



Patients' Satisfaction with the Services Provided at Motazedi Hospital in Kermanshah, Iran

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Abstract

Background: Assessing patient satisfaction is crucial for identifying areas for improvement in medical services and evaluating service quality.

Objectives: This study aims to determine the patients' satisfaction with the services provided at Motazedi Hospital in Kermanshah

Methods: This descriptive-analytical research was conducted among 320 patients who referred to Motazedi Hospital in Kermanshah during 2024. Simple random sampling of patients was done. The measurement tool was a written questionnaire. Data were collected by interviewing patients. Data were analyzed by SPSS version 16 using Crude and adjusted linear regression statistical tests at 95% significant level.

Results: Of the patients surveyed, 19.3% were dissatisfied, 35.7% were moderately satisfied, and 45% were completely satisfied with the services they received. Generally, patients with higher education levels ($\beta = 0.189$ and $P = 0.007$) and health insurance ($\beta = 0.204$ and $P = 0.008$) reported higher levels of satisfaction with the services they received. In the areas of clinical services, facilities and physical environment and nutrition, respectively, the items of "respecting the patient's privacy during examination and performing treatment procedures", "toilet and bathroom condition" and "food quality" obtained the lowest average satisfaction score.

Conclusions: Less than half of the patients were fully satisfied with the services received in the hospital. The satisfaction levels were lowest for the condition of toilets and bathrooms, food quality, and the respect for patient privacy during examinations and treatments. Patients were generally more content with clinical services compared to other aspects.

Keywords: Patient Satisfaction, Hospital, Privacy, Food Quality

1. Background

In recent decades, satisfaction has become an important indicator of service quality; the level of satisfaction with services provided to patients reflects the overall quality of service in the hospital (1). Evaluating patient satisfaction is crucial for identifying areas for improvement in medical services and assessing the quality of service delivery across different aspects; patient satisfaction is a key focus in healthcare,

influencing the accountability of health service providers and contributing to the overall success of the organization (2). Health policymakers should prioritize meeting the needs of patients as a key goal to improve the quality of care; patient satisfaction should be a fundamental consideration for managers when making decisions for the success of their organization (3). Patient satisfaction is considered as a performance measure for the quality of health care services (4). Patient satisfaction with the delivery of health services is

considered by the World Health Organization (WHO) as one of the top five indicators of service quality (5). Studying patient satisfaction helps incorporate the viewpoints of patients into the organization of healthcare services; furthermore, assessing patient satisfaction allows for the identification of any shortcomings in current services, which can then be addressed to improve the quality of patient care (6). Additionally, a satisfied patient is more likely to choose health services and be more consistent with subsequent treatment and recommendations, which in turn leads to better health outcomes and recommending services to others (7). This information can also be effectively used to identify barriers, address treatment gaps, increase turnover, and create more sustainable health care services (8). Enhancing satisfaction levels can lead to more referrals, ultimately boosting a hospital's revenue streams and contributing to the overall well-being of society (9,10).

Patient satisfaction is a complex concept that involves how patients perceive the quality of care they receive; factors that are commonly used to measure satisfaction with hospitals include the type of treatment received, the hospital environment, the quality of services provided, the staff's behavior, the cost of hospitalization, and the follow-up care available after discharge (8). Satisfaction is a mental state that occurs after receiving a service and is measured against the expected level of service (11). Recognizing the value of patients is essential for establishing a healthcare system that prioritizes the needs of patients (12). Moreover, while the quality of care may not always directly impact patient satisfaction, it can still be a significant indicator (13).

2. Objectives

The study was conducted to assess the satisfaction level of patients at Motazedi Hospital in Kermanshah with the services they received. This is important for improving healthcare and hospital performance, especially since there is a lack of evidence-based data in this field in Kermanshah.

3. Methods

3.1. Participants

The present study was a descriptive-analytical research that was conducted among 320 patients referred to Motazedi Hospital in Kermanshah in 2024. Simple random sampling was done among patients. The sampling process began by calculating the total number of hospital beds at Motazedi Hospital. A bed was then chosen at random to start the sampling. A random number was selected from a table to determine the next source of sampling, and the process continued in this manner.

