 (8.8%)	Definitely less than I used to 75 (24.4%)	Rather less than I used to 117 (38.1%)	As much as I ever did 87 (28.3%)	1.15 (0.94)
13. I get sudden feelings of panic	Not at all 131 (42.7%)	Not very often 110 (35.8%)	Quite often 47 (15.3%)	Very Often Indeed 19 (6.2%)	0.85 (0.90)
14. I can enjoy a good book or radio or TV program	Very seldom 90 (29.3%)	Not often 57 (18.6%)	Sometimes 109 (35.5%)	Often 51 (16.6%)	1.61 (1.08)

Table 5: Distribtion of the Participants according to the HADS Categories (N= 307).

Category	Anxiety Subscale N (%)	Depression Subscale N (%)
Normal	163 (53.1)	129 (42.0)
Borderline Abnormal	76 (24.8)	91 (29.6)
Abnormal (Case)	66 (21.5)	86 (28.0)

Table 6: Relationship between Nurses' Communication Scores and Hospital Anxiety and Depression Scores (n = 307).

Hospital Anxiety and Depression Scale	Total Communication Scale	
	r	P
Hospital Anxiety	-.344	.000**
Hospital Depression	-.293	.000**
Total Hospital Anxiety and Depression Scale	-. 353	.000**

Table 7: Relationship between Participants' Gender and Hospital Anxiety and Depression Scores (n = 307).

Variable	M	SD	t	P
Hospital Anxiety Male (215) Female (92)	6.47 8.96	3.81 4.26	5.036	0.000**
Hospital Depression Male (215) Female (92)	7.88 9.47	4.02 3.78	3.228	0.001**
Total Hospital Anxiety and Depression Scale Male (215) Female (92)	14.38 18.42	7.16 7.16	4.451	0.000**

Table 8: Relationship between Participants' Martital Status and Hospital Anxiety and Depression Scores (n = 307).

	Marital Status	Sum of Squares	df	Mean Square	F	P
Hospital anxiety subscale	Between Groups	117.562	3	39.187	2.370	.071
	Within Groups	4977.238	301	16.536		
Hospital depression subscale	Between Groups	180.154	3	60.051	3.842	.010*
	Within Groups	4719.728	302	15.628		
Total hospital anxiety and depression scale	Between Groups	571.922	3	190.641	3.657	.013*

Table 9: Relationship between Participants' Occupation and Hospital Anxiety and Depression Scores (n = 307).

	Occupation	Sum of Squares	df	Mean Square	F	P
Hospital anxiety subscale	Between Groups	151.407	3	50.469	3.073	.028*
	Within Groups	4943.393	301	16.423		
Hospital depression subscale	Between Groups	95.394	3	31.798	1.999	.114
	Within Groups	4804.488	302	15.909		
Total hospital anxiety and depression scale	Between Groups	410.765	3	136.922	2.600	.052*
	Within Groups	15799.495	300	52.665		

Table 10: Relationship between Participants' Education and Hospital Anxiety and Depression Scores (n = 307).

	Education Level	Sum of Squares	df	Mean Square	F	Sig.
Hospital anxiety subscale	Between Groups	126.442	4	31.611	1.909	.109
	Within Groups	4968.358	300	16.561		
Hospital depression subscale	Between Groups	146.575	4	36.644	2.320	.057
	Within Groups	4753.308	301	15.792		
Total hospital anxiety and depression scale	Between Groups	484.370	4	121.093	2.302	.059
	Within Groups	15725.890	299	52.595		

Table 11: Relationship between Participants' Relation to the Patient and Hospital Anxiety and Depression Scores (n = 307).

	Relationship to the Patient	Sum of Squares	df	Mean Square	F	P
Hospital anxiety subscale	Between Groups	341.842	9	37.982	2.357	.014*
	Within Groups	4752.958	295	16.112		
Hospital depression subscale	Between Groups	158.221	9	17.580	1.097	.364
	Within Groups	4741.661	296	16.019		
Total hospital anxiety and depression scale	Between Groups	899.847	9	99.983	1.920	.049*
	Within Groups	15310.413	294	52.076		

with either hospital anxiety or depression scales (r =0.044, 0.057) respectively.

As presented in Table (7), the independant t test revealed a statistically significant difference between male and female participants in relation to their scores in all the hospital anxiety and depression subscales and the totalhospital anxiety and depression scale (p = 0.000, 0.001 and 0.000 respectivley). Female participants experienced higher levels of anxiety and depression compared to male participants.

