

Comparison of the patient satisfaction from inpatient and outpatient fissurectomy in Motahari clinic and Shahid Faghihi hospital, Shiraz, Iran

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ABSTRACT

Introduction: Satisfaction of the patients is considered as an important index in evaluating the performance of the hospitals and is highly effective in developing and improving the quality of the provided services. So, the present study aims to compare the satisfaction of the patients suffering from anal fissure from inpatient and outpatient treatments.

Method: This cross-sectional study was conducted on 212 subjects who were selected through systematic sampling from the patients with anal fissure referring to Motahari clinic and Shahid Faghihi hospital. In order to compare the patient satisfaction in two inpatient and outpatient groups, 21-item questionnaire was designed in order to assess the patient satisfaction. Independent t-test and chi-square test were used to analyze this data.

Results: satisfaction of the inpatients was significantly more than that of the outpatients ($P < 0.001$). The inpatients' waiting time for operation was significantly longer than that of the outpatients ($P = 0.029$). In comparison to the inpatients, the outpatients were more satisfied with the explanations provided regarding food diets after the operation ($P = 0.004$). Of course, outpatients had felt more stress during the operation compared to the inpatients ($P = 0.002$). Concerning the treatment environment, the outpatients were more satisfied than the inpatients ($P < 0.001$); however, the inpatients were more satisfied with the treatment services ($P > 0.001$), quality, and other services compared to the outpatients ($P = 0.041$).

Conclusion: According to the advantages that mentioned, outpatient operations can be a better choice for small surgeries; of course, health planners should pay more attention to its importance and necessity and provide more equipments and welfare facilities in treatment centers.

Keywords: Patient satisfaction, Fissurectomy, Inpatient, Outpatient

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Introduction

In general, one of the most important indexes of service quality in different hospital wards is the clients' level of satisfaction from the services provided in these wards (1). Satisfaction of the patients, as the clients and customers of the services, is considered as an important index in evaluating the performance of the hospitals and is highly effective in developing and improving the quality of the provided services (2). This is due to the fact that the health system is quite important because of being related to the individuals' health. In this system, in addition

to providing the people's physical, psychological, and social needs, satisfaction is of utmost importance (3). Regarding the assessment of the patient satisfaction from healthcare services, presenting a theoretical framework which expresses the relationship between the patients' expectations and satisfaction from healthcare services is seriously taken into account by the ministry of health. In fact, the results obtained from satisfaction assessment are highly valuable because some realities which cannot be found through other types of investigations, such as sufficient attention to the needs, relationship with the clients, and the ways in which services are presented, can

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be achieved through evaluating the level of satisfaction (4). Collecting the data of patient satisfaction may also be utilized in order to identify the institutes' high performance or working processes which need to be improved (5). Of course, it should be noted that the patients' expectations and experiences from receiving healthcare services are manifested in the complex phenomenon of satisfaction which is defined as the patients' impression of their health status, inability, and life status (6). Indeed, being dissatisfied and not taking their opinions into account will damage patients' recovery as well as their desirable treatment outcomes (7). Patient satisfaction has also a great impact on the number of further visits and reputation as well as the credibility of the treatment center.

Fissure is one of the prevalent disorders; such a way that in a study conducted in 2005-2006 in England, 1.56 out of each 10,000 patients referred to the hospitals in order to treat anal fissure (8).

Nowadays, the providers of healthcare services have got a different attitude toward outpatient treatment and outpatient units are considered among the major hospital units. Other countries' experiences have shown that the hospitals which rely only on their inpatient units' income and have not developed their outpatient services are exposed to bankruptcy (9). In Iran, outpatient treatment units are not considered as a major hospital ward particularly in university hospitals and, as a result, they are faced with a large number of problems. One of the major issues encountered by the managers is patient density in service providing units and long waiting time for receiving the services and it is obvious that such long waiting time is quite harmful for the hospitals (3). Today, providing outpatient services is quite common around the world (10). This method helps health economy a great deal by reducing the expenses; in a way that the total costs of such patients are 25-75 less than the inpatients. Moreover, it is accompanied by great treatment advantages, including less waiting time, less need for pre-operation experiments and post-operation medication, and finally more bed circulation (11).

Up to now, a large number of studies have been conducted on patient satisfaction; however, comparison of inpatient and outpatient treatments has not been highly taken into account.

Tavaliat Kashani, Lak, Mousavi Naeeni, and Naeem Bengash conducted a clinical trial and compared local anesthesia and spinal anesthesia in anal sphincterotomy in order to treat chronic anal fissure (12). The results showed that both methods were secure and the patients of both groups had a desirable level of satisfaction; nevertheless, less pain was felt after local anesthesia.

