

## Original Article

# A Survey of Client Satisfaction on Service Delivery in Urban Health Centers of Yazd

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### Abstract

**Introduction:** Satisfaction as a key indicator of health care quality is important for development, recognition and treatment of people in need. The aim of this study is to determine the rate of satisfaction of referral people from the health centers of Yazd city.

**Materials and Methods:** This was a descriptive analytic (cross-sectional) study. The participants were 360 clients, who had referred to 13 health centers of Yazd city and were selected by simple sampling methods. The data was collected by a standard questionnaire. After collection, the data were analyzed by SPSS 18, descriptive tables, ANOVA, and T-test.

**Results:** The mean age of participants was  $32.81 \pm 9.96$ , from which 135 (37.6%) were male and 224 (62.2%) were female. About 303 (62.2%) patients were married. 187 (51.9%) patients were university graduates and 15 (4.2%) were illiterate. Results showed that the satisfaction from the time in more than 94% of participants was moderate. And 49.4% of participants were mostly satisfied by the behavior of employees.

**Conclusion:** Results of the present study showed that most discontent patients complained of equipment, which should be considered for future planning by authorities.

**Keywords:** Satisfaction, Health center, Delivery of services, Yazd.

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## Introduction

The city health network is the smallest independent unit of the health system in Iran<sup>[1]</sup>. The main duty of health centers is to fulfill the needs of customers<sup>[2]</sup> and if necessary, refer them to more equipped centers such as hospitals<sup>[1]</sup>.

In recent years, the priority has been the quantity of health services<sup>[3-4]</sup>. Over the past 10 years, consumer satisfaction has become a measure of service quality of health sectors<sup>[5-6]</sup>. This has been a method to particularly recognize the weaknesses of applications and promote protocols and system services<sup>[6-7]</sup>.

The first step in creating a change to an ideal situation is to review the current status in order to identify the current circumstances and variables affecting the quality of care. Programs need to be modified to reach the ideal situation<sup>[8]</sup>.

Satisfaction is a cognitive and emotional response that allows individuals to express their gratification<sup>[9]</sup>. Kotler defines satisfaction as the individual's sense of joy and hope that is a comparison between a perceived product performance and results and their expectations<sup>[10]</sup>.

Quality of care from the patients' perspective and satisfaction of the patient is a multidimensional concept<sup>[11]</sup>. The three dimensions are: Access to care, Expertise of staff and Quality of care, which covers nearly two-thirds of patient satisfaction<sup>[12]</sup>.

Satisfaction is the key indicator of health care quality in development, diagnosis, treatment, supportive care, and rehabilitation<sup>[15-16]</sup>. Determinants of patient satisfaction are some features of demographic, social and economic factors such as age, sex, education level, understanding client rights<sup>[13-14]</sup> and specified care system<sup>[17-18]</sup>.

High quality depends on a positive relationship with patient satisfaction<sup>[19]</sup> that anticipates future use of the service<sup>[7]</sup>, and will lead to sustainable development of services<sup>[5]</sup>. Although a survey of satisfaction is difficult<sup>[19]</sup>, it is a great way to improve the quality of services<sup>[1]</sup>.

Method of collecting data through questionnaires has been recognized as the most objective approach to this issue<sup>[7]</sup>. Despite the urgent need to assess satisfaction of services, few studies have been conducted in this area<sup>[5,14]</sup>, if people feel sick and troubled, their first choice for treatment and prevention of a diseases condition and feedback from service, are health centers and therefore, satisfaction of clients is an important factor.

Thus, the aim of this study is assessing client satisfaction from methods of delivery of urban health centers of Yazd.

## Materials and Methods

This was a descriptive analytic (cross-sectional) study. The participants were 360 clients referring to 13 health centers of Yazd

city and were selected by simple sampling methods. The data were collected by a standard questionnaire with three sections: 1- demographic questions, 2- Prevalence, 3-Tools of satisfaction measurement. Satisfaction levels subsisted in 6 episodes 1-time of access to services 2- Staff behavior 3- Location services 4- Training received 5-Available facilities and 6- Coordination. To quantify satisfaction, we used the five-level Likert scale.