(Table 8) represents that a one-way ANOVA was conducted to determine if anxiety and depression scores were different for groups with different martital status. Participants were classified into four groups: single (n = 115), married (n = 183), widowed (n = 2) and divorced (n = 7). There was a statistically significant difference between groups in relation to depression scores and total anxiety and depression scores as determined by one-way ANOVA (F (3.842, 3.657), p = 0.01). LSD post-hoc test revealed that hospital depression subscale and total anxiety and depression scale scores were statistically significantly higher among widowed participants compared to the single, marriedand divorced groups of participants (Mean difference 6.902, 13.803, p = 0.01).

Table 9 represents the results of one-way ANOVA that was conducted to determine if anxiety and depression scores were different for groups with different occupations. Participants were classified into four groups: students (n = 50), working (n = 196), retired (n = 7) and unemployed (n = 54). There was a statistically significant difference between groups in relation to depression scores and total anxiety and depression scores as determined by the one-way ANOVA (F (3.073, 2.600), p = 0 .02, 0.01 respectivley). LSD post-hoc test revealed that hospital depression subscale and total anxiety and depression scale scores were statistically significantly higher among unemployed participants compared to the students, working, and retired groups of participants (Mean difference 1.476, 3.061, p = .005).

(Tables 10,11) shows the differences between groups with different educational backgrounds in relation to HADS. One-way ANOVA reflected a borderline statistically significant difference between groups with different educational backgrounds in relation to hospital depression scores and total hospital anxiety and depression scores (F (2.320, 2.302), p = 0.06). LSD post-hoc test revealed that hospital depression subscale and total anxiety and depression scale scores were statistically significantly higher among illiterate participants compared to the participants who have high school or college education with a mean difference 3.935, 3.352, p = .005, 0.01 for depression subscale and a mean difference of 6.624, 5.214, p = 0.01, 0.03 for the total hospital anxiety and depression scale.

To test the differences in the perceived hospital anxiety and depression between accompanying persons with different relationship with the patient, the one-way ANOVA revealed a statistically significant difference between different groups in relation to the perceived hospital anxiety and the total anxiety and depression scale scores (F (2.357, 1.920), p = 0.01, 0.05 respectivley). LSD post-hoc test revealed that hospital anxiety subscale and total anxiety and depression scale scores were statistically significantly higher among fathers and husbands compared to the participants who were mothers, brothers, sisters or sons.

Discussion

The present study is aimed at assessing the relationship between nurse's communication and levels of anxiety and depression among patient's family in the emergency department. The communication between the nurses and patients' family influences the patient's health as well as the quality of nursing care provided.

The responses to the HCCQ by the family members included in this study ascertained that a significant proportion of patients' family reported that they were treated with kindness by the nurses, nurses were calm, showed respect, maintained eye contact and the information given by the nurses was precise and clear, this finding is congruent with the findings of another study

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[11] their results showed that most of the nurses executed eye contact with family members of the patient during interaction. Nurses provided them with adequate information about the treatment and received consent before implementing the planned nursing care [14]. Furthermore, as identified in the findings of the present study, few participants reported that during asking and answering the questions nurses replied to them in an aggressive manner and were treating them in a rude and hasty manner. This result was in harmony with the study on the relationship between communication of nurses and level of anxiety of patient's family in emergency room, which reported that few nurses did not ask adequate information from the family members, did not provide opportunity to family members to ask, and ended up in conflict with family members [13]. Communication is an important facet of patient care which improves nurse-patient relationship and has a profound effect on treatment outcomes [25]. On the contrary when adequate information is not provided to the family members regarding the status of their patient will increase the negative emotions, leaving the family members in a state of being out of control [26].

Hospital anxiety and hospital depression among family members of patients admitted to the emergency department was measured in this study and the scores showed that more than one fifth of the participants had abnormal hospital anxiety. One third of them had abnormal hospital depression; one fourth had borderline hospital anxiety and one third of the participants had borderline hospital depression. Admission to emergency room is a stressful situation for the patients' family that can lead to emotional problems such as anxiety and depression. Similarly, a study reported a prevalence of 15.1% hospital anxiety and 6.6 % hospital depression among their study participants [27]. Also they identified that the prevalence of hospital anxiety and hospital depression was the same for those family members stayed in the ICU for less than 48 hours and those whose relatives had ICU admissions longer than 48 hours [27]. Another study reported 11 (28.2%) relatives as possible cases of anxiety and 17 (43.6%) as probable cases of anxiety [28]. One more study reported that 71% of the respondents experienced borderline or abnormal anxiety levels and 63% of respondents experienced borderline or abnormal depression [29]. Another study reported the prevalence of symptoms of anxiety as 69.1% and depression as 35.4% among family members, symptoms of anxiety or depression were present in 72.7% of family members and 84% of spouses. Anxiety and depression among family members have a major impact on decision making, therefore it is imperative to give more importance to the emotional needs of patient's family members during patients' admissions [30].

