Assessing women's satisfaction level with maternity services: Evidence from Pakistan

Mariam Ashraf¹, Fatima Ashraf^{2*}, Atif Rahman³, Rukhsana Khan⁴

Health Services Academy Islamabad, Pakistan
PhD Scholar, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology Islamabad, Pakistan
Professor of Child Psychiatry, University of Liverpool, School of Population, Community and Behavioural Sciences, Child Mental Health Unit, Alder Hey Children's NHS Foundation Trust, UK
Assistant Professor, Health Services Academy, Ministry of Health, Islamabad, Pakistan

* Corresponding Author: Fatima Ashraf

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology Islamabad, Pakistan Email: fasaifi@yahoo.com

Abstract

Introduction: In Asia, particularly in the Pakistani context, studies have suggested that women's utilization of maternity services is very less. While a number of factors can play a role, one important concern is whether the quality of service that is being offered to those who are using it meets their satisfaction level or not.

Aims and objectives: The present study assesses the satisfaction level of women with maternity services, and identifies factors with which women are satisfied and those with which they are dissatisfied.

Methods: It is a cross-sectional survey of 400 women who had utilized maternity services in the past and was conducted at a public sector hospital in the capital city.

Results: The results suggest that 61% of women were satisfied with the services while 39% were dissatisfied. Moreover, results suggest that women are satisfied with the factors of communication, interpersonal aspect of care, management, and general satisfaction. Women were least satisfied with the factors of availability, accessibility and convenience, followed by knowledge and advice, technical quality, and financial aspect.

Conclusion: Overall, the majority of women were satisfied with the maternity services they received, while the minority was dissatisfied with the maternity services.

Keywords: maternity care, maternity services, women, satisfaction, hospital, Pakistan

Introduction

Half a million maternal deaths occurs worldwide, of which ninety nine percent occur in developing countries. In Pakistan, an estimated 30,000 maternal deaths take place every year. Apart from clinical causes, a number of other relevant factors such as illiteracy, lack of health care facilities, lack of health care providers and lack of transport facilities also play a major role in causing a high percentage of maternal deaths. While a number of measures have been taken to prevent them, the main focus has been on maternity service provision rather than on quality of maternity service provided. In the past, it has been shown that reaching a maternity care facility does not ensure the morbidity or mortality of the women or the child if the service is inefficient or the quality of service provided is ineffective.² Although the percentage of women receiving maternity service is very low in Pakistan³, yet the availability of maternity services does not imply that it will be utilized by women, nor does the utilization of maternity service ensure best possible outcomes for women. Since maternal deaths occur even after reaching the maternity care service, and women deaths and morbidity are attributed to poor maternity quality of care4, the quality of care issue gains importance.² This issue also gains significance since past research has proved a strong relationship between the quality of services provided by a hospital and patterns of utilization of the service.⁴ Thereafter, women's views regarding quality of maternity care are significant as they are the consumers of this particular service.^{5,14} It is indeed the patients' viewpoint that determines what constitutes quality of care.^{7,8,12,23} Also, patients' perceptions about quality of care are significant since they influence patients' health outcomes⁶ and therefore, women satisfaction is increasingly accepted as an important dimension of quality of care. Particularly in maternity care services, satisfaction with care is an important aspect. 18 Hence it becomes clear that health professionals and women must work together for setting aims⁸, particularly in this current era of competition and consumerism.9

Whereas most studies have focused on provision of maternity service, quality of care in maternity services has received very little attention. The need of the hour is to study the quality of care since it greatly impacts women, which influences their health, acceptability and uptake of the service as well. At a time when industrialized countries have halved their maternal mortality in the early 20th century through access to professional care at delivery and through effective and safe hospital technology this issue needs to be highlighted in the Asian context. Particularly in the context of Pakistan, the issue of satisfaction of women regarding quality of care needs to be explored, since clients' racial and ethnic backgrounds influence their perceptions of care. Becker and Tsui found only one previous study that addressed this issue. Another study compared the perceptions of obstetricians, midwives, and postnatal mothers regarding service features during labor and postnatal care that are important to women.