For determining the level of satisfaction, we divided the scales to three sections: lower than

33.3=bad, 33.3-66.7=moderate and more than 66.7=good. After collection, the data were analyzed by SPSS 18, descriptive tables, ANOVA, and T-tests.

## Results

The mean age of participants was  $32.81 \pm 9.96$ , from which 135(37.6%) were male and 224(62.2%) were female. About 303(62.2%) were married. 187(51.9%) were university educated and 15 (4.2%) were illiterate. About 118 (32.8%) were housewives and 74(20.6%) were employed

**Table 1:** Distribution of frequency of client satisfaction in various aspects of satisfaction

Levels of satisfaction	Good		Moderate		Bad	
	%	N	%	N	%	N
<b>Time</b>	0.3	1	94.7	337	5	18
<b>Equipment</b>	36	129	53.3	191	10.7	38
<b>Behavior</b>	67	240	32.1	115	0.9	3
<b>Education</b>	57.9	205	34.7	123	7.4	26
<b>Behavior and education</b>	47.6	168	48.4	171	4	14
<b>Place</b>	46.2	165	49.8	178	4	14
<b>Coordination</b>	50.8	181	40.7	145	8.5	30

Results showed that satisfaction of more than 94% of participants from that time period was moderate. The satisfaction of 49.4% from

the participants of employees' behavior was good.

**Table 2:** Distribution of the correlation between satisfaction and demographic variables

Dimensions of satisfaction	Time	Equipment	Behavior	Education	Behavior and education	place	Coordination
<b>Sex</b>	0.23	0.02	0.28	0.46	0.4	0.11	0.87
<b>Marital</b>	0.9	0.49	0.68	0.04	0.05	0.76	0.76
<b>Education</b>	0.16	0.04	0.7	0.7	0.83	0.03	0.76
<b>Job</b>	0.89	0.26	0.72	0.04	0.17	0.15	0.8
<b>presenting</b>	0.84	0.5	0.04	0.37	0.04	0.02	0.25

The results of this table show that there is a positive correlation between equipment and sex ( $p=0.02$ ). There was a negative correlation between education and satisfaction of facility

( $p=0.03$ ,  $r=0.14$ ). There was a positive correlation between presenting and satisfaction of the facility location (Table2).

**Table 3:** Distribution of the samples' status and section of health center

	Good		Moderate		Total		N
	%	N	%	N	%	N	
<b>Treatment section</b>	54	27	46	23	100	50	
<b>Environment health</b>	78	28	22	8	100	36	
<b>Vaccination</b>	61.8	47	38.2	29	100	76	
<b>Family health</b>	83.3	45	16.7	9	100	54	
<b>Oral health</b>	65.7	23	34.3	12	100	35	
<b>School health</b>	81.8	9	18.2	2	100	11	
<b>Injections and dressing</b>	67.8	19	32.2	9	100	28	
<b>Laboratory</b>	59.4	22	40.6	15	100	37	
<b>Consultation</b>	72.7	16	27.3	6	100	22	
<b>Multiple causes</b>	81.8	9	18.2	2	100	11	

The results of table 3 show that satisfaction of more than 80% of participants from family

health, school health care and multiple other factors was good.

## Discussion

The results showed that most of the participants (62.2%) were female, as was the case with the study of Sayedandy et al <sup>[20]</sup>, and Kersing <sup>[21]</sup>. Also, more than 69.7% of the participants in the study of Sayedandy, and more than 54% of the samples in the Kersing's study were women.

The results of the present study revealed that most participants had academic education and only a small number of them were illiterates, while the majority of the samples were illiterate in the study of Shirvani <sup>[22]</sup> and Zahiri <sup>[1]</sup>.

Results of the present study showed that the most dissatisfaction was on the education and behavior of personnel, which should be considered in planning by authorities. The results of another study in Iran <sup>[23]</sup> revealed that most complaints by women were about the lack of follow-up by personnel at the time of visiting, also pregnant women in need of more care complained of inappropriate behavior of the staff with clients.

