



The Nurses' Perception of Nurse-Physician Professional Relationship in Abu-Ali-Sina Organ Transplantation in Shiraz: A Descriptive Study in Iran

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Abstract

Introduction: Highly professional communication could result in the improvement of the quality of care such as reduced mortality, medical error, length of stay, and unplanned readmission. Therefore, the purpose of this study was to determine the nurses' perception of nurse-physician professional relationship in Abu-Ali-Sina organ transplant hospital of Shiraz.

Methods: This is a descriptive study performed cross-sectionally in Abu-Ali-Sina hospital in Shiraz in 2020. The sampling method was the census. All nurses working at Abu-Ali-Sina Organ Transplant Hospital (N=295) participated in the study, so no sampling was applied. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 24.

Results: The finding of this study showed that the level of professional nurses-physician relationship was moderate from the nurses' point of view. Reporting of patient issues to physicians (72.2%), physicians' respect (67.8%), and trust (66.1%) to nurses were highly desirable at Abu-Ali-Sina Hospital. However, the nurse's assertive skills to tell the physicians' errors (14.2%) and their encouragement by physicians (10.2%) were not favorable.

Conclusion: From the results, it is possible to conclude that the nurse-physician professional relationship is at a moderate level in Abu-Ali Sina Transplant Center. Further studies are need to implement intervention for improving the level of physician and nurse's relationship.

Keywords: Nurse-Physician Professional Relationship, Nurses' Perception, Hospital, Transplant.

Article History:
Received: 04 May 2020
Accepted: 14 November 2020

Please cite this paper as:
Nikandish R, Karajizadeh M, Rasekh R, Soleimanijafarbiglo MB, Golafshan L, Roozrokh Arshadi Montazer M. The Nurses' Perception of Nurse-Physician Professional Relationship in Abu-Ali-Sina Organ Transplantation in Shiraz: A Descriptive Study in Iran. J Health Man & Info. 2020; 7(4): 206-212.

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Background

The primary purpose of hospitals and health care centers is to provide quality care services for the patients, and communication is an essential component at all stages of the care process in the hospital. A questionnaire was used to assess the nurses' perception of the nurse-physician professional relationship that consisted of demographic data and

25 questions with three-point Likert scale about nurse-physician communication. This tool was used in a previous study (1). Sharing the patient's information with other care providers (physicians, nurses, specialists, and other hospital staff) requires concise and effective communication (2). As the disease becomes more complex, the need for having more effective communication rises. Based on

previous studies, the impact of good communication include the resource efficiency (physician and nurse time), effectiveness of main operations (length of stay, medical error), quality life of clinical staff (job stress and job satisfaction), and service quality (patient's satisfaction and patient's experience) (3). Although a number of staff are involved in patient care, nurses and physicians are considered as the principal members of the team.

The results of previous studies show that professional nurse-physician communication is not desirable (4-9). Also, Kang et al. demonstrated that nurse and physician team working as well as nurse education levels are directly related to 30-day mortality and morbidity rates (4). Hence, improving nurse-physician communication is considered as the basis of collaboration and teamwork for patient care (10). Poor communication in healthcare is a high priority challenge which needs to improve (11) the communication level in the healthcare depending on cultures and healthcare systems (12).

According to previous reports, poor communication between the members of the healthcare team can increase the mortality rate (2, 13), length of stay (7), medical error (14), cost of treatment (15), reduced culture of organizational cooperation, and reduced patients' satisfaction (16). Low level of nurse-physician communication can also affect the quality of life of nurses and physicians (17-20).

Poor professional communication skills could lead to a lack of independence and reduction in the satisfaction level of nurses (21). To the best of our knowledge, there was no professional physician-nurse communication study performed at Abu-Ali-Sina Organ Transplant Hospital. As the largest transplant center in the world (22) and the referral Center for Organ Transplantation in the Middle East, high quality of care is expected here. One of the most important factors required for quality care is nurse-physician communication as mentioned above. Understanding of communication between the nurses and physicians can provide invaluable information. According to this result, different quality improvement initiatives may be implemented in order to provide the best quality care. Still, there is a gap between the current status of the physician-nurses' communication and good physician-nurse relationship level (11). Therefore, the aim of this study was to determine the perception of nurse-physician communication at Abu-Ali-Sina Hospital.