The participants in the study were informed about how to conduct the study, the confidentiality of their information, and the purpose of the study. They all willingly agreed to participate. Patients admitted to Motazedi Hospital in Kermanshah were included in the study. Exclusion criteria included incomplete questionnaire responses. A total of 300 questionnaires were completed and analyzed, with a response rate of 93.75%. Participants were assured of the confidentiality of their information and the study's purpose. The study was approved by the Ethics Committee of Kermanshah University of Medical Sciences (KUMS) ([IR.KUMS.REC.1402.593](#)).

3.2. Data Collection Tool

The data collection tool was the use of a written questionnaire, the data of which was completed by interviewing the participants. The questionnaire consisted of two parts. The first section covered background and demographic information, while the second section focused on the questions related to patient satisfaction with the services they received. The questionnaire covers three main areas: Clinical services (11 items), facilities and physical environment (3 items), and nutritional status (2 items). Participants rated each item on a 4-point Likert scale: Completely dissatisfied (0), dissatisfied (1), satisfied (2), and completely satisfied (3). The total points from the questionnaire determined the overall satisfaction level of the individual. A higher score indicated higher satisfaction, with people falling into three categories: Unsatisfied (score 0 to 16), moderately satisfied (score 17 to 32), and fully satisfied (score 33 to 48). The validity and reliability of the questionnaire in Iran were confirmed in a study by Nemati et al., 2014 (14). The reliability of the

questionnaire in this study was found to be 0.89 using the alpha coefficient test, indicating good reliability.

3.3. Data Analysis

Data were analyzed by SPSS version 16 using Crude and adjusted linear regression statistical tests at 95% significant level. Descriptive data are reported with mean (standard deviation) and number (percent). Crude and adjusted linear regression was used to measure the predictors of patients' satisfaction with the services received.

4. Results

The mean age of the participants was 26.86 with a standard deviation of 6.51 in the age range of 15 to 43 years. Other background data are given in [Table 1](#). The mean score of the satisfaction questionnaire was 29.19 with a standard deviation of 12.73, and thus the patients obtained 60.8% of the maximum score obtainable for the questionnaire of satisfaction with the services received. Of the patients surveyed, 19.3% were dissatisfied, 35.7% were moderately satisfied, and 45% were completely satisfied with the services they received. The status of responses to the items of the questionnaire of satisfaction with the services received is given in [Table 2](#). In the areas of clinical services, facilities and physical environment services, and nutrition services, respectively, the items of "respecting the patient's privacy during examination and performing treatment procedures", "toilet and bathroom condition" and "food quality" obtained the lowest average satisfaction score. [Table 3](#) shows the mean, standard deviation and maximum percentage that can be obtained for the score of different areas of the patient satisfaction questionnaire for the services received. As the findings show, patients were most satisfied with clinical services and least satisfied with nutritional status. In [Table 4](#) indicated, patients with higher education levels ($P = 0.007$) and health insurance ($P = 0.008$) reported higher levels of satisfaction with the services they received.

5. Discussion

The present study was conducted with the aim of determining the satisfaction status of patients referred

to Motazedi Hospital in Kermanshah. Of the patients surveyed, 19.3% were dissatisfied, 35.7% were moderately satisfied, and 45% were completely satisfied with the services they received. In this regard, Sharami et al. (2008) in his study with the aim of determining the level of satisfaction and the factors affecting it in prenatal units of public hospitals in Rasht showed that in general the level of satisfaction of the majority of women (62.7%) was average, 37% were satisfied and only 3.3 0% were dissatisfied (15). Hossein Rashidi et al. also showed the level of satisfaction of women referring to infertility clinics affiliated with Tehran University of Medical Sciences, the services provided in 35.9% of cases at an adequate level and excellent in 49.3% at a relatively level. It was appropriate and 14.8% was at an inappropriate level (16). However, Verma et al., in their study to evaluate the satisfaction of patients referred to a tertiary care hospital in Haryana (one of the northern states of India) showed that 77% of patients were satisfied with inpatient services (7). Our findings show that less than half of the patients were completely satisfied with the services received, which is consistent with other studies conducted in the Iran. These findings can be alarm for treatment managers in Iran and show the need for special attention. Identifying the specific cases that have caused patient dissatisfaction can assist in creating focused interventions to enhance the quality of services offered to patients.