The data showed that the average satisfaction rating of the facilities at the health centers in male patients was significantly lower ( $p=0.02$ ) than women. This indicates that sex and facilities are determinants of satisfaction, which confirms the results of Maragulish and Hagian <sup>[24-25]</sup>. There was a significant difference between the mean scores of satisfaction from the location of services, equipment and the reason for referring to

center ( $p=0.01$ ). We can conclude that the distance from the center to the clients' houses is an important factor in increasing their satisfaction and this is similar to the results of Sayedandi <sup>[21]</sup>.

There was a negative correlation between the education level of participants and satisfaction of location of services. These results are the same as the results of two other studies <sup>[26-27]</sup>. There was a significant difference between the age of participants and cause of refer to center ( $p=0.02$ ), in a way that with an increase in age, satisfaction increased, which confirms the results of Kazemini et al and Hidari et al (26, 27). The results of Lee et al. and Moshiri et al. did not show any relevance between education and satisfaction of participants <sup>[3,28]</sup>.

Our data showed that there was a significant difference between age groups of participants and the cause of referring to the health centers ( $p=0.02$ ). This means that with increasing the age, the rate of satisfaction increased, the reason of this positive relation is that the knowledge and recognition of these subjects are higher than the rest.

These results are similar to Kazemini and Haidari's report <sup>[26,27]</sup>. There was no significant relationship between the mean grade scores of satisfaction and some variables like, age, education level and job groups, this was in contrast with the results of Kazemini <sup>[26]</sup>, and consistent with the results of Nikpour et al and Eric et al <sup>[23,29]</sup>.

In this study, the overall satisfaction level is moderate to high, which is the same as the results of Bayati in Arak<sup>[30]</sup>.

Finally, when referring to health centers, having stronger affinity interactions with family and community results in feeling more satisfied. It is hoped that by using the results of

this study, we implement life skills training for employees, which is certainly a desirable outcome for the client and is a reason for the staff to provide proper treatment to not only acquire some social benefits, but also to provide a good service in order to satisfy the clients.

## References

1. Zahiri R, Taheri M. Satisfaction of clients covering urban and rural health centers in the central province of Medical Sciences and Health Services. *Scientific Journal of School of Public Health and Institute of Public Health Research*. 2009;8(3): 68-72.[Persian]
2. javady M, Zareach A, samiee S , et al. Relationship satisfaction survey of veterans health services and demographic characteristics. *Iranian Journal of War and Public Health*. 2010; 2(3):28-35. [Persian]
3. Moshiri E, Noorbakhsh M, Ghafari M, et al. Comparison of patient satisfaction in the emergency department of University Hospital 87-86 years with 89 years. *Arak University of Medical Sciences Journal*. 2010; 4(5): 85-91. [Persian]
4. Abrahymnya M, Ameriun A , Azizabadi M, et al. Patient satisfaction emergency care services in military hospitals. *Journal of Hospital*. 2009; 8(2): 15-22. .[Persian]
5. Ghasemzadeh M, Modiria A, Soroush M, et al. Effectiveness of Educational General Department Veterans South West Tehran referred to the Department of Veterans satisfaction Veterans. *Medical Research Institute*. 2008; 1(1): 1-16. [Persian]
6. Yen-Ju Lin, Blossom Hsu, Chung-Ping C Juan, et al. The role of leader behaviors in hospital-based emergency departments' unit performance and employee work satisfaction. *Soc Sci Med*. 2010; 72(2): 238-46.
7. Boyer L, Baumstarck-Barrau K, Cano N, et al. Assessment of psychiatric inpatient satisfaction :a systematic review of self-reported instruments. *Eur Psychiatry*. 2009;24(8): 540-9.
8. Sarabi N, Nasiri Z, Sfrabady Farahani F, et al. study of Ostomy patient satisfaction nursing care. *Iranian of Nursing Journal* 2011. 24(60): 43-52. [Persian]
9. Amani F, Rangraz H, Habibis, et al. the rate ofsatisfaction from hospital personal performance *Journal of Ardabil University of Medical Sciences Research Committee*. 2010;2(2): 16-20.[Persian]
10. Fellani Danasra D, Grita S, Yevis Marty O. Patient satisfaction analysis on service quality of dental health care based on empathy and responsiveness. *Dent Res J*, 2011;8(4): 172–77.
11. Mascarenhas A.K. Patient satisfaction with the comprehensive care model of dental care delivery. *J Dent Educ*. 2001; 65(11): 1266-71.