In Pakistan very few studies have been conducted regarding women satisfaction.¹¹ One study regarding consumer satisfaction and expectations was carried out in emergency and accident care service¹² and another covered satisfaction with the antenatal services.¹³ Sensing a gap in the current literature, the present study aims to examine the satisfaction of

women as consumers of health care in Pakistan with the quality of maternity services provided.

The current study is an attempt at understanding consumer and (i.e. women) professional perceptions of health care, since few studies have made this attempt. ¹⁰ It is a reply to Proctor's call for the need to develop a consumer-orientation in maternity services, since these customers are essentially women. ⁸ This study will establish whether or not women utilizing maternal health services are satisfied with the quality of maternal health care provided to them by assessing their level of satisfaction with the existing services and also suggest ways to enhance quality of maternal health care.

We expect that women will benefit from this study as it will encourage women to seek health advice, comply with treatment, continue and maintain an ongoing relationship with the doctor, which will ultimately lead to improved health outcomes. 14,15,16,17 Since we assess women satisfaction with quality of maternity care, this study offers the advantage for evaluation as well. Hospitals may derive benefit from this research by being in a better position to predict future behavior of women who have utilized maternity services, such as compliance with treatment and intent to return for care 19,9, and in accessing consumer views for quality of care and informing service planning. 20

For the present study, we adopt the definition of quality of care, put forth by the Institute of Medicine. Quality of care is defined "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge". Patient satisfaction is defined for the present study as "multiple evaluations of distinct aspects of health care which are determined by the individuals' perceptions, attitude and comparison processes". 18

Materials & Methods

The study was conducted at a local public sector hospital in the capital city of Islamabad. The hospital is a tertiary-care level government hospital with a separate MCH Centre. It has two units, with 125 beds, out of which 85 are general, 20 semiprivate, 15 private and 5 for critically ill patients. This study covered the patients of general ward and included all women who had delivered and had utilized maternity services. A majority of the sample belonged to middle and low socio economic group. The mean age of respondents was 26 years, with a minimum age of 18 years and maximum being 40 years.

The study is a cross-sectional survey in which the defined population was surveyed for satisfaction level with maternity service. The sample size, estimated on the basis of expected 50% prevalence of women satisfied with quality of maternity services, was calculated using the formula,

$$n=z^2p(1-p)/d^2=388$$

where,

z= is the significance level (at 5% significance level its value is 1.96)

p= is proportion of women satisfied with maternity services. Assumed to be 50%

d= is the margin of error (It has been taken as 5%).

Hence forth, we interviewed a total of 400 women.

Study sample

Systematic random sampling was done. Fourteen women per day were interviewed in the 30-day data collection period. For this, we used the list of the women who were discharged from the postnatal ward that provided the value of N. Using formula N/n, we calculated the sample size needed.

Among the respondents, the majority had no education. 62% of them had a monthly income of less than Rs. 10,000. Approximately 91% of women were housewives and 9.2% were working women. Seventy percent of the respondents lived in a combined family system, while 30% lived independently. Table 1 presents the results in detail.

Criteria for inclusion and exclusion

All those women who were discharged from the post natal ward, had delivered, and were booked cases of the hospital were included in the study. Women with delivery complications were excluded from the study.

Data collection tool

Patient satisfaction surveys have been used internationally as an indicator of quality of care. For this study, we collected the data using a structured questionnaire. The Patient Satisfaction Questionnaire, PSQ-18 (short form) was adapted. The questionnaire consisted of three parts. Part A tapped demographic information, part B tapped patient satisfaction and part C consisted of additional questions pertinent to labor and post natal care. All questions were statements which required respondents to mark on a 5-point Likert type scale from *strongly agree* to *strongly disagree*. All items were pre-coded.

Data collection

Data were collected over a 30-day period from a local public sector hospital. Besides the primary authors, a pre-trained research assistant was hired for data collection. Replies were received soon after the administration of the questionnaire.

Data analysis

Data was entered in SPSS version 16.0. Individual scores of each item was calculated and were categorized into three so that highly agreed and agreed were sum up under agreed, neither agreed nor disagreed remained same and disagree and highly disagree were sum up under disagreed. Variables were then calculated through summation of scores.

