

# Quality of Services Provided in Physicians' Offices and its Effect on Patient Satisfaction

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## A-R-T-I-C-L-E I-N-F-O

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## A-B-S-T-R-A-C-T

**Background & Aims of the Study:** The satisfaction of the patients referred to medical centers for the quality of services provided in these centers impacts on continuance of referring. The aim of this study is to evaluate the quality of services provided in these centers and its impacts on patients' satisfaction. In this study, the quality of services is studied from five aspects of confidence, empathy, evident, trust and accountability and their effects on patients as well.

**Materials & Methods** This survey had performed by simple random sampling of patients who referred to doctor's offices of Ilam. The study population included all patients referred to doctors' offices in 2014 in the city of Ilam. According to Morgan table, 381 individuals were selected randomly as samples. Questionnaire was used to collect data and their external validity, content validity was confirmed as well. Data were analyzed using Spearman correlation test and multiple regression in SPSS-21 software.

**Results:** The results showed a significant positive correlation between the quality of service perceived at the level of one percent of the empathy, confidence-raising, physical factors, accountability, reliability and satisfaction of patients. In addition, the results of multiple regression analysis showed that the perceived quality of services could determine 56 percent of the dependent variable changes, patient satisfaction.

**Conclusion:** Doctors can provide the ground for obtaining patients satisfaction by creating proper environment, fulfilling promises, accountability, good behavior, privacy, giving accurate information to patients and respect them.

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## Background

Undoubtedly, in today's competitive environment, one of the most important and intended mechanisms for organizations and institutions working in different fields is to create an optimal level of satisfaction among customers or users of their services. Therefore, managers and practitioners of successful businesses found that satisfied customers who

possess good attitude towards the services provided by the organization, not only reached to a confident loyalty for the continuation of cooperation and buying their services, but also would transfer that satisfaction to others for promotion of their reputation and making new clients and can be effective for the organization over a period of time for high profitability, selling service and reduce costs of advertising and market development (1). In this regard, the

most important matter for executives of organizations are the methods and frameworks to establish the appropriate level of client satisfaction in relation to the services provided. Patients' perceptions about health services seem to have been largely ignored by health care providers in developing countries. That such perceptions, especially about service quality, might shape confidence and subsequent behaviors with regard to choice and usage of the available health care facilities is reflected in the fact that many patients avoid the system or avail it only as a measure of last resort. Those who can afford it seek help in other countries, while preventive care or early detection simply falls by the wayside. Patients' voice must begin to play a greater role in the design of health care service delivery processes in the developing countries (2).

Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centered delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals (3). The health sections particularly in the medical services and activities within the framework of the activities of medical offices in the cities, offered services are limited to treatments prescribed by your doctor and is designed to develop a medicine, increase client satisfaction and ultimately higher profitability. The quality of service perceived by clients intended as an essential principle among the people of this profession (4).

The importance of health for the public and the necessity of obvious attention to prescribed medical attention referred to the high accuracy and the effectiveness of these prescriptions and curative activities to treat patients in one hand and multiplicity of medical services in relation to the perception of the quality of the service on the other, pay attention to the importance of

attracting patients more than before. In this regard, health clinics and medical offices, considering the floating quality of services especially in the application of science and technology, equipment and medical devices for the diagnosis and treatment of diseases, the circle of experience and knowledge of physicians and precise information on establish guidelines to heal and treat diseases in patients certainly confronted with volatility and imbalances in welcoming them by patients (5). In other words, the level of client satisfaction with the quality of services received medical places impact on continuing their returning and on referring other patients as well. Quality of service in this section is the result of disease diagnosis, enabling mutual communication with your doctor, use of medical equipment and devices, possibility of offering clinically appropriate approaches and prescribe drugs or treatment methods as well (6).

In fact, the quality of services considered as a form of attitude of clients, which appears in long-term assessment. Service quality considered as a function of the difference between expectations and performance together with the quality of services. So that by increasing the perception of the quality of services provided and promising its customers, increasing satisfaction and likely will be the future reference (7).

Therefore, regarding increasing importance of health and hygiene issues in the community as well as the possibility to increase public satisfaction by improving the quality of medical services, the study sought to answer this question that to what extent the quality of services provided in physicians' offices in Ilam city was effective on increasing the level of satisfaction of visitors. Also, among the other items that are considered in this study is the analysis of the client perspective on what the components of quality of services are. It is obvious that the results of this study can be the perfect solution for improving the quality of services provided satisfied patients in doctors'

offices offer in order to increase public consent. The importance of this subject has encouraged various researchers within and outside of the country to examine the relationship between the qualities of the services provided in various organizations some of which will be noted in this paper.