Furthermore, Ahmadi, Zivdar, and Rafiei investigated the inpatient satisfaction in type 1 hospitals of Tehran University of Medical Sciences in Iran through a cross-sectional study and showed that 78.1 of the patients were satisfied by the hospital status (13). In addition, a strong positive correlation was found between the hospital environment and patient satisfaction as well as the patients' level of satisfaction and feeling of health, which shows the important role that the treatment team can play

in gaining the patient satisfaction and trust (13).

The present study aims to compare the satisfaction of the patients suffering from anal fissure with inpatient and outpatient treatments in Motahari clinic and Shahid Faghihi hospital operating rooms.

Methods

The present descriptive, cross-sectional study was conducted on 212 subjects who were selected through systematic sampling from the patients with anal fissure referring to Motahari clinic and Shahid Faghihi hospital which are both government educational centers in Shiraz. In order to ensure the reliability of the research, first a pilot study was performed on 50 subjects.

In this study, 106 patients were treated by local anesthesia in the clinic and 106 ones were treated by general anesthesia in the hospital. The patients with the history of underlying diseases were excluded from the study. Then, a 21-item questionnaire was designed in order to assess the patient satisfaction. The construct validity and face validity of the questionnaire was confirmed by the project executives and a sociologist. In addition, in order to determine the reliability of the questionnaire, a pilot study was conducted on 50 patients. The reliability of questioner had been determined based on 50 cases. Cronbach's alpha of 85 was obtained.

The patients were examined by their physicians 1 week and 2 weeks after the operation and the satisfaction questionnaire was completed by one of the researchers through interviews. The questions included 6 options and evaluated the patient satisfaction from the operation, treatment, treatment environment, nursing care services, care explanation and training, time setting for operation, expenditures, and waiting time. In order to compare the patient satisfaction in two inpatient and outpatient groups, first the related questions were combined in new variables and patient satisfaction was summarized in 6 areas. In this way, the areas of environment, treatment, and services included 2, 9, and 7 questions, respectively. In order to construct each item, the corresponding values of questions in each area were added together. On this basis environment, treatment, and services were in (2,12), (9,54), (7,42) intervals respectively. In order to compare these areas among inpatients and outpatients, independent t-test was used. After completing the questionnaire, the data were entered into the SPSS statistical software and frequency tables, independent t-test, and cross-tabulation were utilized.

Results

The present study was conducted on 212 patients who were randomly allocated into the outpatient (n=106) and inpatient (n=106) groups. Overall, 71 patients were male and 141 ones were female. In the outpatient group, 37 patients (34.9) were male, while 69 ones (65.1) were female. In the inpatient group, on the other hand, 34 patients (32.1) were male and 72 ones (67.9) were female. The mean age of the patients was 31.82 ± 9.87 and 38.63 ± 12.91 years in the outpatient and inpatient groups, respectively. No significant difference was found between the two groups regarding the demographic information.

According to the results of the independent t-test, outpatients were more satisfied with the treatment environment compared to the inpatients and the difference was statistically significant ($P<0.001$). However, in comparison to the outpatients, the inpatients were significantly more satisfied with the treatment ($P<0.001$). Moreover, the outpatients' level of satisfaction from the care services was significantly more than that of the inpatients ($P=0.041$). The results are presented in Table 1.

Table 1. Comparison of inpatients' and outpatients' level of satisfaction from treatment environment, treatment method, and treatment services

		Mean \pm SD	P
Environment	Inpatient	5.67 \pm 1.74	<0.001
	Outpatient	4.74 \pm 1.82	
Treatment	Inpatient	37.16 \pm 3.99	<0.001
	Outpatient	34.9 \pm 4.91	
Services	Inpatient	15.97 \pm 3.99	0.041
	Outpatient	14.73 \pm 4.81	

Inpatients' and outpatients' level of satisfaction was compared through independent t-test and $P<0.05$ was considered as statistically significant.

In this study, the areas of time setting, expenditures, and waiting time only included one question. Therefore, chi-square test was used in order to determine the difference between the inpatients and outpatients regarding these areas. The results are presented in Table 2. According to the results, the overall satisfaction of the inpatients was significantly more than that of the outpatients ($P<0.001$).