Methods

The present study is a descriptive cross-sectional

research performed in Abu-Ali-Sina hospital in Shiraz. The study was conducted from March 10, 2020 to April 16, 2020.

Setting

Shiraz Organ Transplant Hospital is known as the largest liver transplant center worldwide. Patients are referred to this hospital from all over the country, and also from the neighboring countries. This hospital is affiliated to Shiraz University of Medical Sciences and has been working since 2017 with 600 approved beds, and residents and fellows deliver services to the wards. Also, a part of this major transplant center is dedicated to other specialties as well.

Participations

This study explores the perception of nurses towards nurse-physician relationship. The sampling method was the census. All nurses working at the hospital participated in the study. Thus, no sampling was conducted (N=295) and we received all of 295 responses.

Instrument

Data were collected using Shokri et al. research's questionnaire which consisted of demographic data and 25 questions with a three-point Likert scale (high-three point, low two point, and never one point) considering nurse-physician communication. The validity and reliability of the questionnaire in Persian were proven in a previously performed study by Shokri et al. (1). Three-point scale has a smaller scope in answering and helps to obtain more accurate responses. Because the nurse have not enough time, we converted five-point scale to three-point scale questions. This questionnaire has not any dimensions. Total average was categorized into three group including low level relationship (average between 20 to 51), moderate level relationship (average between 52 to 80), and good level relationship (average between 81 to 110) (1).

Procedure

The purpose of the study and the questionnaire was electronically sent to nurses. Participation in the survey was voluntary. Nurses were given two-week time to participate in the study. At the second week, a reminder was sent to those nurses who did not complete the questionnaire, with the purpose of doing it if they desired.

Statistical Analysis

Counts and percentages were reported for

categorical variables. Also, the mean score (standard deviation) of each item was reported. The data were analyzed by descriptive statistics using SPSS version 24.

Result

All the nurses participated in this study (response rate=100%). Table 1 shows demographic data of the participants. Findings of the present study showed that the types of employment of all participants in the survey were contractual; 87.2% of them were female and 62.6% were unmarried. About 14.2% of the participants were in the emergency department (Table 1).

The mean score of the relationship between the nurse and physicians was 60.90. Most of the nurses participating in this study (72.2%) believed that they informed the physicians about the patient's care issues in a timely manner. Also, 67.8% of the nurses believed that their communication with physicians showed respect between them. Toally, 66.1% of the nurses believed that physicians trust the nurses on the given information by them about their patient's conditions. 65.8% of the nurses stated that communication between nurses and physicians was based on collaboration, while 59.3% of them believed that they were in conflict with physical encounters. Also, 76.4% of the nurses imagined themselves as the subordinates of the physicians. 85.8% of the nurses assumed that they could tell the physicians their mistakes, and 10.2% of them stated that they would not be encouraged and supported by the appropriate professional performance of the nurses. 89.5% of nurses agreed that their relationship was physician dominant (Table 2).

Discussion

This study was conducted to determine the nurses' perception of nurse-physician communication in Abu-Ali-Sina Organ Transplant Hospital of Shiraz, Iran. Overall, the findings of this study indicated that most of the nurses believed that the relationship between the nurses and physicians was at a moderate level (total average score=60.90).

The results of many studies conducted in Iran indicate that the professional relationship between the nurses and physicians is at a moderate level (1, 23) . As to other countries, Copnell et al. found that the relationship between physician and nurse was moderate at Children's Hospital in Melbourne, Australia (9). Still, the healthcare system in Iran is physician-centered. Therefore, this might lead to poor communication between physician and nurses.

