



Outpatients' Satisfaction with Medical Services Offered by Specialist Physicians in Kerman in 2019

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Abstract

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Background: The present study evaluated outpatients' satisfaction with the quality of medical services delivered by specialized physicians in Kerman.

Methods: In this descriptive-analytical cross-sectional study, a questionnaire validated in previous studies was administered to the patients to assess their satisfaction using a score ranging from 0 (lowest) to 20 (highest). The patients (n = 140) were selected using simple random sampling from among the patients at medical offices of specialized physicians in Kerman. The data were analyzed using SPSS software (version 18) through independent samples t-test and one-way ANOVA.

Results: The patients' mean score for the overall satisfaction with the quality of medical services was 12.31 ± 0.40 out of 20. The most influential factors that decreased the patients' satisfaction were the patient's waste of time in the office (8.62 ± 0.49), the behaviour of the secretaries with the patients (11.18 ± 0.51), and the treatment costs (9.95 ± 0.49). The male patients were less satisfied with the wait time for appointments than the female patients ($p = 0.013$). The mean score for overall satisfaction among local people was higher than among non-local people ($p = 0.049$). Besides, the patients with higher education were more satisfied than the patients with less education ($p < 0.05$).

Conclusion: The results indicated that patients' dissatisfaction with the quality of medical services, especially time management, secretaries' behaviour with patients, and the costs of treatment by specialist physicians in Kerman are management problems that need to be solved to improve the quality of medical services.

Keywords: Satisfaction, Outpatients, Specialist

Introduction

One of the goals of the health system in the world, especially in the Ministry of Health, Treatment and Medical Education of Iran, is to increase the quality of medical services, as patient satisfaction is of particular importance. Accordingly, since the early 1990s,

some theoretical and practical concepts were developed to provide quality healthcare services. Patients' satisfaction in different health care sectors is one of the most important indicators used to assess the quality of this type of service in the health care system (1). In fact,



people's satisfaction with the services provided can be referred to as people's reaction to the services provided and a reflection of their overall understanding of the quality of services (2). An important thing to note is that patients are more likely to participate in care and treatment following their satisfaction with the quality of services provided, and this plays, directly and indirectly, a vital role in the prevention and treatment of diseases (2). Thus, patients' satisfaction with the quality services will encourage them to follow treatment guidelines effectively and on time, and this, in turn, speeds up the treatment process (2). This issue is so important that some experts consider it as one of the most important elements in patient recovery and health (3).

So far, several studies have addressed the satisfaction of patients visiting the health care systems worldwide (4, 5). Most of these studies have used the SERVQUAL questionnaire with minor modifications according to the type of population and behavioral characteristics (6, 7). For example, Noorossana et al. developed and validated a questionnaire to assess patients' satisfaction with general practitioners' services in Fasa, Iran (8). Moreover, Ayatollahi et al. examined patients' satisfaction with their consultant physicians in Shiraz and found no significant difference between male and female patients in terms of satisfaction. However, the patients were less satisfied with male specialists than female specialists (9). Other studies have been conducted in various provinces of Iran such as Tehran (10), Isfahan (11), Fars (12, 13), and Semnan (14) to assess the satisfaction of patients visiting health centers and they have reported different levels of satisfaction. One study reported a high level of clients' satisfaction (63%) with service delivery in urban health centers in Arak (15). Since health services especially services provided by specialized physicians have an important place in the treatment process and cover a wide range of people in the community, measuring patient satisfaction and the factors affecting services delivered by this group of physicians can reveal the strengths and weaknesses of the services provided (16). Accordingly, intervention measures can be taken to improve the strengths and eliminate the weaknesses to increase clients' satisfaction and improve the quality of health care services.

Our reviews in search engines indicated that

no study has yet assessed the satisfaction of patients who visited specialist physicians in Kerman. Therefore, given the gap in the literature on the satisfaction of outpatients referring to specialist physicians, the present study aimed to identify the weaknesses and strengths of services provided by specialist physicians in Kerman and provide insights into how to solve possible problems in future service delivery plans.