In the current study, one of the factors that influenced patient satisfaction was the level of education. Patients with higher education tended to have a higher average satisfaction score. This aligns with a study conducted by Verma et al., in India, which found that educated patients were more likely to be satisfied with the services they received (7). However, research in Nigeria (17) and Ethiopia (18, 19) showed the opposite relationship, with less educated patients reporting higher satisfaction levels. This could be because patients with higher education have higher expectations for service quality. These conflicting results may be due to societal or cultural differences, highlighting the need for further research in this area.

In this study, having health insurance was found to be a predictor of patient satisfaction. This aligns with a study by Hosseini et al., which found that patients with health insurance reported higher satisfaction scores

Table 1. Distribution of Background Data Among the Patients

Variables	No. (%)
Education level	
Primary school	91 (30.3)
Secondary school	80 (26.7)
High school	103 (34.3)
Academic	26 (8.7)
Job	
Housewife	257 (85.7)
Working	43 (14.3)
Economic status	
Weak	191 (63.7)
Average	97 (32.3)
Good	12 (4)
Place of residence	
Urban	151 (50.3)
Rural	149 (49.9)
Length of hospitalization (per day)	
One	140 (46.7)
Two	101 (33.7)
Three	54 (18)
More than three	5 (1.6)
Health insurance	
No	83 (27.7)
Yes	217 (72.3)
History of previous hospitalization in Motazedi Hospital	
No	96 (32)
Yes	204 (68)

when compared to those without insurance (20). This suggests that the impact of health insurance on patient satisfaction should be explored further. Factors such as out-of-pocket payments may play a role in this relationship.

The study found that the highest satisfaction score was related to overall clinical services, while the lowest score was related to nutrition. Specifically, satisfaction with the condition of sanitary facilities received the lowest average score in terms of facilities and physical environment. These results align with a previous study in Tehran, which also found that nutrition services received the lowest score among women visiting infertility clinics (16). Further analysis revealed that in terms of clinical services, overall satisfaction with medical services and discharge services received the highest average scores. On the other hand, respect for patient privacy during examinations and treatment

procedures, as well as satisfaction with the staff's attitude towards patients, received the lowest average scores. These findings provide valuable insights for hospital management, especially in improving patient satisfaction. Patients were least satisfied with the preservation of their privacy during examinations and the way treatment staff treated them. These findings should be considered by policymakers and treatment managers at Kermanshah and Motazedi Hospital, where the majority of patients are pregnant mothers. Improving communication with patients could lead to overall better patient satisfaction. Overall, patient satisfaction with clinical services was better than in other areas. Any deficiencies or dissatisfaction should be addressed by experts to ensure that patients' rights are respected and that their satisfaction with services is improved.

5.1. Limitations

Table 2. Status of Responses to the Items of the Questionnaire of Satisfaction with the Services Received ^a

Items	Values	Completely Dissatisfied	Dissatisfied	Satisfied	Completely Satisfied
Clinical service area					
Overall satisfaction with medical services	2.14 ± 0.87	13 (4.3)	57 (19)	105 (35)	125 (41.7)
Satisfaction with clearance services	2.11 ± 0.89	16 (5.3)	58 (19.3)	104 (34.7)	122 (40.7)
Overall satisfaction with nursing services	2.03 ± 0.91	20 (6.7)	62 (20.7)	107 (35.7)	111 (37)
Satisfaction with access to treatment staff when the patient needs	2.01 ± 0.93	21 (7)	67 (22.3)	100 (33.3)	112 (37.4)
Satisfaction with patient education	1.99 ± 0.94	24 (8)	63 (21)	104 (34.7)	109 (36.3)
Giving the necessary information at the time of admission	1.97 ± 0.95	22 (7.3)	75 (25)	92 (30.7)	111 (37)
Satisfaction with the provision of information and awareness of patient questions	1.97 ± 0.94	22 (7.3)	72 (24)	99 (33)	107 (35.7)
Satisfaction with the skill and experience of the treatment staff during the examination	1.95 ± 0.98	27 (9)	72 (24)	91 (30.3)	110 (36.7)
Satisfaction with the explanations provided about the disease, diagnosis of treatment methods	1.94 ± 0.96	25 (8.3)	74 (24.7)	96 (32)	105 (35)
Satisfaction with the way the treatment staff treats the patient	1.91 ± 0.95	28 (9.3)	67 (22.3)	110 (36.7)	95 (31.7)
Respecting the patient's privacy during examination and treatment procedures	1.80 ± 0.89	25 (8.3)	81 (27)	122 (40.7)	72 (24)
Facilities and physical environment area					
Timely change of bedding, clothes and personal belongings of the patient	1.58 ± 0.89	35 (11.7)	106 (35.3)	110 (36.7)	49 (16.3)
Hospital room conditions (light, temperature, crowding, etc.)	1.56 ± 0.94	43 (14.3)	100 (33.3)	103 (34.3)	54 (18)
The toilet and bathroom condition	1.54 ± 0.99	50 (16.7)	99 (33)	91 (30.3)	60 (20)
Nutrition area					
Quantity of food	1.35 ± 1.01	71 (23.7)	102 (34)	77 (25.7)	50 (16.6)
Food quality	1.35 ± 1.03	74 (24.7)	99 (33)	75 (25)	52 (17.3)