Table 2. Comparison of inpatients' and outpatients' level of satisfaction from time setting, expenditures, and waiting time

		Too much n(%)	Much n(%)	To some extent n(%)	A little n(%)	Too little n(%)	Not at all n(%)	Chi-square n(%)	P
Time setting	Inpatient	12(11.3)	41(38.7)	6(5.7)	39(36.8)	7(6.6)	1(0.9)	10.78	0.056
	Outpatient	6(5.7)	24(22.6)	9(8.5)	54(50.5)	12(11.3)	1(0.9)		
Expenditures	Inpatient	33(31.1)	62(58.5)	6(5.7)	3(2.8)	2(1.9)	0(0)	4.17	0.525
	Outpatient	36(34.0)	51(48.1)	11(10.4)	5(4.7)	2(1.9)	1(0.9)		
Waiting time	Inpatient	16(15.1)	21(19.8)	10(9.4)	51(48.1)	13(12.3)	0(0)	12.50	0.029*
	Outpatient	10(9.4)	19(17.9)	12(11.3)	46(43.4)	6(5.7)	8(7.5)		

Number is presented as n(%) and Chi-square test was used to compare the inpatients' and outpatients' level of satisfaction and $P<0.05$ was considered as statistically significant.

Among the 21 factors which were considered as the criteria for assessing the level of satisfaction in the questionnaire, the following ones were significantly different among the patients. As it was expected, the inpatients' waiting time for operation was significantly longer than that of the outpatients ($P=0.029$). In addition, in comparison to the inpatients, the outpatients were more satisfied with the explanation provided regarding food diets after the operation ($P=0.004$). Of course, outpatients

were more stressed during the operation compared to the inpatients ($P=0.002$).

Concerning the treatment environment, the outpatients were more satisfied than the inpatients ($P=0.000$), while the inpatients were more satisfied with the treatment services ($P=0.000$), quality, and other services compared to the outpatients ($P=0.041$).

The study results revealed a statistically significant difference between the inpatients and outpatients regarding bleeding, fecal incontinence, and wound healing a week after the operation. One week after the operation, the inpatients bled significantly more than the outpatients ($P=0.032$). Fecal incontinence was also significantly less among the outpatients ($P=0.01$). On the other hand, compared to the outpatients, wound healing was significantly better among the inpatients ($P=0.023$). Nevertheless, no significant difference was observed between the two groups regarding other complications during the first week (and also the complications 2 weeks after the operation). The study groups were also similar regarding the complications 2 weeks after the operation.

Discussion

Satisfaction of the patients from the services they are provided with is one of the major goals of the treatment teams and plays a critical role in improving the patients' health. From the management perspective, patient satisfaction from diagnostic, treatment, and rehabilitation services is highly important due to various reasons; for instance, satisfied patients tend to follow the diagnostic and treatment programs more than the dissatisfied ones (14).

The present study compared the satisfaction level of the outpatients treated in Motahari clinic and Shahid Faghihi hospital, Shiraz, Iran. According to the results, the overall satisfaction of the outpatients was significantly more than the inpatients ($P<0.001$), which is consistent with the findings of the study by Krywulak (2005) showing a higher level of satisfaction in the inpatients compared to the outpatients (15).

Although the outpatients had a more desirable status

Table 3. Frequency and comparison of inpatients' and outpatients' level of satisfaction

	Investigation of the patients' satisfaction after the operation		1 n(%)	2 n(%)	3 n(%)	4 n(%)	5 n(%)	6 n(%)	P
1	How much stress did you have in the treatment environment?	Inpatient	14(13.2)	19(17.9)	19(17.9)	21(19.8)	11(10.4)	22(20.8)	0.002
		Outpatient	36(34.0)	16(15.1)	21(19.8)	17(16.0)	2(1.9)	14(13.2)	
2	How long did you wait for your operation?	Inpatient	16(15.1)	21(19.8)	10(9.4)	46(43.4)	12(12.3)	0(0)	0.029
		Outpatient	10(9.4)	19(17.9)	12(11.3)	51(48.1)	6(5.7)	8(7.5)	
6	Were the services of high quality?	Inpatient	10(9.4)	86(81.1)	7(6.6)	0(0)	0(0)	3(2.8)	0.053
		Outpatient	20(18.9)	73(68.9)	10(9.4)	1(0.9)	2(1.9)	0(0)	
10	To what extent was the physician careful in your examination?	Inpatient	17(16.0)	82(77.4)	7(6.6)	0(0)	0(0)	0(0)	0.041
		Outpatient	34(32.1)	64(60.4)	6(5.7)	0(0)	1(0.9)	1(0.9)	
11	To what extent were the necessary explanations provided before giving the healthcare?	Inpatient	9(8.5)	43(40.6)	37(34.9)	6(5.7)	2(1.9)	9(8.5)	0.006
		Outpatient	22(20.8)	55(51.9)	16(15.1)	3(2.8)	2(1.9)	8(7.5)	
12	Were diagnosis and causes of pain sufficiently explained?	Inpatient	4(3.8)	64(60.4)	28(26.4)	3(2.8)	4(3.8)	3(2.8)	0.046
		Outpatient	14(13.2)	58(54.7)	18(17.0)	9(8.5)	3(2.8)	4(3.8)	
13	Did you have bleeding after the operation?	Inpatient	0(0)	7(6.6)	4(3.8)	26(24.5)	42(39.6)	27(25.5)	0.025
		Outpatient	3(2.8)	10(9.4)	10(9.4)	37(34.9)	26(24.5)	20(18.9)	
14	Did you have fecal incontinence after the operation?	Inpatient	0(0)	0(0)	0(0)	0(0)	5(4.7)	101(95.3)	0.006
		Outpatient	3(2.8)	4(3.8)	3(2.8)	5(4.7)	6(5.7)	85(80.2)	
15	Did you have flatus incontinence after the operation?	Inpatient	0(0)	5(4.7)	4(3.8)	7(6.6)	6(5.7)	84(79.2)	0.013
		Outpatient	4(3.8)	9(8.5)	6(5.7)	13(12.3)	14(13.2)	60(56.6)	
19	To what extent were the necessary explanations provided regarding food diet, medication, and healthcare?	Inpatient	6(5.7)	65(61.3)	22(20.8)	6(5.7)	2(1.9)	5(4.7)	0.004
		Outpatient	22(20.8)	68(64.2)	11(10.4)	1(0.9)	1(0.9)	3(2.8)	
20	To what extent were sufficient and effective pain killers given at times of pain?	Inpatient	10(9.4)	82(77.4)	4(3.8)	5(4.7)	0(0)	5(4.7)	0.020
		Outpatient	15(14.2)	65(61.3)	17(16.0)	6(5.7)	1(0.9)	2(1.9)	

