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Investigating the Patient-Physician Relationship in Specialized Outpatient Clinics of Ahvaz Jundishapur University of Medical Sciences

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Abstract

Background: Good patient-physician relationship is a factor that can enhance the efficiency of medical services. This study aimed to investigate the patient-physician relationship in specialized outpatient clinics affiliated with Ahvaz University of Medical Sciences.

Methods: This descriptive-analytical cross-sectional study was performed on 275 patients who visited specialized outpatient clinics of Ahvaz University of Medical Sciences in 2019. The data in this study were collected using the Patient-Doctor Relationship Questionnaire (PDRQ-9). Data were analyzed using SPSS22 software with the Pearson correlation coefficient and independent samples t-test.

Results: The patients' satisfaction with their relationship with the physician was reported to be moderate (33.92±6.80 out of 45). The highest score (4.13±0.83 out of 5) was related to the item "I trust my doctor" and the lowest score (2.84±1.16 out of 5) was related to the item "I find my doctor easily accessible". There was a significant and negative relation between the patients' satisfaction with the relationship with the physician and wait time and a significant and positive relation with the duration of the visit. The mean visit and the mean wait time were 13.7±11.1 and 90±57.8 minutes, respectively. Besides, the patients' satisfaction with communication with physicians had a significant relation with the type of clinic (P = 0.032).

Conclusion: To improve the patient-physician relationship, it is essential to take some management measures to reduce patients' wait time, comply with standard visit time, improve environmental conditions, and empower physicians to enhance communication skills.

Keywords: Physician communication skills, Communication with patient, Patient satisfaction

Introduction

Communication is a set of skills, but the most important of which is to understand the other party's attitudes (1). Communication is the transfer of information from sender to receiver in a way that is understandable and clear to both (2). According to the recommendations of mental health specialists of the World Health Organization (WHO) in 1993, communication skills are divided into two categories of basic skills (interpersonal skills, data collection skills, information presentation skills, and patient education skills) and advanced skills (skills needed to attract patient cooperation, application of basic skills in special situations like to groups with different languages and cultures, those with brain disorders, blind patients, deaf patients, and people who are unable to speak) (3). Research has shown that most medical diagnoses and treatment decisions are based on the information obtained from interviews with patients and the basis of the medical interview is communication (1). Good patient-physician communication is the cornerstone of good medical care and an effective factor in the successful delivery of primary health care and the efficiency of medical services (1, 4). One of the most important outcomes of establishing an effective patient-physician relationship is patient satisfaction with the treatment process (2). Moreover, having effective communication not only helps the patient to feel better but also helps to restore the patient's complete health (4). Baker et al. showed that a significant percentage of patients' complaints to the doctor and improper use of treatment instructions are not the result of a physician's incompetence but are a consequence of communication problems (5). Effective communication leads to patient satisfaction and ultimately improves clinical outcomes. In a study in Tehran, 74% of patients believed that the better the patient-physician relationship, the greater their satisfaction. Effective communication with the patient also affects the physician's satisfaction, self-confidence, and clinical competence (1). Barriers to establishing effective patient-physician communication are differences in colloquial language, having a busy schedule, reluctance, discouragement, apathy towards the profession, unfavorable environmental conditions (loud noise, frequent commuting, etc.), anxiety, concerns, and specific physical and mental conditions caused by the disease in patients (6). Factors such as age, gender, language, physical condition, and technical language of the physician also affect the patient-physician interaction (7).

From the patients' point of view, the quality of services is increased through effective communication with the physician. Accordingly, most complaints and dissatisfaction in health and treatment settings are caused by communication errors and a lack of effective communication (8). Lack of effective communication skills puts patients' care and safety at risk during work shifts so that 75% of medical errors and 65% of accidents in work shifts are caused by ineffective communication (9). Zahednezhad et al. showed that the physician-patient relationship was correlated with satisfaction with treatment. Besides, the highest level of satisfaction was related to scientific knowledge, confidential behavior, careful listening, and spending enough time for examination (10). Furthermore, establishing an effective patient-physician relationship often leads to an increase in physician job satisfaction, which in turn increases physicians' satisfaction with their job and enhances their efficiency (1, 4). Blint coined the term "physician as medicine" to describe the dynamic nature of the physician-patient relationship. He believed that the most powerful tool a physician has is himself/herself. He also used the term mutual investment in the patient-physician relationship and believed that this investment will benefit both parties, physician and patient, over time (11). Amak showed that the correct physician-patient relationship will lead to increased patient satisfaction, a more pleasant clinical experience, increased accuracy of diagnosis, and increased adherence to treatment, of which patient satisfaction will be the most important consequence (12).