Patients in the emergency department usually are not able to give information about their health status, in this circumstances effective communication by the nurses with family members is important to plan for patient treatment [31]. The present study revealed that more proper way of communication reduced the hospital anxiety and depression, enough information and knowledge about the condition of the patient who was admitted to the emergency department made the family members feel supported. This is consistent with the findings of a study which reported that family members were gratified with the nurses' communication while having their queries replied reliably. That

in turn helped in reduction of hospital anxiety and depression [32]. In contrast, another study reported that according to family members, nurses used an ineffective and ambiguous communication strategy which ended up in conflict and led to anxiety and depression in family members [5]. Therefore, providing more information, allowing longer visiting hours, broadening visiting policies and encouraging family members to discuss and agree among themselves will decrease the possibility of development of the symptoms of anxiety and depression and increase decision-making ability of the family members [30].

In examining the relationship between hospital anxiety and depression with gender, the current study revealed that female family members experienced higher levels of anxiety and depression compared to male family members. This finding is consistent with a few more studies which revealed that female family members experienced higher level of anxiety when compared to male family members [30,33]. A contradict of this was found in a study, on assessing the anxiety and depression among caregivers of patients admitted to intensive care unit that there was no difference in the anxiety and depression levels based on gender. Nurses should bear in mind the need to decrease the risks of anxiety and depression in family members [29].

When studying the relationship between demographic variables such as occupation, marital status, education and relation to patient with hospital anxiety and depression, current study' findings revealed that HADS were higher among the unemployed, illiterate family members and those who were fathers and husbands. This finding is congruent with the findings of a study which reported that the severity of hospital depression depends on the educational status of the family members. The same study also reported that the spouses experienced higher levels of anxiety than other family members [32]. On the contrary, a research finding reported that mothers of the patients had higher level of anxiety when compared to fathers and husbands who had moderate level of anxiety [12]. On the other hand, it was revealed that there was no significant relationship between the selected demographic variables such as age, gender, relation to patient, education, and duration of stay [28].

Gaining the trust of family members in the initial conversation is vital in terms of communication. Past studies that were conducted with families from different cultures have found that the primary needs of family members are trust and being informed about their patients' condition.

This study presents the following limitations: Cross-sectional design is used, which does not allow inferences about causality and the temporal stability of the associations indicated by our data. This study did not evaluate the previous state of the family members prior to patients' admissions.

CONCLUSION

The study results revealed that effective communication of nurses in the emergency department is vital. The nurses as caregivers should have skills of communication mainly to handle the situation with the family members, since they are the co-participants of the nursing care processes. Nurses get the complete information about the patient from their family member's in order to make congruent decisions regarding

nursing care, at the same time nurses are responsible to provide adequate information about the uncertainty, risks, treatment options and treatment plans to the family members. Institute for patient and family-centered care core concepts of patient centered care involves dignity, respect, giving information and collaboration. Findings of this study suggest that one of the most essential need of family members during admission of a family member to the emergency department is accessing information, and this information should be communicated effectively by the nurses that will help to reduce the anxiety and depression among the patient's family.

1. 7.1. Based on the findings of this study, the following recommendations are suggestedEncourage open communication by the nurses about the patient condition, progress, risks and treatment plan to the patient family, especially in the emergency department will help to reduce anxiety and depression among family members.

2. Emphasize the importance of continuing educational programs on interpersonal skills of communication for nurses.

3. Further research studies on the potential impact of hospital anxiety and depression on family members on the ability to be effective surrogates is highly recommended.

4. Routine screening for anxiety and depression as a tool for helping emergency department caregivers meet family needs is potentially beneficial.

5. Evaluation of the potential emotional benefits of allowing family members to participate in care giving activities is an important avenue for future research.

ACKNOWLEDGEMENTS

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