Methods

This descriptive-analytical cross-sectional study was conducted from May to August 2019 on 140 patients who visited specialist physicians in Kerman. To this end, 40 physicians were selected randomly from among the specialized physicians with medical offices in Kerman, so that the research sample represented an extensive geographical distribution and covered various specialties. Then, from each office, 3 to 4 patients were randomly selected. The selected patients completed a questionnaire in the presence of the researcher. Ethical considerations were observed when conducting the study. The patients were provided with sufficient information about the research procedure and informed consent was obtained from them. Moreover, the patients' data were kept confidential and they were free to leave the study. The patients' and physicians' names were not recorded in the questionnaire. This research project was registered under the code of ethics IR.KMU.REC.1398.316.

The inclusion criteria were being sick, visiting a physician, and physical presence in the office, and the exclusion criteria were dementia and inability to answer the questions. The research population included all patients who visited specialist physicians' offices in Kerman to receive medical services.

To assess the patients' satisfaction with medical services, a questionnaire developed by Noorossana et al. was used with some modifications in the structure of the questionnaire (but not its content). The validity and reliability of this questionnaire were confirmed by Noorossana et al. and the correlation between overall satisfaction and the score obtained from the questionnaire was 0.842, indicating that the questionnaire had sufficient construct validity. The reliability of the questionnaire was assessed by calculating the Cronbach's alpha coefficient and the value was 0.93, indicating its acceptable

reliability (8). The sample size was estimated using the formula to determine sample size for estimating the mean. In this formula, the alpha or type 1 error was 5%, the standard deviation of patient satisfaction was assumed to be 3.68 following a study by Fallahi et al. (17), and the acceptable error was 0.61. Accordingly, the necessary sample size was calculated to be at least 140 people.

The data in this study were collected using a demographic information form and the patient satisfaction questionnaire. The questionnaire contained 17 items on a 5-point Likert scale, with 13 measuring patient satisfaction with service delivery in the physician's office, 3 items assessing patient loyalty, and 1 item evaluating overall satisfaction with general practitioner services. Patient satisfaction was measured using a score ranging from 0 (lowest) to 20 (highest). The questionnaires were completed by the patients in the presence of a member of the research team. The patients were asked not to answer any item that did not make sense to them. In cases where a patient needed information to

answer an item, the required information was provided in a manner that did not distort the content of the item or influence the patient's mentality when answering that item. For those patients who were illiterate, the statements in the questionnaire were read out by the interviewer and the questionnaire was completed based on the responses provided by the patient.

The collected data were revised and coded and were analyzed using SPSS 18 software. To this end, first, the data distribution was checked and after ensuring their normal distribution, parametric tests including independent samples t-test and one-way ANOVA were used to analyze the data at the significance level of 0.05.

Results

Table 1 shows the participants' demographic characteristics. As can be seen, most of the participants were female and public employees. Furthermore, a majority of the participants had a bachelor's degree and a few participants were illiterate or had high school or lower education.

Table 1. The participants' demographic characteristics

Variable	Category	Number	Percentage
Gender	Female	105	75.0%
	Male	35	25.0%
Occupation	Employee	78	55.7%
	Self-employed	56	40.0%
	Student	5	3.6%
	Housewife	0	0.0%
	Retired	1	0.7%
	Other	0	0.0%
Education	Illiterate	1	0.7%
	High school/lower education	1	0.7%
	Diploma	7	5.0%
	Associate's degree	13	9.3%
	Bachelor's degree	87	62.1%
Marital status	Master's degree and higher	31	22.1%
	Single	56	40.0%
Type of insurance	Married	84	60.0%
	Health insurance	28	20.0%
	Social security insurance	93	66.4%
	Rural insurance	5	3.6%
	Other	12	8.5%
Type of residence	No insurance	2	1.4%
	Local	126	90.0%
	Non-local	14	10.0%
Total		140	

Analysis of the data indicated that the mean of the patients' overall satisfaction was 12.31 ± 0.40 out of 20. The highest level of satisfaction was related to keeping patient records with a mean score of 15.15 ± 2.92 and

the lowest level of satisfaction was related to the wait time in the office. Table 2 shows the mean scores of the patients' satisfaction with service delivery in medical offices in Kerman.