Various studies have addressed the physician-patient relationship and the pattern of mutual participation and cooperation (13), but no study has been conducted in this field in Ahvaz. Therefore, considering the importance of the issue and the impact of the patient's effective relationship with the medical staff on the treatment process, care promotion, creating a reassuring relationship, and understanding patients' needs and expectations, the present study aimed to investigate the patient-physician relationship in specialized outpatient

clinics affiliated with Ahvaz Jundishapur University of Medical Sciences.

Methods

This was a descriptive-analytical cross-sectional study conducted in 2019. The research population included patients who visited specialized outpatient clinics of teaching hospitals of Ahvaz University of Medical Sciences. This study was performed in the clinics of three teaching-university hospitals, including the Imam Khomeini, Golestan, and Razi Hospitals.

To estimate the sample size, first, the average number of patients visiting the clinics of each hospital per month was determined. The corresponding numbers were 129, 124, and 109 patients (362 patients in total) in the specialized outpatient clinics of Imam Khomeini, Golestan, and Razi hospitals, respectively. According to Morgan's table which specifies that at least 186 persons should be sampled for a population of 360, the sample size was estimated as 275 persons. The participants were selected using random stratified sampling from patients who visited specialized outpatient clinics of the three hospitals. In proportion to the number of patients who visited each hospital, 96, 94, and 85 patients were selected from the clinics of Imam Khomeini, Golestan, and Razi hospitals, respectively. The inclusion criteria were being over 18 years of age, being able to answer questions, and having literacy.

The data in this study were collected using a demographic information questionnaire (that assessed the participants' age, gender, education, place of residence, appointment method, type of insurance, and type of clinic) and the Patient-Doctor Relationship Questionnaire (PDRQ-9) whose validity and reliability were confirmed by Van Der Feltz et al. in 2004 (14). The validity and reliability of the Persian version of the questionnaire were checked and confirmed by Torabipour et al. (15). The questionnaire contains 9 items that assess satisfaction with the patient-physician relationship using a 5-point Likert scale: very high (5), high (4), moderate (3), low (2), and very low (1). The total score for each respondent ranges from 9 to 45. A score of 9 to 21 shows poor communication, a score of 22 to 35 indicates moderate communication, and a score of 36 and above shows good communication.

The visit time was measured (in minutes) by the researcher using a stopwatch. The patients were also asked to report the wait time (in minutes). The data collected in this study were analyzed using SPSS.20 software at the significance level of 0.05. The participants' data were summarized as percentage, mean, and standard deviation. As the normality of the data was confirmed, Pearson correlation coefficient and independent samples t-tests were used to analyze the data.

This research project was approved under the code of ethics IR.AJUMS.REC.1398.212 by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences. To comply with ethical considerations, the researchers submitted an official letter of introduction from Ahvaz Jundishapur University of Medical Sciences to specialized outpatient clinics of the studied hospitals. They also obtained permission from the officials of the clinics and explained the research objectives to the participants. The participants were also told that their participation was voluntary and they could leave the study if they wished. They were also ensured that their information would be kept confidential.

Results

Table 1 shows the participants' demographic characteristics. As can be seen, most patients aged 30 to 60 years (68.7%). Besides, 55.3% of the patients were male and 74.2% had a high school diploma. Furthermore, 63.6% of the patients stated that they had social security insurance. Most of the patients (82.9%) were also living in cities and 90.2% of the patients reported that they made a face-to-face appointment. The data also showed that the patients' mean age was 44.1±14.1 years, as shown in Table 1.

Patients' satisfaction with communication with physicians in specialized clinics was the highest in ophthalmology clinics (36.29±6.03) and the least in orthopedic clinics (31.17± 7.52). The mean scores for the patients' satisfaction with communication with the physician in different clinics are shown in Table 2. It was shown that the patients' satisfaction with communication with physicians had a significant relation with the type of clinic (P = 0.032). The results also showed the highest number of patients (14.5%) visited internal medicine clinics and the lowest number of patients (6.2%) visited ENT clinics.

Table 1. The participants' demographic characteristics

Variable	Category	Frequency	Percentage
Age	< 30	48	17.5
	30-60	189	68.7
	> 60	38	13.8
Gender	Male	152	55.3
	Female	123	44.7
Education	High school diploma	204	74.2
	Associate's degree	48	17.5
	Bachelor's degree	19	6.9
	Master's degree	4	1.4
Place of residence	Urban	228	82.9
	Rural	47	17.1
Scheduling an appointment	Face-to-face	248	90.2
	Phone	9	3.3
	Online	18	6.5
Type of insurance	Social security	175	63.6
	Armed forces	4	1.5
	Imam Khomeini Relief Foundation	11	4
	Iranian health insurance	29	10.5
	Rural insurance	37	13.5
	Other	19	6.9
Total		275	100

Table 2. The patients' satisfaction with communication with the physician in different clinics

Type of clinic	Mean ± SD	Confidence interval (95%)
Cardiology	35.17±7.84	32.47-37.86
Gynecology	34.39±4.62	32.59-36.18
Ophthalmology	36.29±6.03	33.74-38.84
ENT	33.00±3.31	31.29-34.70
Orthopedic	31.17±7.52	28.26-34.09
Internal	34.30±7.15	32.01-36.58
Surgical	32.17±7.93	29.10-35.25
Dermatology	34.35±6.38	32.22-36.48
Other	33.81±6.98	31.52-36.11

An assessment of the patients' relation with the physicians showed that 12 patients (4.4%) reported poor communication, 147 patients (53.5%) reported moderate communication, and 116 patients (42.2%) reported good communication.