Results

Satisfaction Analysis: Women satisfaction with maternity service was assessed with factors of general satisfaction, technical quality, interpersonal aspect, communication, financial aspect. Table 2 presents the results.

General Satisfaction: General satisfaction of women was concerned with the maternity services as a whole offered to the women. It was measured with 2 items. Results show that 70% of women were satisfied where as 30% of women are not satisfied with the maternity services in general

Technical Quality: This related to the availability of equipment required for complete medical checkup, competency of medical doctors, and satisfaction of women with the doctor's ability and was measured with 3 items. Overall, results show that 44% of women were not satisfied with the technical aspect whereas 56% of women were satisfied.

Interpersonal Aspect: This is related to the attitude of the doctors with the women It was measured with two items. Results reveal that 25% of women were not satisfied with the interpersonal aspect, whereas the 75% were satisfied.

Communication: This defines the communication of the doctors with the patients. Whether they are able to understand what doctors explain them and do the doctors listen to them when they need to understand something. It included two items. Results show that 79% of women were satisfied whereas 21% of women were not satisfied with the communication factor

Financial aspect: It measured women's satisfaction with the financial aspect related to their pregnancy and delivery. It identifies the satisfaction with the cost they had to bare for utilizing the services. It was measured with 2 items. Results reveal that 42 % of women were not satisfied with the financial aspect, while 58% of women were satisfied.

Time spent with doctor: It consisted of 2 items that measured the time doctors gave to women, and whether women were satisfied the time spent on them by the doctor. Results

reveal that 36% of women were not satisfied whereas 64% of women were satisfied with the time spent on them by the doctor.

Access, Availability and Convenience: It consisted of four items. Results reveal that 86% of women were not satisfied whereas 14% of the women were satisfied with the access, availability, and convenience factor.

Management Service: This concerned maternity services/care that women received during labour and delivery and was measured with 5 items. Results reveal that 82% of women were satisfied while 18% were not satisfied.

Knowledge and advice: This pertained to advice and knowledge women were given by doctors. It was measured with 6 items. Results show that 54% of women were not satisfied whereas 46% women were satisfied.

Reutilization of the service: This pertained to reutilization and recommendation of maternity service by women. Results shows that 78% - a high percentage -of women intended to reutilize the maternity service provided to them, whereas 22% did not intend to reutilize the maternity service.

Comparison of satisfaction and dissatisfaction

A comparison was done to identify factors with which women were satisfied and those with which women were dissatisfied. The graph below shows all factors that measured satisfaction in this study.

The graph shows that women were dissatisfied with the factor of availability, accessibility and convenience (AAC), followed by the financial aspect (FA). Women were highly satisfied with communication (COMM) and management (MS) factors. Average satisfaction score were calculated which showed that 61% of the women were satisfied with the services offered to them. Communication aspect (79%), followed by satisfaction with interpersonal aspect (IA) of care (75%), management satisfaction (MS) (75%) and general satisfaction (GS) (70%). They were least satisfied with the aspect of availability, accessibility and convenience AAC (13%) followed by knowledge and advice (46%), technical quality TQ (56%) and financial aspect FA (58%).

Discussion

Since patient satisfaction with maternity services is an important outcome measure for the quality of care and provision of services, this study examined women's satisfaction level with maternity services. Results revealed that overall, 61% of women were satisfied, while 39% were dissatisfied. Specifically, women were highly satisfied with the communication aspect (79%), followed by satisfaction with interpersonal aspect of care (75%),

management satisfaction (75%) and general satisfaction (70%). They were least satisfied with the aspect of availability, accessibility and convenience AAC (13%) followed by knowledge and advice (46%), technical quality TQ (56%) and financial aspect FA (58%).

These findings suggest that for a successful maternity service non-medical factor such as cost, convenience and accessibility are important factors which influence the satisfaction level of the services by the women. These factors have also been identified in previous research.³⁶ Regarding individual assessment, 83% of the women in this study reported that they were very satisfied with antenatal, natal and postnatal care services. These findings are in line with the previous findings which demonstrated high levels of satisfaction in this aspect²².