Table 2. The patients' satisfaction with service delivery in medical offices in Kerman

No	Variable	Number out of 20
1	Physical and cleanness conditions of the medical office	13.15±0.41
2	The conditions of the waiting room	11.77±0.42
3	Scheduling patient appointments	10.50±0.47
4	The wait time in the office	62.80±0.49
5	The visit time for each patient	10.80±0.50
6	Air conditioning system	13.67±0.45
7	The office equipment and facilities	13.88±0.42
8	The secretary's behaviour with the patient	11.18±0.51
9	The physician's behaviour with the patient	14.90±0.40
10	The physician's skills	14.42±0.39
11	Careful examination of the patients and their medical history by the physician	12.95±0.44
12	The physician's manner of responding to patients' questions about their disease and its treatment	13.35±0.45
13	Easy access to the office (the existence/non-existence of an elevator)	13.03±0.48
14	Health care and treatment costs	9.59±0.49
15	Medical office's working hours	12.44±0.43
16	Visiting the patients individually or in groups	13.13±0.47
17	Keeping or not keeping patient medical records	15.15±92.2
18	Responding to patients when they don't attend the office	8.94±0.54
19	Wait time to receive an appointment	9.31±0.53
20	Overall patient satisfaction	13.12±0.40

The results of statistical analysis (Table 3) suggested that except for the wait time for receiving an appointment, that was significantly different between the male patients (7.05 ± 0.96) and female patients (10.08 ± 0.62), the males and

females did not show any significant difference in their satisfaction with other aspects of medical services. Table 3 shows the mean scores of the male and female patients' satisfaction with service delivery.

Table 3. The male and female patients' satisfaction with service delivery

No	Variable	Gender	Number out of 20	P value
1	Physical and cleanness conditions of the medical office	Female	13.30±0.49	0.383
		Male	14.12±0.69	
2	The conditions of the waiting room	Female	11.52±0.50	0.320
		Male	12.50±0.78	
3	Scheduling patient appointments	Female	10.59±0.55	0.762
		Male	10.25±0.95	
4	The wait time in the office	Female	8.70±0.56	0.789
		Male	8.40±0.98	
5	The visit time for each patient	Female	10.72±0.58	0.797
		Male	11.02±1.01	
6	Air conditioning system	Female	13.94±0.49	0.324
		Male	12.90±1.07	
7	The office equipment and facilities	Female	14.27±0.48	0.112
		Male	12.72±0.78	
8	The secretary's behaviour with the patient	Female	11.19±0.57	0.965
		Male	11.14±1.08	
9	The physician's behaviour with the patient	Female	14.93±0.46	0.553
		Male	14.70±0.87	
10	The physician's skills	Female	14.71±0.45	0.201
		Male	13.54±0.80	
11	Careful examination of the patients and their medical history by the physician	Female	13.03±0.52	0.755
		Male	12±71.83	
12	The physician's manner of responding to patients' questions about their disease and its treatment	Female	13.34±0.52	0.958
		Male	13.40±0.94	

Continue Table 3. The male and female patients' satisfaction with service delivery

No	Variable	Gender	Number out of 20	P value
13	Easy access to the office (the existence/non-existence of an elevator)	Female	13.05±0.55	0.938
		Male	12.70±1.02	
14	Health care and treatment costs	Female	9.91±0.56	0.855
		Male	10.08±1.00	
15	Medical office's working hours	Female	12.20±0.50	0.494
		Male	11.94±0.83	
16	Visiting the patients individually or in groups	Female	13.70±0.53	0.893
		Male	13.20±1.04	
17	Keeping or not keeping patient medical records	Female	16.00±1.02	0.464
		Male	11.50±1.05	
18	Responding to patients when they don't attend the office	Female	9.09±0.63	0.629
		Male	8.48±1.00	
19	Wait time to receive an appointment	Female	10.80±0.62	0.013
		Male	7.05±0.96	
20	Overall patient satisfaction	Female	12.10±0.45	0.652
		Male	12.00±0.88	

The results of the independent samples t-test showed that single and married participants were not significantly different in terms of overall satisfaction ($p=0.321$) in all aspects of service delivery. In contrast, it was shown that the local participants (12.57 ± 0.40) had a higher level of satisfaction than non-local participants (9.96 ± 1.58) ($p=0.049$). The local participants

were also more satisfied with *the conditions of the waiting room* ($p=0.007$), *the office equipment and facilities* ($p=0.039$), *the secretary's behaviour with the patient* ($p=0.05$), *the medical office's working hours* ($p=0.042$), *visiting the patients individually or in groups* ($p=0.017$), and *the wait time to receive an appointment* ($p=0.008$) compared to the non-local patients (Table 4).