As shown in Table 3, the mean score of patients' satisfaction with the relationship with the physician was 33.92 out of 45, indicating a moderate level of patients' satisfaction (22 to 35). Besides, the highest score (4.13 ± 0.83) was related to the item "*I trust my doctor*" and the lowest score (2.84±1.16) was related to the item "*I find my doctor easily accessible*".

Table 3. The patients' satisfaction with their communication with physicians

Row	Item	Mean ± SD
1	My doctor helps me	3.78±0.91
2	My doctor devotes enough time to help me	3.80±0.89
3	I trust my doctor	4.13±0.83
4	My doctor understands me	3.98±0.86
5	My doctor is assigned to help me	3.84±1.04
6	My doctor and I agree on the nature of my medical symptoms	3.90±0.92
7	I can talk to my doctor	3.85±0.94
8	I feel content with my doctor's treatment	3.78±0.95
9	I find my doctor easily accessible	2.84±1.16
Total satisfaction score		33.92±6.80

As can be seen in table 4, there was a negative and significant relation between wait time and patient satisfaction with the physician. Thus, an increase in the wait time for the patient to see the doctor decreased the patient's satisfaction with the communication

with the doctor. Furthermore, there was a positive relation between the duration of the visit by the physician and the patient's satisfaction with communicating with the physician, indicating that an increase in the duration of the doctor's visit increased the patient's satisfaction with the physician. The mean duration of the patient's visit was 13.7±11.1 minutes and the average wait time was 90±57.8 minutes.

Table 4. The correlation between the wait time and visit time with patients' satisfaction with their relationship with the physician

Variable	Pearson correlation (r)	P-value
Wait time	- 0.297	0.001
Visit time	0.154	0.011

Discussion

Effective patient-physician communication plays an important role in the health system. Establishing effective communication requires human skills (1). This study investigated the patient-physician relationship in specialized outpatient clinics affiliated with Ahvaz Jundishapur University of Medical Sciences. The results showed that 53.5% of the patients were moderately satisfied with their communication with the physician. Moreover, the patients had the highest level of trust in the physician but they reported the lowest level of satisfaction with access to the physician. Also, among the scores of patients' satisfaction with the physician, the highest mean score was in the component of trust in the physician and the lowest mean score was in the component of access to the physician.

A study by Ghafari Nasab et al. (7) on patients visiting a health center in Shiraz showed that if patients do not trust the doctor or, more precisely, do not trust the position of doctors, not paying attention to the doctor's advice and developing a disease due to impaired communication with the patient may endanger the patient's life. The present study showed that "the patient's trust in physician" was a communication component and was assessed by the patients as the most important factor. Building trust is one of the main goals of effective patient-physician communication (16). It seems that the patient's trust in the physician can be improved through the physician's interpersonal communication skills. Torabipour et al. (15) conducted a study in community health centers of Ahvaz and reported the "patient access to the physician" (scored 3.18 out of 5) as the most important component of the patient-physician relationship.

The data in the present study confirmed a negative significant relation between the wait time and patient's satisfaction with the physician and a positive relation between the duration of the visit by the physician and the patient's satisfaction with communicating with the physician. Consequently, an increase in the wait time for the patient to see the doctor decreased the patient's satisfaction with the communication with the doctor. Furthermore, an increase in the duration of the doctor's visit increased the patient's satisfaction with the physician.

Khamse et al. (17) reported that in specialized clinics of a hospital in Tehran, the wait time for patients to see a doctor was 121 minutes. The wait time in the present study was 90 minutes for patients. This difference could be due to the admission process, the number of physicians, the number of visits, and the duration of previous patients' visits.