Factors influencing the satisfaction level have also been identified which include education of the women, place of residence and their monthly income; these are non-medical factors, one of which is mode of delivery. Past research found that women who are giving birth for the first time might be more satisfied than those women who are delivering second or more times.²³

Limitations

Although the study found some interesting results, some reservations must be addressed. First, the study sample was taken from a single hospital, which raises the question of generalizability of results to other public and private hospitals.

In addition, inclusion of complicated cases in the study might have led to different results. These findings might also have been affected by the fact that women were interviewed after discharge, when they are likely to express negative feelings about maternity care.²⁴ In addition, recall bias should be recognized as a limitation.²⁵ Finally, it is also possible that women might have overrated some answers so as to influence hospital staff.^{19,25}

Conclusion

In this study, examining maternity satisfaction with different dimensions identified different aspects which may not be related directly to the service, but plays an important part in influencing women's satisfaction. This study has shown that apart from the hospital services, other factors such as their convenience of coming to this hospital, finances that the women have to bare for utilizing the services and of course the education status plays an important role.

This study has shown that women are satisfied with the hospital services but were unhappy with very few aspects. It includes the waiting time for checkup, and discussion of their problems with the doctors.

This study has provided means to obtain women views on the services being offered to them and can help health care providers, hospital managers and policy makers to work jointly in shaping their efforts for achieving maximum women's satisfaction with maternity services

Suggestions for future research

Future studies should consider gathering more data from a more diverse sample to address the generalizability issue. Future studies can provide a comparison of public and private sector hospitals. Additionally, women satisfaction could include more indicators for more holistic measurement. Lastly, a sample from a different culture could provide cross-cultural insights into the same issue.

Ethical view

The study was approved by ethical committee of Health Services Academy. Verbal consent was obtained from women to be interviewed after informing them about the nature and purpose of survey. The information provided by participants was confidential. Their name and identity was also not disclosed at any time.

References

- 1. Choudhry TM. Maternal mortality and quality of maternity care: Implications for Pakistan. 2005; *Masters thesis, Karolinska Institutet, Sweden.* Available at: http://openmed.nic.in/1370/
- 2. Ambruso LD, Abey M, Hussien J. Please understand when I cry out in pain: Women's accounts of maternity services during labour and delivery in Ghana. *BMC Pub Health*. 2005;5140,1-11.
- 3. Zafar R, Cross A. Reproductive Health. *Pakistan Demographic and Health Survey 2006-2007*. NIPS, USAID. Islamabad, Pakistan;2008:101-22.
- 4. Hulton, LA, Mathews Z, Stone RW. A framework for evaluation of quality of care in maternity services. University of South Hampton; 2000:1-4.
- 5. Brown CR. Where are the patients in the quality of health care? *Int J Qual Health Care*. 2007; 19,3:125-126.
- 6. Becker D, Tsui AO. Reproductive health service preferences and perceptions of quality among low income women: Racial ethnic and language group difference. *Persp Sexual Reprod Health*. 2008;40:202-211.

- 7. Salomon L, Gasquett I, Misbah M, Revaud P. Construction of a scale measuring inpatients' opinion on quality of care. *Intern J Quality Health Care*. 1999;11:507-516.
- 8. Proctor S. What determines quality in maternity care? Comparing perceptions of child-bearing women and midwives. *Birth.* 1998;25:85-93.
- 9. Dozier AM. Development of an instrument to measure patient perception of the quality of nursing care. *Research Nurs Health*. 2001;21:506-517.
- 10. Brouwere V. Safe motherhood strategies: A review of the evidence. *Studies Health Serv Organiz Policy*. 2001;17:2-3.
- 11. Naru I A. Consumers and providers' perception about quality of health care deliver in an outpatient department of a public sector hospital .1998; *Master's Thesis Quaid-e-Azam university, Pakistan*.
- 12. Mahmood T. Consumers' expectations, experience and satisfaction with emergency and accident care service in PIMS. 1999; *Master's Thesis Quaid-e-Azam University*, *Pakistan*.
- 13. Nisar N, Amjad R. Pattern of Antenatal Care Provided at a Public Sector hospital Hyderabad Sindh. *J Ayub Medical College*. 2007;19:11-14.
- 14. Haddad S, Potvin L, Roberge D, Pineault R, Remodin M. Patient perception of quality following a visit to a doctor in a primary care unit. *Family Practice*. 2000; 17:21-29.
- 15. Pope C, RoyenVan P, Baker R. Qualitative methods in research on healthcare quality. *Qual Safe Health Care*. 2002;11:148-152.
- 16. Johnson M, Langdon R, Yong L, Stewart H, Kelly P. Comprehensive measurement of maternal satisfaction: The modified Mason Survey. *Int J Nurs Prac*. 2002;8:127–136.
- 17. Drapper M, Cohen P, Buchan H. Seeking consumer's views: What use are results of hospital patient satisfaction surveys? *Int J Quality Health Care*. 2001; 13:6,463-468.
- 18. Rudman A, EL-Khouri B, Waldenstrom U. Women's satisfaction with intrapartum care a pattern approach. *J Adv Nursing*. 2007;59:474–487.
- 19. Currie V, Harvey G, West E, McKenna H, Keeney S. Relationship between quality of care, staffing levels, skill mix and nurse autonomy: Literature review. *J Adv Nursing*. 2005; 51:73.
- 20. Gonzalez N, Quintana JM, Bilbao A et al. Development and validation of an In-Patient Satisfaction Questionnaire. *Int J Qual Health Care*. 2005;17:465-472.