Table 4. The local and non-local patients' satisfaction with service delivery

No	Variable	Patients	Score (out of 20)	P value
1	Overall satisfaction	Non-local	9.96±1.58	0.049
		Local	12.57±0.40	
2	The conditions of the waiting room	Non-local	8.39±1.67	0.007
		Local	12.15±0.42	
3	The office equipment and facilities	Non-local	10.05±1.83	0.039
		Local	14.31±0.41	
4	The secretary's behaviour with the patient	Non-local	8.21±1.58	0.05
		Local	11.51±0.53	
5	The medical office's working hours	Non-local	9.85±1.51	0.042
		Local	12.74±0.44	
6	Visiting the patients individually or in groups	Non-local	9.78±1.74	0.017
		Local	13.52±0.48	
7	Wait time to receive an appointment	Non-local	5.14±1.37	0.008
		Local	9.78±0.55	

The assessment of satisfaction among the patients with different levels of education showed that there were significant differences in the patients' satisfaction with some aspects of service delivery including *the secretary's behaviour with the patient* ($p=0.037$), *the physician's skills*

($p=0.006$), and *careful examination of the patients and their medical history by the physician* ($p=0.018$) and the patients with a lower level of education were less satisfied with medical services compared to the more educated patients (Table 5).

Table 5. The satisfaction with service delivery in terms of education

Variable	Diploma	Associate's degree	Bachelor's degree	Master's degree and higher	P-value
How the doctor's secretary treats and respects patients	6.42±2.60	9.25±1.54	11.19±0.63	12.96±0.98	0.037
Physician skills and competence	9.42±2.22	16.16±1.05	14.14±0.51	15.64±0.63	0.006
Careful examination of the patient and taking a complete history and examination by a physician	8.71±2.58	14.91±1.04	12.47±0.55	14.51±0.83	0.018

The results of the study also showed that the participants with different insurances and occupations did not show any significant difference in terms of their satisfaction with all aspects of service delivery in medical offices.

Discussion

The present study investigated the satisfaction of the outpatients visiting specialist physicians in Kerman in 2019. The results showed that the patients did not have a high level of satisfaction with medical services offered by specialist physicians in Kerman. In contrast, Fallahi et al. (17) studied client satisfaction with family physicians in health care centers in Jiroft and showed that the mean score of overall satisfaction was 42.63 ± 3.68 . In another study, Barikani and Kaffashi assessed client satisfaction with the services provided by the marginal health center of Iran University of Medical Sciences (18) and observed that 86.4% of the clients were satisfied with physician services. However, it should be noted that since medical professionals have special skills, patients expect to receive high-quality medical services. Thus, it may not be reasonable to compare the levels of satisfaction with services provided by specialists and family physicians who often work in rural areas or general practitioners practicing in health centers as patients' expectations play a more important role in their satisfaction. Besides, other psychosocial variables play an insignificant role in patient satisfaction. In another study, Ayatollahi et al. examined patients' satisfaction with their consultant physicians in Shiraz (9), which may be due to the delivery of better medical services by physicians in Shiraz.

The patients in the present study reported the highest level of satisfaction with their medical records being kept in the office and the lowest level of satisfaction with the wait time in the office. Similarly, Khosravi et al. examined patients' satisfaction with family physicians in rural areas of Bardsir (Kerman Province) in 2013 and reported the lowest level of satisfaction with the wait time for receiving the family physician's services (19). Accordingly, effective measures can be taken to reduce the wait time and increase client satisfaction and the quality of services.

The findings of the present study also indicated that the patients were less satisfied with

the way of responding to patients when they didn't attend the office, the wait time to receive an appointment, and the costs of health care and treatment services. Accordingly, it seems that effective management of some issues can increase patient satisfaction. For example, the wait time in the office can be considerably reduced if some arrangements are made so that patients can make an appointment very quickly without the need for attending the office in person and in the case that the patient is visited by the physician at the scheduled appointment. Noorossana et al. assessed patients' satisfaction with general physicians' services and showed that scheduling appointments is one of the main problems leading to patient dissatisfaction (8). Another study conducted in Kerman showed that scheduling appointments is one of the problems that require planning and does not seem to be easily solved (20).

