

Maternal Satisfaction with Health and Healthcare Services: A Survey in Northern Iran

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Abstract

Background and Objectives: Patient satisfaction is an important indicator of the quality of health and health-care services. Most relevant studies in Iran have been conducted in the nation's capital, and there is a lack of large-scale studies in other regions of this country. In order to help filling this gap, this study was designed to undertake a relatively large-scale assessment of patient satisfaction with health and healthcare systems in Mazandaran province situated in northern Iran.

Methods: This cross-sectional study was conducted on a sample of 450 women who referred to health facilities in Mazandaran province. A quota random sampling method was adopted. Data were summarized using descriptive statistical methods. Chi-square and Fisher tests were used to analyze data.

Findings: A satisfaction rate of 65.5% and 56.8% was identified among the patient with health and healthcare services, respectively. A significant relationship was found between patients' satisfaction with health services and their age, level of education, status as a homemaker, and number of children. Similarly, patients' satisfaction with healthcare services showed a significant relationship with their age and number of children.

Conclusions: Our results indicate a gap between maternal satisfaction with health/healthcare services and the ideal situation. In addition, this study highlights the need for an in-depth analysis of the nature of relationship between patients' satisfaction with health/healthcare services and their demographic characteristics to enable developing effective improvement strategies.

Keywords: Patient, Satisfaction, Maternal, Health, Healthcare

Background and Objectives

Satisfaction of customers with services is a hallmark of services quality and their delivery [3]. Customer satisfaction is a major consideration in developing interventions aiming at improving products and services [4]. Evolution of management science in recent decades is indebted to the evolution of control processes [5]. Continuous quality improvement is an ultimate goal of such an evolution. In this approach, standards have a dynamic nature and should continuously adapt to customer needs and expectations. Therefore, customer satisfaction has emerged as a measure for assessment of quality of products and services in recent decades [4]. In the health system, the customer is referred to as a patient who requires healthcare services. Given that, patient satisfaction is an important

indicator of the quality of health and healthcare services provided [6]. There are several factors influencing community health, including heredity, environment, lifestyle, as well as health/healthcare providers. Among them, the latter have a significant influence on community health, thereby requiring particular attention by policy makers. Factors influencing patient satisfaction are related to the quality and quantity of services and patient demographic and socio-economic characteristics including age, gender, level of educational, and patients' awareness about their rights. The first step in enhancing patient satisfaction is assessment of the current level of their satisfaction with their health and healthcare systems. While such surveys are quite common worldwide, in Iran, most data of this kind are released from the capital, and similar large-scale data from other geographic regions of the country are scarce. In order to help filling this gap, this study was designed to undertake a relatively large-scale assessment of patient satisfaction with the health and healthcare systems in Mazandaran province in the northern Iran.

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Table 1 Maternal Satisfaction with Health Services

Healthservices	Satisfied		Relatively Satisfied		Unsatisfied	
	Number	%	Number	%	Number	%
Maternal and child care	319	71	85	18.8	46	10.2
Family planning	300	66.6	105	23.4	45	10
Vaccination	307	68.4	99	21.7	44	9.9
Health education	288	64	64	14.3	98	21.7
Mean	303	67.5	88	19.5	59	13

Methods

Study Design and Settings

This cross-sectional study was conducted by enrolling 431 mothers referred to 53 healthcare centers in 16 cities of Mazandaran province. The health services for which the patients were referred included maternal and child care, immunization, family planning, and health education. In addition, the healthcare services requested by the patients included medical, dentistry, pharmacy, injections, and dressing services. Our target population comprised of mothers between 18-45 years of age who referred to urban health and healthcare centers. A quota random sampling method was adopted. A sample size of 385 was calculated. To prevent possible losses, 450 subjects were enrolled in the study.