^a Values are expressed as mean ± SD or No. (%).

Table 3. Mean ± SD and Maximum Percentage Obtained for Different Areas of the Patient Satisfaction Questionnaire

Areas	Mean ± SD	Range	Maximum Percentage Obtained
Clinical services	21.81 ± 8.96	0 - 33	66.09
Facilities and physical environment services	4.67 ± 2.75	0 - 9	51.88
Nutrition services	2.70 ± 2.02	0 - 6	45

The current study has some limitations that should be noted. Firstly, the study was only conducted among patients at a hospital affiliated with Kermanshah University of Medical Sciences, so the findings may not generalizable to other patients. Secondly, the data collected was self-reported, which could lead to inaccuracies due to social desirability bias or recall errors, resulting in a margin of error. Thirdly, because the study was cross-sectional, caution should be taken when interpreting the results as it does not establish

causation. Additionally, the study only focused on patient satisfaction, and it may be beneficial to also evaluate the satisfaction of service providers to compare results. Despite these limitations, the study did uncover important insights into patient satisfaction with hospital services, which can be used to plan improvements in the quality of care provided to patients.

5.2. Conclusions

Table 4. Background and Demographic Factors Affecting Patients' Satisfaction

Variables	Model 1 (Crude)			P	Model 2 (Adjusted)			P
	B	Standard Error	Beta		B	Standard Error	Beta	
Age	0.132	0.113	0.068	0.244	0.048	0.109	0.025	0.660
Education level	4.085	0.719	0.313	< 0.001	2.571	0.906	0.189	0.007
Job	5.910	2.074	0.163	0.005	0.611	2.182	0.017	0.780
Economic status	4.705	1.272	0.210	< 0.001	1.771	1.294	0.079	0.172
Place of residence	-5.971	1.432	-0.235	< 0.001	-1.040	1.624	-0.041	0.522
Length of hospitalization	0.255	0.914	0.016	0.780	-	-	-	-
Health insurance	9.328	1.555	0.328	< 0.001	5.796	2.171	0.204	0.008
History of previous hospitalization in Motazedi Hospital	7.346	1.521	0.269	< 0.001	1.149	2.057	0.042	0.577

The data from this study can help treatment managers at KUMS enhance the quality of services for patients in teaching hospitals by pinpointing areas that need improvement. Less than half of the patients were fully satisfied with the services received in the hospital. The satisfaction levels were lowest for the condition of toilets and bathrooms, food quality, and the respect for patient privacy during examinations and treatments. Patients were generally more content with clinical services compared to other aspects.

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Footnotes

Authors' Contribution: M. M. A. and F. J. contributed to the idea of study interpretation. M. M. N. contributed to the data analysis. N. M. A. contributed to the set-out of the first draft of the manuscript. M. B. and F. B., was involved in data collection. Critical revision of the manuscript for important intellectual content, M. M. and A. S.; All authors participate in the final approval of the revised manuscript for publication.

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Data Availability: The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Informed Consent: Written informed consent was obtained from all participant.

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