The options 1-6 were too much, much, to some extent, a little, too little, and not at all, which were the other way around in the items 1, 2, 13, 14, and 15.

Comparison was performed through chi-square test and $P < 0.05$ was considered as statistically significant.

training about food diet, and complications of bleeding and flatus incontinence, the study results showed that the inpatients were more satisfied with the treatment services, regarding waiting time, time setting, explanation and quality, facilities, low stress during the operation, and wound healing a week after the operation. This finding is in line with that of the study by Coupy (1991) which showed environment as one of the factors affecting patient satisfaction (16).

The results of the present study showed gender, occupation, and level of education not to have any effects on patient satisfaction, which is in agreement with the study by Eslaminejad (17). However, waiting time revealed to be highly effective in the patients' satisfaction level, which was mentioned by Ditomasso (18) and Bursch (19) as well.

In the current study, the outpatients' waiting time for operation was significantly less than the inpatients ($P=0.029$). However, Landburg showed no significant relationship between the patients' waiting time and their satisfaction level (20).

Furthermore, in comparison to the inpatients, outpatients were significantly more stressed in the treatment environment ($P=0.002$). It seems that the patients' consciousness during the operation which is accompanied by observing the unfamiliar faces of the physicians and nurses, smelling the medication odor, listening to other patients scream, observing the treatment team working, and seeing advanced equipments with different alarms and noises disturb their tranquility (14).

Several researchers have expressed a relationship between the patient satisfaction and the physicians, nurses and correct, timely diagnosis of the disease as well as sufficient, beneficial information (21). Moreover, Wolf et al (2003) showed a somewhat strong relationship between nursing care and patient satisfaction (22).

In this study, the inpatients were more satisfied with the quality and other services compared to the outpatients ($P=0.041$). Oulton also revealed that patient satisfaction was significantly related to the care quality (12).

According to the study findings, in comparison to the inpatients, outpatients were more satisfied with the explanations provided about pre-operation care, which might be due to the closer relationship between the physicians and the outpatients. As Eslaminejad mentions, the physicians' appropriate, polite behavior not only provides the ground for the patients' cooperation in the treatment and follow-up processes, but it also motivates them to recommend the physicians to other patients and their relatives (17).

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According to the advantages and deficiencies mentioned above, outpatient operations can be a better choice for small surgeries; of course, health planners should pay more attention to its importance and necessity and provide more equipments and welfare facilities in treatment centers. On the other hand, human relationship which is one of the basic needs of the human beings is more clearly manifested in the field of treatment and affects the patient satisfaction as well as the treatment process a great deal. Of course, it requires the treatment teams' (both physicians and nurses) sufficient education and attention.

Conclusion

According to the benefits and deficiencies mentioned above, outpatient operations can be a better choice for small surgeries; of course, health planners should pay more attention to its importance and necessity and provide more equipments and welfare facilities in treatment centers. On the other hand, human relationship which is one of the basic needs of the human beings is more clearly manifested in the field of treatment and affects the patient satisfaction as well as the treatment process a great deal. Of course, it requires the treatment teams' (both physicians and nurses) sufficient education and attention.

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