Rasoolabadi et al (2013) were conducted to determine the gap between expectations and conceptions of the students at Kurdistan University of Medical Sciences'. According to the results there was a negative gap in all five dimensions of quality including; assurance, responsiveness, empathy, reliability and tangibility, maximum and minimum quality gaps belonged to responsiveness and assurance respectively. There was no statistically significant difference between male and female students in regard to the gap in the five dimensions of service quality (8).

Gholipour (2012), in a study, examined the relationship between the patients' perceptions and expectations of the quality of medical services. The findings suggest that there is difference between average perception marks and expectation in quality. This means that health centers have failed to respond to patients' expectations in any of the five quality components and perceived quality has always been less than expected (9). Feiz et al (2012) also in a study examined the relationship between service quality, perceived value and customer satisfaction in Raja Passenger Trains. He used the two concepts of excellence and efficiency of services to study the quality of services offered by Raja as well as the relationship between these concepts with the perceived value of service and customer satisfaction. The results showed that service excellence and effectiveness affect perceived value of services and customer satisfaction and adequacy of service have an effective mediating role of these two variables on customer satisfaction and the perceived value of services has direct and significant effect on the satisfaction of the passengers (10).

Datin et al (2012) in a study focuses on the satisfaction level of Small and Medium Enterprises (SMEs) with regards to the quality of non-audit services provided by Small and Medium Practitioners (SMPs) and their quality control practices. The results show relevant authority body should educate SMPs the importance of quality control and the way it can induce the quality of services provided and maximize client's satisfaction level without impairing their independent roles and compliance with standards, ethical, regulatory and legal requirements. Akaba (5) in a study, had evaluated the quality of a hotel services in Turkey and concluded that from the customer's perspective, tangibility and after that the adequacy of the service, the customer's perception, security and comfort are the most important factors (11).

Chen (2008) also examined the relationship between quality of medical services and patient satisfaction. The results showed that the quality of medical services is the most important factor in patient satisfaction and improve the quality not only leads to patients' satisfaction but also increase patient loyalty as well (12). Linda (2012) Deficits in hospital care quality were common in all countries. Improvement of hospital work environments might be a relatively low cost strategy to improve safety and quality in hospital care and to increase patient satisfaction (13). Fatehirad et al (2010) in a study with the aim to investigate the influence of healthcare service quality on medical tourists' satisfaction that comes to Malaysia as international patients. The units of analysis of this current study are individuals that attend private healthcare centers in Penang. Overall, the study findings revealed a positive relationship between healthcare service quality and overall patient satisfaction. Therefore, the government and service providers should pay more attention to healthcare service quality to be able to create reliable competitive advantages for developing the medical tourism

industry compared to their regional competitors (14).

### Aims of the study:

Evaluating the relationship between perceived service qualities of doctor's office with the consent of patients is very important. Unfortunately, such a study has not been conducted in the city of Ilam so far. This has led the present study to investigate the relationship between perceived service quality and satisfaction with physicians' offices in the city of Ilam in order to fill the gap of existing studies.

### Materials & Methods

This study was a cross sectional research and the study population consisted of all patients referred to physicians' offices of Ilam township in 2013-2014 their number, according to the Department of Health of Ilam province in 2014 ing according to Morgan table, 381 individuals were selected as examples.

The tool of data collection in this study was a questionnaire consisted of 3 parts of demographic characteristics of patients (8 items), patient perceptions of quality of service of medical offices (31 items in the five ranges of Likert), and patient satisfaction with the service quality (7 items in the five ranges of Likert). In the preparation of questions to measure patient perceptions of quality of medical offices, the questionnaire Servqual model had been employed. It should be noted that in this study the ideal customer expectations have not been directly questioned. But this level of patient's expectations is considered as the maximum expectation of patients allocated the highest possible score (here 5) to it. Validity and reliability of the questionnaire approved using Cronbach's alpha test (0.96) and by specialists opinion as well.

### Data analysis:

Data analysis performed using statistical software SPSS 21 in two sections of descriptive statistics (focus criteria, diversity criteria and frequency tables together with related charts) and inferential statistics (teat, good correlation and regression analysis).

### Results

Personal and professional characteristics of patients According to the results of the study, the average age of the patients was 29 years (minimum 18 and maximum 40 years), 70.3% of them were men and 62.2% of which have an associate degree or below . The majority of subjects (28.1%) were the employees of private sector. In the meantime, most patients (48.2%), social security insurance coverage and no complimentary insurance (70%).

Evaluating the status of patient satisfaction with physicians' offices in the city of Ilam showed that the subjects have best satisfied from "doctor performance", "Services provided in the office" as well as "their own choice". In addition, results showed that patients tend slightly to "introduce friends and family to the centers" and "continue to use the services of those offices", respectively. In general, the mean of patient satisfaction with physicians' offices in the city of Ilam is equal to 4.25 with a standard deviation of 2.21, which can be high. Therefore, it can be concluded that patients are largely satisfied with the doctor's office in the city of Ilam (Table 1).