The standard visit time in Iran for specialist physicians is at least 20 minutes and for subspecialists 25 minutes (18). Moreover, according to the World Health Organization, the standard time a specialist must spend for each patient is 15 minutes (19). A study by Hassanpour et al. in Qazvin reported an average patient visit time of 4.67 minutes (18). Besides, the average visit time reported by Migongo was 14.5 minutes in the United States (20). Chen (21) and Tähepõld et al. (22) also reported 33 and 9 minutes in China and Estonia, respectively. In this study, the average visit time was 13.7 minutes, while the average time reported for clinics in Qazvin was 4.67 minutes (18). The average visit time in the present study was longer than the average visit time in Qazvin (18) but shorter than the standard time recommended by the World Health Organization (19) and the average

times reported in United States (20) and China (21). Moreover, the average visit time measured in the present study was longer than the average visit time reported by Hassanpour et al. (18) and Tähepõld et al. (22). Hassanpour et al. (18) found that the patient visit time is effective on the physician-patient partnership and the treatment process and affects patient's satisfaction with and trust in the physician. The present study reported a significant relation between the visit time and the patient's satisfaction with the relationship with the physician. It was also shown that a decrease in the visit time can lead to a decrease in patient safety (16). The most important factors leading to the short visit time were patients' high demands, patients' unawareness of their rights, the low number of physicians, non-compliance with clinical instructions and regulations, lack of supervision (18), access to physicians, continuity of physicians' services (19), and the quality of the patient-physician relationship.

Torabipour et al. (15) conducted a study in health centers of Ahvaz and showed that patient's satisfaction with the physician was 28.58 (out of 45). A study by Matin et al. (8) in a hospital in Shahrekord also showed that the mean score of patient's satisfaction with nurses was 49.4 (out of 110). The present study reported a higher level of patient's satisfaction with communication with the physician compared to the rate reported by Torabipour et al. (15) in health centers in Ahvaz. Thus, it seems that the type of services and clinical setting are effective in patient satisfaction. However, the level of satisfaction with communication with physicians reported in the present study was lower than the rate reported by Matin et al. (8). Accordingly, it seems that nurses have better communication skills than physicians. In line with the observations made by Torabipour et al. (15) and Matin et al. (8), the patients in the present study reported moderate satisfaction with their relationship with the physician. There are many factors involved in establishing an effective patient-physician relationship that may reduce or increase the patient's level of satisfaction with communication with the physician. For instance, in a study by Alberto et al. (23), physicians believed several factors such as language problems, dialects, mental health issues, and disability could prevent the strengthening of the physician-patient relationship (19). Janine et al. (2018) showed that communication errors include non-verbal, verbal, and content errors, and having poor attitudes toward communication (24). Ghafari Nasab et al. (7) found that factors such as age, gender, language, physical condition, and technical language used by the physician affect the quality of the patient-physician interaction. Furthermore, Chen et al. (2017) showed that the physician's age and type of specialization affect the physician-patient relationship and patient satisfaction. They also showed that patients were more satisfied with older physicians and they reported different levels of satisfaction with physicians having different medical specialties so that they had the highest level of satisfaction with obstetricians (25). Coelho and Galan also showed there was a relation between treatment outcomes and patient's satisfaction with an effective physician-patient relationship (26). Moreover, Ruberton et al. (2016) found that the modest behavior of the physician, rather than being paternalistic or arrogant, affects patient and physician satisfaction during the physician-patient visit (27).

Moin et al. (1) showed to establish effective communication and enhance patients' satisfaction with communication with physicians, physicians need basic skills such as interpersonal skills including greeting the patients, active listening, showing empathy, respect, interest, humility, and patience, having confidentiality, collecting information, educating the patient, and having advanced communication skills.

The present study showed that the patients were most satisfied with the ophthalmology clinics but least satisfied with the orthopedic clinics, and patient's satisfaction with communication with physicians was significantly related to the type of clinic. Another study showed that patient's satisfaction with communication with physicians differed significantly in terms of specialization in different clinics (8). This difference can be probably due to the nature of specialized services, the needs and conditions of patients, and the individual characteristics of specialist physicians in each clinic.

Given the role of patient-physician communication in improving the quality of treatment, some measures need to be taken to strengthen physicians' interpersonal skills, educate patients and people, improve the physical environment of medical centers and facilities, admission process, and access to

physicians, reduce the wait time, comply with the standard visit time and technical and managerial measures to improve the patient-physician relationship.

One of the limitations of the present study was the difficulty of collecting data from patients due to the crowdedness of medical clinics, the mental condition of patients, and the low literacy of some patients. Another limitation was that this study did not examine all the factors affecting the patient- physician relationship since many factors that affect the patient- physician relationship are beyond the scope of this study. Future studies can further address barriers to the patient-physician relationship and factors facilitating this relationship.

Conclusion

The present study showed that patients were moderately satisfied with their relationship with the physicians in specialized outpatient clinics of Ahvaz Jundishapur University of Medical Sciences. Besides, the wait time and visit duration were found as two parameters affecting the patient- physician relationship. To improve the patient-physician relationship, it is necessary to take management measures to reduce the wait time in medical clinics and offices, comply with the standard visit time, control and improve environmental conditions, and empower physicians to improve their communication skills.

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Conflict of interest

The authors declared no conflict of interest.

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