12. Xiao H, Barber JP. The effect of perceived health status on patient satisfaction. *Value health*. 2008;11(4): 19-25.
13. Nickel S, Thiedemann B, von dem Knesebeck O. The effects of integrated inpatient health care on patient satisfaction and health-related quality of life: Results of a survey among heart disease patients in Germany. *Health policy*. 2010;98(2): 156-63.
14. Verbeek J, de Boer A G, van der Weide W E, et al. Patient satisfaction with occupational health physicians, development of a questionnaire. *Occup Environ Med*. 2005;62(2): 119-23.
15. Cooper BR, Monson AL. Patient Satisfaction in a Restorative Functions Dental Hygiene Clinic. *J Dent Educ*. 2008; 72(12): 1510-15.
16. Brédart A, Coens C, Aaronson N, et al. Determinants of patient satisfaction in oncology settings from European and Asian countries: preliminary results based on the EORTC IN-PATSAT32 questionnaire. *Eur J Cancer*. 2007; 43(2): 323-30.
17. Sajjadian A, Kaviani A, Younesian M, Montazeri A. Patient satisfaction: a descriptive study of breast care clinic. *Iranian Journal of Breast Diseases*. 2008;1(3): 45-51. [Persian]
18. Darryz H, Farid F, Sayedi D. Evaluation of patients' satisfaction with the services provided by the Department of Education in Dentistry, Tehran University of Medical Sciences 86-85. *Journal of Dentistry, Medical Sciences of Tehran University*. 2011; 23(4): 249-55. [Persian]
19. Spyridoula T, Nikolaos B, Konstantinos T, et al. Factors affecting parental satisfaction in the neonatal intensive care unit. *Journal of Neonatal Nursing*. 2012; 18(5): 183-92.
20. Kersnik J. An evaluation of patient satisfaction with family practice care in Slovenia. *International. Int J Qual Health Care*. 2000;12(2): 143-7.
21. Syed Andy J, Shojaei Zadeh D, Batebi A, et al. Client satisfaction in health centers - Beheshti Tehran University of Medical Sciences, health care system. *JBUMS Journal of Babol University of Medical Sciences*. 2009; 10(6): 80-7. [Persian]
22. Shirvani N, Ashrafi Amiri H, Motlagh M E, et al. Evaluation of the Function of Referral System in Family Physician Program in Northern Provinces of Iran. *Babol Univ Med Sci*. 2010; 11 (6):46-52. [Persian]
23. Nikpoor S, Shahpvryan F, Haji Kazmy A, et al. Relationship satisfaction of women received prenatal care and delivery of services to their profile. *Iranian Journal of Nursing*. 2007; 20(49): 1-13. [Persian]
24. Margolis S A, Al-marzouqi S, Revel T, et al. Patient satisfaction with primary health care services in the United Arab Emirates. *International Journal for Quality in Health Care*. 2003; 15(3): 241-9.
25. Hajian, K. Satisfaction of patients hospitalized in Shahid beheshti and Yahyah nejad hospitals. *Babol Medical University Journal*. 2005; 9(2): 51-60. [Persian]
26. Kazemini SK, Mohammadi F, Owlia F. Evaluation of Satisfaction Rate of Patients Admitted to Yazd Shaheed Sadoughi Burn Hospital in First Nine Months of the year 2011. *Journal of Tolo health*. 2013;11(4) 91-102. [Persian]
27. Heidari A, Seidi M. Patient satisfaction from General Physician Ghom city. *Journal of medical council of Islamic Republic of Iran*. 2007;26(4): 530-40. [Persian]
28. Lee DS, Tu JV, Chong A, et al. Patient satisfaction and its relationship with quality and outcomes of care after acute myocardial infarction. *Circulation*. 2008; 118(19): 1938-45.

29. Eric B, Ivanon L. The relationship between Women's satisfaction with prenatal care service and the characteristics of the pregnant women and the service. *Eur J Contracept Reprod Health Care*. 2004; 9(1): 16-28.
30. Bayati A. Measuring inpatient satisfaction in Arak Hospitals from services. *Arak Medical University Journal (AMUJ)*. 2010; 3(4): 6-9. [Persian]