**Table 1) Prioritized items related to patient satisfaction with physicians' offices in Ilam**

Items	Average	Deviation	Change coefficient	priority items
Satisfaction with the performance of physician	3.99	1.67	0.445	1
Your satisfaction of services provided at the center	3.85	1.59	0.443	2
Satisfaction of your choice	3.46	2.39	0.438	3
Location of medical center	3.97	2.57	0.430	4
The priority of the center to other centers	4.70	2.44	0.427	5
You want to introduce this facility to friends and acquaintances	4.87	2.51	0.392	6
Wish to continue using the services of this center	4.95	2.35	0.388	7
Overall Satisfaction	4.25	2.21	-	-

Evaluating the quality of service perceived at physicians' offices in Ilam city

Based on the results presented in table 2, it is observed that patients regarded assuring, trust and sympathy factors in perceived service quality of doctors' offices more than the other dimensions. In general, the average mark of the quality of services perceived at doctor's office is 3.55 with deviation of 1.81 which was in average range. Therefore, it can be stated that the patients do not believe that the quality of services in physicians' offices is that high.

**Table 2) prioritized quality of service perceived at physicians' offices Ilam city**

Service Quality Dimensions	Average	S. deviation	Change coefficient	priority
Trust	3.74	2.09	0.343	2
Sympathy	4.03	2.03	0.348	3
Physical Factors	2.33	1.36	0.421	5
Assuring	3.28	1.41	0.272	1
Accountability	4.36	2.19	0.374	4
General quality of perceived services	3.55	1.81	-	-

Evaluating the relationship between trust and satisfaction of patients in the Ilam Township appear a positive relationship between trust and satisfaction of patients from doctor's office at the level of 1%. Therefore, it could be said with 99% confidence that the more confidence of patients of the medical practice, the more satisfaction of them resulted.-Evaluating the relationship between confidence and satisfaction. Also the results shows positive correlation between confidences made by the physicians to patients and their satisfaction from doctors' offices and doctors them. Therefore, it can be concluded that the more doctors could give patients more certainty, the more they will be satisfied (table 3).

The findings of this study clear that there is a significant relationship between physical factors and patient satisfaction with physicians' offices at the level of one percent. In other words, the better physical factors at doctors' offices, the more patient satisfaction will resulted. Moreover there is a significant relationship between sympathy and patient satisfaction with physicians' offices at the level of one percent. In other words, the more sympathy at doctors' offices, the more patient satisfaction will resulted. Also the findings of this study show a positive relationship between accountability and satisfaction of patients from doctor's office at the level of 1%. Therefore, it could be said with 99% confidence that the more accountability of medical offices, the more satisfaction of them will resulted (table 3).



**Table 3) The relationship between perceived service quality of doctors' offices and patient satisfaction in Ilam**

Dimensions	correlation coefficient	Significant level
Reliability	0.41	0.000
Sympathy	0.28	0.000
Physical factors	0.27	0.000
Confidentiality	0.37	0.000
Accountability	0.41	0.000

In order to assess the simultaneous effect of independent variables on the dependent variable (satisfaction) the multiple regression procedure was used (Table 4).

**Table 4) Identifying the factors influencing patient satisfaction in Ilam city**

Variable	Coefficient	S. D	S	T	P
Fix Value	2.80	1.97	-	1.42	0.15
Trust	0.20	0.04	0.24	5	<0.001
Reliability	0.49	0.14	0.33	3.54	<0.001
Physical factors	0.25	0.03	0.29	7.04	<0.001
Sympathy	0.62	0.14	0.40	4.41	<0.001
Accountability	0.57	0.08	0.41	6.84	0.0003
Age	0.74	0.25	0.12	2.96	0.003
Education	-0.65	0.22	-0.21	-2.95	0.003
Complementary Insurance	-0.81	0.98	-0.07	-0.83	0.45
Gender	2.10	1.14	0.19	1.83	0.06
Employment Status	0.18	0.15	0.5	1.19	0.23
Insurance status	1.24	0.52	0.11	2.38	0.005
R= 0.62		R <sup>2</sup> = 0.58		Adjusted R <sup>2</sup> = 0.56	
F = 21.03		Sig= 0.000			

As seen in the above table, in analysis of variance of F, statistics and the significant level are 21.03 and 0.0004 respectively and since the level of significance is less than 0.01, we conclude that the regression model is suitable. It also observed that the amount of R, R<sup>2</sup> and Adjusted R<sup>2</sup> are 0.62, 0.580 and 0.56. Respectively and since, the adjusted determined coefficient is equal 0.566, can conclude that the variables of trust, accountability, assuring, physical factors, empathy, age, education, having complementary insurance, gender, employment status and insurance status can predict 56% of changing the variance of dependent variable (satisfaction).