Table 1: Characteristics of the participants

Variable	No (%)
Sex	
Male	26(12.8)
Female	177(87.2)
Marital status	
Single	127(62.6)
Married	76(37.4)
Wards name	
Emergency ward	42(14.2)
Surgical ICU	10(3.4)
Medical ICU	12(4.1)
Intestinal rehabilitation	13(4.4)
Post liver transplant care	13(4.4)
Post kidney transplant care	10(3.4)
General transplant ward	20(6.8)
Obstetrics &Gynecology	3(1)
General surgery 1	20(6.8)
General surgery 2	18(6.1)
Colorectal surgery	8(2.7)
Neurosurgery	8(2.7)
Cardiology	9(3.1)
General surgery	10(3.4)
Colorectal surgery	11(3.7)
Nephrology	8(2.7)
Pulmonary & thoracic surgery	10(3.4)
Pediatrics organ transplant ICU	10(3.4)
Adult Organ Transplant ICU 1	6(2)
Adult Organ Transplant ICU 2	19(6.4)
Cardiac surgery ICU	15(5.1)
Kidney transplant ICU	4(1.4)
CCU	12(4.1)
Oncology	4(1.4)
Total	295

Thus, patient-centered approach can help solve this problem (24-27).

Our finding indicates that approximately three quarters of participants imagine themselves as subordinates to physicians. One of the possible explanations for the area of weakness is the dominant culture of patient care in our hospitals which is mostly physician- centered rather than the patient-centered (25, 26, 28). Making this paradigm shift is a major challenge in our healthcare systems, but still improving the quality of care and increasing the job satisfaction in nurses are the most important requirements in every hospital (26, 27).

Rostami et al. revealed that increasing the knowledge and professional training of nurses could improve the nurse-physician communication (23). Kang et al. found that the level of education and teamwork of different professions had a direct impact on the patients' clinical outcomes (4). Kristi et al. have demonstrated that modifying the healthcare team communication at

Table 2: Items of the questionnaire about nurse-physician professional relationship

Num.	Items	Likert scale (n=295)/frequency (%)			
		Never n(%)	Low n(%)	High n(%)	Mean score (Std. Deviation)
1	To what extent do you feel that physicians understand the information you receive?	(4.4)13	(38.6)114	(56.9)168	2.53(0.58)
2	To what extent does your relationship with physicians show respect?	(1.7)5	(30.5)90	(67.8)200	2.66(0.51)
3	To what extent is your relationship with physicians based on collaboration?	(5.8)17	(28.5)84	(65.8)194	2.60(0.60)
4	How satisfied are you with your relationship with doctors?	(5.1)15	(40.7)120	(54.2)160	2.49(0.59)
5	How involved are you with doctors? (From verbal conflict to physical encounters)?	(40.7)120	(32.2)95	(27.1)80	1.86(0.81)
6	To what extent is it satisfying for you to interact and talk to your doctors?	(5.4)16	(41.4)122	(53.2)157	2.48(0.60)
7	To what extent do physicians express satisfaction with extracurricular activities that you have undertaken to diagnose in order to change the patient's condition (even if it is critical for the patient)?	(6.1)18	(38.3)113	(55.6)164	2.49(0.61)
8	To what extent do physicians expect nurses to perform some of their duties?	(4.7)14	(41.4)122	(53.9)159	2.49(0.61)
9	To what extent do physicians trust your information about patient status?	(3.7)11	(30.2)89	(66.1)195	2.62(0.56)
10	To what extent do physicians ignore nurses' phone calls?	(6.4)19	(38)112	(55.6)164	2.49(0.59)
11	To what extent do physicians work as a coordinated team?	(5.8)17	(38)112	(56.3)166	2.51(0.61)
12	To what extent do physicians respect dedicated nursing professional plans?	(7.8)23	(46.4)137	(45.8)135	2.38(0.63)
13	To what extent will doctors consider you when making decisions for the patient?	(10.8)32	(45.4)134	(43.7)129	2.33(0.66)
14	To what extent do your interactions with physicians indicate a prescriber-recipient relationship (dominant physician-recessive nurse)?	(5.8)17	(40.7)120	(53.6)158	2.48(0.60)
15	To what extent do you imagine yourself under the hands of a physician?	(18.6)55	(42)124	(39.3)116	2.21(0.73)
16	To what extent do you discuss patients with doctors?	(4.7)14	(35.3)104	(60)177	2.55(0.59)
17	To what extent is your relationship with your doctor a boss and a relationship?	(9.5)28	(46.4)137	(44.1)130	2.35(0.65)
18	To what extent are you encouraged and supported by physicians for good professional practice?	(10.8)32	(47.5)140	(41.7)123	2.31(0.66)
19	To what extent can you tell the mistakes of doctors?	(14.2)42	(47.1)139	(38.6)114	2.24(0.69)
20	How easily can you communicate with doctors?	(6.1)18	(44.7)132	(49.2)145	2.43(0.61)
21	How quickly do you get the information you need from doctors when you are a patient?	(4.7)14	(38)112	(57.3)169	2.53(0.59)
22	How well can you get a solution from a physician while having a problem with patient care?	(3.4)10	(34.6)102	(62)183	2.59(0.56)
23	How easily can you ask doctors if the doctor's instructions are questionable?	(4.1)12	(40)118	(55.9)165	2.52(0.58)
24	To what extent do you timely inform physicians about patient care issues?	(4.7)14	(23.1)68	(72.2)213	2.67(0.56)
25	To what extent will doctors consult you on treatment process?	1(0.03)	266(90.2)	28(9.5)	2.09(0.30)
Total average					60.90

