

# Determining the Quality of Services Provided in Delivery Room at Ayatollah Kashani Hospital (Jiroft, Iran) from the Perspective of Clients Using Service Quality Model (SQM) During Spring 2019

Narges Mahyapour Lori<sup>1</sup>, Hourie Taheri Sarvetomin<sup>1</sup>, Mahdijeh Ahmadi<sup>2</sup>, Sareh Mehni<sup>3</sup>, Neda Dastyar<sup>3</sup>

<sup>1</sup>Member of Students research committee; <sup>2</sup>Head of Student Research committee; <sup>3</sup>Msc of Midwifery, Department of Midwifery, Jiroft University of Medical Sciences, Jiroft, Iran

## Abstract

**Background and Objective:** Topnotch services provided through preserving high quality is a prerequisite to the success of service organizations including maternity hospitals. Since maternity hospitals play an important role in providing services and promoting women's health and that of the entire society, this study attempted to assess the quality of services provided in the maternity ward of Ayatollah Kashani Hospital in Jiroft (Iran).

**Method:** This was a cross-sectional, descriptive study conducted on 234 women who went through vaginal delivery in Ayatollah Kashani Hospital. After 2 hours of delivery, convenience sampling was carried on the subjects in 2019. Data were collected through SERVQUAL standard questionnaire (1988), the validity and reliability of which were confirmed. Data were analyzed by SPSS using descriptive and inferential statistics.

**Results:** The results indicated that there is a negative gap in all dimensions of service quality. The largest gap was observed in assurance (-5.69) while the lowest gap was in the physical dimension (-3.2). There was a significant difference between women's expectations and perceptions across all five SERVQUAL dimensions ( $P < 0.001$ ).

**Conclusions:** From the women's perspective, the quality of services was not satisfactory and the significant difference between expected and received services indicates that managers should pay more attention to quality improvement programs in maternity hospitals so that increasing the quality of services will promote women's health and eventually that of the entire society.

**Keywords:** Women, Maternity Hospital, SERVQUAL, Quality of Health Care

## Introduction

Nowadays, promoting the society's health is a key factor in economic and social development. Therefore, one of the major concerns of countries worldwide is assurance of health care quality, programs and services. Quality is a main factor in global competition, where managers have to provide quality services for successful competition (1-2-3). Quality of service is the comparison

of what the client feels it should be (expectations) with what it has actually received (perceptions). If expectations are higher than perceptions, the client would perceive the quality of service to be lower, leading to dissatisfaction (4). Expectation is one of the most important determinants of client evaluation of service quality, and accurate understanding of client expectations is the most important step in defining and delivering high-quality services. In fact, one of the current challenges in the health system is how to respond to patient expectations. This has been neglected despite the importance of recognizing the needs and requirements of patients in providing care (5). The

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**Corresponding author:**

**Neda Dastyar**

E-mail: ne.dastyar@jmu.ac.ir

results of various studies demonstrate that fulfilling patient expectations is associated with high satisfaction with services, whereas unfulfilled expectations are associated with dissatisfaction. Patient satisfaction is one of the critical goals of group therapy activities. Patients' satisfaction with hospital services is one of the most important indicators of quality and effectiveness in service delivery and has made a major contribution in this regard. Satisfied patient is a key factor in any hospital's success. In fact, patient satisfaction is defined as patients' overall perception of the quality of healthcare provided (6-7). The only way for the patient to participate in caregiving is to research and seek patient satisfaction with current structures and to obtain their feedback. One of the most important groups under study in the field of satisfaction is patients in care and hospitalized in the maternity ward. That is because the delivery process during the care period is extremely stressful and it is one of the undesirable experiences of many people (8-9). According to a statement by the International Confederation of Midwives (ICM) and the International Federation of Gynecology and Obstetrics (FIGO), awareness of the disadvantages and benefits of different therapies, participation in the decision-making process and offering high quality services are among the ethical rights reserved for pregnant women (10). Observance of these rights leads to greater satisfaction with prenatal care and increased satisfaction with childbirth and, consequently, lower rate of cesarean delivery and the complications of pregnancy and childbirth on the mother and fetus (11). Accordingly, mothers can participate in their own treatment process and receive more quality therapeutic interventions (12). Deploying high-quality services saves costs, enhances the effectiveness of specialized service providers, strengthens staff morale, creates a satisfying environment, and increases patient loyalty in choosing a hospital for health care.

Conflicting perceptions of service quality have led to the adoption of different methods to assess service quality (13). For many years, researchers have been measuring quality of service using one-dimensional scales, while one-dimensional scales are not suitable for measuring a multi-dimensional concept such as quality (14). One of the best and most practical strategies to evaluate service quality involves SERVQUAL, a model designed by Parasuraman et al. (2008). SERVQUAL is a method for purposefully identifying the strengths and weaknesses of service organizations such as hospitals. It is also used to comparatively measure the perceptions

and expectations of clients (patients). The SERVQUAL scale contains metrics, half of which measure the expectation level of service recipient while the second half measures the perceived level of quality provided by the organization (15). Given that patient satisfaction assessment can provide the basis for identifying the current strengths and weaknesses and pondering strategies for providing better care and improving the quality of services, SERVQUAL was adopted as a powerful tool for measuring service quality (16-17-18). Moreover, given that quality analysis of hospital services enables hospital managers to allocate funds to improve performance in areas that have a greater impact on patient satisfaction, and since our preliminary study about quality of service in Iran was more focused on primary health care without using expert opinions, we intended to conduct a research to evaluate the quality of services provided in Ayatollah Kashani Hospital in Jiroft during spring 2019. This was decided because fewer authorities have taken this into consideration despite the importance of maternity ward's emergency department in ensuring the health of pregnant mother and her fetus, as well as the special importance of Ayatollah Kashani Hospital Maternity Hospital as the only specialized women's hospital in southern Kerman.