Also according to information on the regression coefficients and reliability analysis it is found that a significant level of the variables of trust (P<0.001), responsiveness (P<0.001), (P<0.001), physical variable (P<0.001), empathy (P<0.001), age (0.003), insurance status (0.005) and education (0.003) is less than 0.05, which means that the impact of the variables on the dependent variable (satisfaction) is significant. The variables having a significant level of insurance (0.45), gender (0.06) and employment (0.23) is more than 0.05, which means that it has no impact on the dependent variable (satisfaction).

## Discussion

In current increasing competitive environment, high quality service, play a vital role in the success of the organization. However, it must be noted, providing higher quality service is not a selective competitive strategy for the organization to be distinct from its competitors, but nowadays the quality of services is a vital factor in the survival and profitability of the organization (15). In this regard, the health sector, especially in medical services within the framework of the activities of medical offices of the city, the service provided is limited to prescriptions and curative measures of the physician to the patient. In addition, to develop medical affair, increasing the satisfaction of visitors and higher profitability and ultimately, the quality of service perceived by customers has been intended as a fundamental principle between members of the profession. Therefore, this study was to examine the relationship between perceived service quality dimensions of doctors' offices and patients' satisfaction. The results showed a significant positive correlation between these two variables. The findings are complied with the results of Fornell (2010), Townsend (2009) and Gronroos (2010) studies (16,17,18). The researchers through their researches found that

perceived service quality affects increasing the level of customer satisfaction in the quality and quantity of services offered. Also, the results of the present study indicate a significant and positive relationship between the trust and satisfaction of the patients. Therefore, it can be said that the more the doctors are able to attract trust of patients, the more they can prepare the ground for their satisfaction. The findings are in line with the results of studies of the Getty (2008) and Griffin (2008) studies (6, 19). Accountability is another dimension of perceived quality of service, which has a significant and positive relationship in this study. The result showed that the above mentioned variable has significant and positive impact on the satisfaction of the patients for the services provided that is complied with the results of studies of Foster (2012) study (20).

Assuring is another dimension that the findings of this study confirmed its significant and positive impact on satisfaction of the patients about the services provided. This is in line with the findings of Munish (2009) and Reicheld .F & Sasser (2012) studies (21, 22).

From the other results of this study, we can mention the significant and positive correlation of physical factors and patients' satisfaction from the quality of the services provided in doctors' offices. Therefore, we can say that physical factors such as the appropriateness of the office space; in terms of cleanliness, proper equipment for diagnosis and treatment etc. impact on the patients' satisfaction. This is in line with the result of studies of Sullivan (2007) and Vogt & Barry (20012) (23, 24). Empathy as other dimension of perceived service quality that the results of this study confirmed its significant and positive correlation with the satisfaction of the patients for the services provided in doctors' offices.

In Addition, the findings of multiple regression calculations derived from the combined method showed that the variables of trust, reliability, accountability, age, gender, employment status and insurance status impact on patients'

satisfaction on the quality of the services offered in the city of Ilam. Standardized coefficients also suggests that accountability, among the other variables of the model, has the most impacts on dependent variable. The above variables are generally determined 56% of dependent variable variance (the satisfaction of services provided) and the rest related to other variables that have not been entered in the study.

## Conclusion

The main aim of this survey was to assess the relationship between perceived service quality and satisfaction with physicians' offices in the city of Ilam. The results showed a significant positive correlation between the quality of service perceived at the level of one percent of the empathy, confidence-raising, physical factors, accountability, reliability and satisfaction of patients. In addition, the results of multiple regression analysis showed that the perceived quality of services could determine 56 percent of the dependent variable changes, patient satisfaction. Using the findings of applied research, proposals of enhancing the satisfaction of patients with physicians' services in doctors' office have been suggested:

-With regard to the positive impact of the physical environment on patients' satisfaction of services provided, it is recommended to the physicians to create appropriate space from the viewpoint of health facilities, equipment for diagnosis and treatment of disease.

-With regard to the positive impact of the trust on the consent of the patients of the services provided, it is recommended to the providers of medical services keep their promises in order to attract patients' satisfaction.

-With regard to the positive impact of accountability on the consent of the patients of the services provided, it is recommended

that by appropriate encouraging of personnel, prepare the conditions in which necessary services provided to the patients in the shortest time.

With regard to the positive impact of assurance on patients' satisfaction with the services provided, it is recommended to provide patients with the necessary training to adhere to correct behavior and giving detailed information and protecting their privacy as well.

-With regard to the positive impact of empathy on the satisfaction of the patients with the services provided, it is recommended that the personnel of health centers attract patients' satisfaction by respecting patients and listen to their feedback.

## Footnotes

### Conflict of Interest:

The authors declared no conflict of interest.

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