The present study showed that the patients with higher education were more satisfied with service delivery in medical offices than those with lower education. The same result was reported in other studies. For instance, Ayatollahi et al. (9) found that patients' education was negatively correlated with their satisfaction with their consultant physicians (11). It was also shown that male patients were less satisfied with the wait time for receiving an appointment compared to female patients. However, there were no significant differences between male and female patients in terms of their satisfaction with other aspects of service delivery in medical offices. Therefore, it seems that gender does not have much effect on patients' overall satisfaction.

The present study found that the patients were more satisfied with the way physicians treated them compared to secretaries' treatment. This suggests that physicians treat patients with respect as they are aware of the patients' condition. However, as secretaries have less knowledge about patients' conditions, they may mistreat the patients and this leads to patient's dissatisfaction with the way they are treated. Therefore, patient satisfaction can be optimally improved by training medical secretaries and supervising their performance by specialist physicians or relevant organizations. Similar to the present study, Noorossana et al. showed that patients were more satisfied with physicians'

treatment compared to other aspects of service delivery (8).

A survey of the patients in the present study showed that the local patients were more satisfied with the quality of medical services than non-local patients. Since local people are more familiar with cultural issues and economic conditions in the region, they have a different view of the health care system compared to non-local people. However, since more than 90% of the participants were locals, it does not seem that the dissatisfaction of non-local patients had a significant effect on the overall satisfaction with medical services. Non-local clients are unfamiliar with the new place and concerned about the problems caused by being away from family and thus they may not be able to tolerate some problems. Accordingly, some arrangements should be made so that patients can refer to physicians in the city where they are living and go to another city for treatment only in special cases.

Heidari and Seidi studied patient satisfaction with general practitioners in Qom and the factors affecting it. They reported that satisfaction was significantly correlated with age, marital status, education, and gender (21). It was also shown that the patients' satisfaction decreased with age and the male patients were more satisfied than the females. Moreover, the patients with higher levels of education and those who were married were more satisfied with services offered by general practitioners. In a similar vein, the present study showed that, compared to the less educated patients, the patients with a higher level of education were more satisfied with some aspects of service delivery including the secretary's behaviour with the patient, the physician's skills, and careful examination of the patients by the physician. This indicates that higher education provides the patient with a better understanding of the situation and makes the person have more reasonable expectations of the situation. However, since most of the participants in the present study did not have high education, there was a need to take some measures to increase their satisfaction. Similarly, Toobaei and Dehbozorgi evaluated patient expectation of internists, psychiatrists, and surgical specialists in Shiraz and showed that factors such as age, occupation, and place of residence did not affect patient satisfaction.

However, more educated patients were less satisfied with specialist physicians' services (22). In contrast, Noorossana et al. and some studies conducted abroad considered the level of education as a barrier to satisfaction and showed that the higher the level of education, the lower the satisfaction (8, 11, 13). This shows that cultural differences are also important and lead to some differences in the level of satisfaction with the provision of health services. However, other studies (e.g. Fakhri et al.) showed that factors such as the trust of patients and physicians also influence patient satisfaction (23).

The present study indicated that occupation and type of insurance did not affect patient satisfaction. It seems that the same level of financial support provided by different insurance policies accounts for the lack of any difference in patient satisfaction. It was also found that the patients' marital status did not affect their satisfaction. This finding is consistent with previous studies (9, 24). However, it should be noted that the level of satisfaction in hospitalized patients is different from outpatients (25) and any comparison should be done with caution.

The present study was conducted with the same limitations such as non-cooperation of some patients, the inability of some patients to fill out the questionnaires, and also the small number of participants. Thus, these issues need to be taken into account in future studies.

Conclusion

This study assessed patient satisfaction with medical services for the first time in Kerman and found that the wait time in the office, the costs of health services, responding to patients when they don't attend the office, and the wait time to receive an appointment were the most important factors leading to patient dissatisfaction with medical services offered by specialist physicians. Accordingly, some measures must be taken to deal with the problems that reduce patient satisfaction because patient dissatisfaction can lead to poor cooperation, poor treatment follow-up, the waste of resources, and a decline in the credibility of health services in Kerman.

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Conflict of interest

The authors reported no conflict of interest.

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