Measurement Instrument

The data were collected using a self-made questionnaire supplemented with face-to-face interviews. Experts ensured validity of the data collection tool. External reliability of the questionnaire was assessed using the test re-test method. Cronbach's alpha coefficient was used to assess internal consistency reliability. The obtained alpha coefficient was 0.84, indicating sufficient consistency reliability.

The answers to the questions were quantified using a 5-point Likert-type scale. The Likert-type scale was

converted to a 100-point scale before data analysis. Scores lower than 35 were considered to represent "Dissatisfaction", within 35-70, "Relative Satisfaction", and within 70-100, "High Satisfaction". Data were summarized using descriptive statistical methods. Chi-square and Fisher tests were used for data analysis. All statistical analyses were carried out using IBM SPSS Version 18 Software.

Results

The average age of women was 28±10 years old. The total satisfaction rate was 67.5% for health services and 56.8% for healthcare services. The highest level of satisfaction with health services was related to maternal and childcare (71%), whereas the highest level of satisfaction with healthcare services was gained by medical services (62%). The lowest satisfaction with health services was received by health education (21.7%), and the lowest satisfaction with healthcare services was related to pharmacy services (36.5%). According to our results, satisfaction with health and healthcare services can be considered to be at the moderate level. Analysis of the data indicated that there is a significant relationship between satisfaction with health services and age ($P = 0.031$), level of education ($P = 0.026$), status as a homemaker ($P = 0.042$) and number of children ($P = 0.018$). In addition, a significant relationship was found between satisfaction with healthcare

Table 1 Maternal Satisfaction with Healthcare Services

Health care services	Satisfied		Relatively Satisfied		Unsatisfied	
	Number	%	Number	%	Number	%
Medical	79	17.5	280	62	91	20.5
Dentistry	68	15.2	245	54.5	137	30.3
Pharmacy	59	13.1	226	50.4	165	36.5
Injections and dressing	83	18.4	271	60.3	96	21.3
Mean	72	16	256	56.8	122	27.2

services and age ($P = 0.001$), and number of children ($P = 0.022$). No significant relationship was found between satisfaction with healthcare services and level of education and status as a homemaker.

Discussion

The purpose of this study was to evaluate the level of maternal patient satisfaction with health and healthcare services in Iran. Our data indicated moderate patient satisfaction with health and healthcare services. This finding highlights the need for further planning to realize high patient satisfaction in health and healthcare systems.

In the present study, patients' satisfaction with health services was found to be higher than that reported in a number of previous studies, including Blendon's survey, where rates of 55% and 10% satisfaction with the health system was identified in Canadian and US patients, respectively [11]. However, the rate of patient satisfaction with healthcare services in our study is consistent with the study of El Shabrawy, where patients expressed 60% satisfaction with healthcare services [9].

Our results also led to the identification of a relationship between patients' satisfaction with health services and their demographic characteristics, including age, level of education, status as a homemaker, and number of children. In addition, we found a relationship between patient satisfaction with healthcare services and age, and number of children. Identifying the causes of such relationships was beyond the scope of this study. However, our results encourage such studies to facilitate a comprehensive improvement planning for the health/healthcare systems.

Conclusions

In this study, we conducted a relatively large-scale survey to identify the level of maternal satisfaction with health and healthcare services in Iran. A moderate rate of satisfaction with health and healthcare services were identified. In addition, a significant relationship was found between maternal satisfaction with health services and some demographic factors including age, level of education, status as a homemaker, and number of children. Similarly, maternal satisfaction with the healthcare system was found to be related to the patients' age and number of children. While analyzing the nature of these relationships was beyond the scope of this study, our survey encourages such an investigation as a part of requirements for developing an insightful plan for health and healthcare systems improvement.

Competing Interests

The authors declare no competing interests.

Authors' Contributions

GA designed the study. FR collected, refined and analyzed the data. GA, AAD and MF contributed to the interpretation of the results. AAD and HN participated in preparing the draft manuscript. GA and AAD revised and finalized the manuscript. The final manuscript was read and approved by all authors

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