The most important client will be realized through proper planning, correction of deficiencies and ultimately improvement of service quality (26).

## **Materials and Method**

This is a cross-sectional, descriptive-analytical research project. The statistical population includes all women referred to Ayatollah Kashani Hospital in Jiroft for the period of March to June 2019. The data were collected by census method and from all qualified clients. Inclusion criteria: Informed consent to participate in the study, maximum 5th pregnancy, at least 24 hours of hospitalization, pregnant or 2 hours past parturition and transferred to gynecology ward, maximum age 45 years old, minimum literacy reading and writing, no physical or mental illness. Moreover, women in the active phase of labor who did not complete all sections of the questionnaire were excluded. Finally, the population comprised 234 subjects. After obtaining permission from the Ethics Committee and agreeing to hospital managers, the leading researcher attended the maternity ward and administered the SERVQUAL questionnaire at different labor shifts (morning, afternoon, and evening) until the end of June. The subjects returned their

written consent and were assured of the confidentiality of their information. The questionnaire consisted of two parts: demographic information and SERVQUAL items. Personal information involved 11 items (age, number of pregnancies, level of education, etc.) The second part covers SERVQUAL Multidimensional Questionnaire. The questionnaire included 28 items in 6 dimensions, namely physical (5 items), reliability (5 items), responsiveness (5 items), service assurance (5 items), empathy (4 items), and access to care (4 items), while the questionnaire was based on a five-point Likert scale: very high, high, medium, low, very low. In their study, Mousavi et al. calculated reliability and validity of the questionnaire through Cronbach's alpha, which were 0.88, 0.87, 0.88, 0.88, 0.91 and 0.86 in physical dimension, responsiveness, assurance, empathy, reliability and accessibility, respectively (28). In order to enhance the concentration of subjects, the questionnaire was administered without staff presence. It took about 15 minutes to complete the questionnaires. After collecting the questionnaires, data were analyzed using SPSS 20. Furthermore, the data normality assumption was evaluated by Kolmogorov-Smirnov test and, Mann-Whitney and Kruskal-Wallis nonparametric tests were used.

## Results

A total of 234 subjects with a mean age of  $27.0 \pm 6.44$  participated in the study, of whom 80% held a diploma degree and lower, while the rest had a bachelor's degree or higher. Of these, 87% were housewives and about 9% were occupied, 39% experienced first pregnancies and 5% were on the fifth pregnancy. There was no significant relationship between age and satisfaction ( $p=0.56$ ). The mean gap score in patients with a bachelor's degree and higher was significantly higher than those with a lower level of education ( $p<0.05$ ). Interestingly, mean expectations were similar in the two groups ( $p=0.08$ ) but mean perceptions in the bachelor and higher groups were significantly lower ( $p<0.05$ ). The mean score of gap was significantly higher in those with a bachelor's degree and higher ( $p<0.05$ ). The mean gap score was significantly different between those who tended to be pregnant and those who did not tend to be pregnant ( $p=0.39$ ).

As can be seen in the table below, physical dimension had the smallest gap (-3.2) while assurance indicated the highest gap (-5.69). Individuals expressed the highest expectations in terms of accountability and assurance while the lowest perceptions were in empathy

and access. There was a significant difference ( $p<0.001$ ) between mean perceptions and expectations at all dimensions.

## Discussion

The main purpose of this study was to investigate the level of expectations and perceptions about the quality of services from the perspective of patients referred to Kashani Hospital in Jiroft during spring.

Similar to many researchers, we attempted to examine the gap between client expectations and perceptions of service quality. According to the findings in our study, the lowest and mean gaps and highest perceptions were found in the physical dimension which was inconsistent with the findings of Seyedi et al. (29). This reflected that the hospital cared for physical and infrastructural facilities similar to the results of a periodic survey conducted between 2000 and 2008 focusing on the provision of services at a dental service facility in Estonia. Their research results showed that the gap between patients' perceptions and expectations of service quality widened between 2000 and 2007 and decreased during 2008 (30).

Furthermore, the low score of perception and expectation in the empathy dimension indicates that the hospital-patient interactions have weaknesses that need to be addressed. This is in contrast to the results of Gray Boshoff (31) and Sidey et al. (29). It is also noteworthy that the individual interactions that occur during the care processes have a significant impact on the recipient's perception of the quality of service provided by the medical center.

The highest expectations and gaps were found in assurance, which is consistent with the results of the study by Mousavi et al. (32) as well as Baker (33). These results indicate that from the patients' perspective, the proficiency and expertise of the medical staff and the protection of patient rights when providing care services are vital, and the large gap in this dimension indicates that their expectations and dissatisfaction are not met.

In this study, the mean score of expectations in patients with university and non-university education was the same, but there was a significant difference in the perception of these two groups, which resulted in a significant gap in education, so that the mean of the academic gap was higher than the others. Greater level of education increases the level of expectation and

consequently decreases the perception of quality.

In our study, the variables history of hospitalization, insurance coverage and length of hospital stay did not lead to any significant difference in the main variables.

### Conclusion

Finally, we suggest that the gap across all items is significant, which means that the hospital has a long way to go before satisfying the patients in providing health services.

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**Ethical Clearance:** Taken from Jiroft University of medical sciences.

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