discharge can reduce the readmission and visits to the emergency department (29).

Teamwork is essential in the evaluation, diagnosis, surgery, and care of patients (3). Therefore, it is necessary to improve the interaction between the nurses and physicians. Wang et al. conducted a review study to identify the interventions which

improve the nurse-physician communication in intensive care units (30). They found that using checklists and communication tools, team training, structure assessment, interdisciplinary work, and positioning-field-evaluation-recommendation-based electronic documentation are essential to improve communication (30). Using the daily checklist, SBAR

(31), can enhance the understanding of the effective relationship between physician and nurse, and call out checkbox, and conflict resolution are among the ways to promote teamwork. The use of various methods can improve communication between physicians and nurses. In addition, Li et al. have shown that applying the Interprofessional Teamwork Innovation model enhances the professional communication between the physicians and nurses (32).

Adequate documentation of clinical information can enhance the communication between nurses and physicians. Vermeir et al. showed that inadequate documentation can weaken the communication among the care team members (3). In this study, one of the reasons for the poor communication between the nurses and physicians may be due to inadequate documentation. Anderson et al. have shown that electronic medical records and electronic health records are considered as one of the important tools to strengthen the communication between physicians and nurses in the intensive care unit (33).

This is the first study investigating the relationship between nurses and physicians from the perspective of nurses in a specialized organ transplant hospital. At the transplant center, members of the transplantation team need to have good communication with the rest of nurses and physicians. The relationship between nurses and physicians has a direct impact on the quality of patient care. Therefore, the strength of this study is that the research community is Abu Ali Sina organ transplant hospital, which is one of the largest organ transplant center worldwide. Also, the sample size in this study was large.

This study had also some limitations; the research was not performed at several transplant centers to obtain a more comprehensive result due to budget constraints and human resources. In addition, the present study did not explore the physician's perception of nurses-physician communication. Such exploration can have useful findings for planning to improve the relationship between physicians and nurses. It is also suggested that the effect of nurse-physician communication on patients' quality of care should be examined.

Conclusion

From the results, we can conclude that the nurses-physicians professional relationship, as an important patient-related interaction, is at a moderate level. Therefore, it is recommended that workshops, checklists and communication tools, team training, patient center care, evaluation of interdisciplinary work structure, and positioning-field-evaluation-

electronic documentation format should be developed to enhance the communication skills. Further studies are needed to implement interventions for improving the level of physicians and nurses' relationship.

Ethical Consideration

The study was approved by Institutional Review Board of the Shiraz University of Medical Science (Approval ID: IR.SUMS.REC.1399.343). The authors of the study were de-identified data for the research purpose. Consent was obtained from the participants in this study.

Acknowledgement

The authors would like to thank the nurses of Abu-Ali-Sina Organ Transplant Center for their participation. This project was financially supported by Shiraz University of Medical Sciences (grant number 98-01-15-21220).

Authors' Contribution

RN contributed to the design, acquisition, analysis, or interpretation of data, and drafting. MK contributed to the acquisition, analysis, interpretation of data, and drafting. RR cooperated design, acquisition data, interpretation of data, and revising it critically for important intellectual content. MS contributed to the acquisition, analysis, and revision of the manuscript. LG contributed to the acquisition, analysis, interpretation of data, and drafting the manuscript. MR cooperated in the design, acquisition of data, and its critical revision for important intellectual content. All authors approved the final version of the manuscript.

Conflict of Interest: None declared.

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