- 21. Chassin MR. Quality of care. The New England J Med. 1996;335:891-893.
- 22. Goodman P, Mackey MC, Tavakoli AS. Factors related to child birth satisfaction. *J Adv Nursing*. 2004;46:212-219.
- 23. Teijiligen ER, Hundley V, Rennie RM, Graham W. Maternity satisfaction studies and their limitations: "What is must still be best". *Birth.* 2003;30:75-82.
- 24. Hundley VA, Milne JM, Glazener C, Mollison J. Satisfaction and the three C's: Continuity, choice and control. Women's views from a randomized controlled trial of midwife-led care. *British J Obstetrics Gyne*. 1997;104:1273-1280.
- 25. McCrea BH, Wright ME. Satisfaction in child birth and perceptions of personal control in pain relief during labour. *J Adv Nurs*. 1999;29:877-884.

Table 1: Demographic variables of respondents (N=400)

Variable	Frequency	Percent
Education level (grade)		
No education		24.2
Primary (1-5)		17.5
Middle (6-8)		19.5
Secondary(9-10)		21.5
Higher Secondary (11-12)		14.2
Higher > 12		3
Working status		
House wife	363	90.8
working	37	9.2
Husband Job		
Government job	76	19.0
Private job	318	79.5
Jobless	6	1.5
Monthly income		
Less than 10,000		62
11,000-15,000		20
16,000-20,000		10
Greater than 20,000		8
Family system		
Combined family	280	70
Independent family	120	30

Reutilization of service

Factor	Dissatisfied		Satisfied	
	Frequency	Percentage	Frequency	Percentage
General satisfaction	122	30	278	70
Technical quality	173	44	224	56
Interpersonal aspect	99	25	301	75
Communication	86	21	314	79
Financial aspect	166	42	234	58
Time spent with doctor	145	36	255	64
Access, availability,	346	87	54	14
convenience				
Management service	70	18	330	82
Knowledge and advice	215	54	185	46

22

311

78

89

Table 2: Factors affecting satisfaction of women with maternity services (N=400)

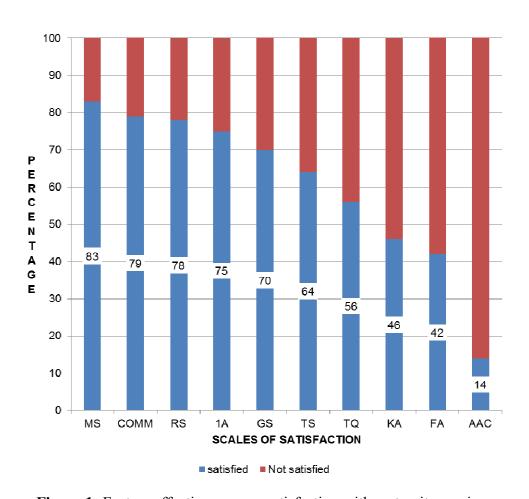


Figure 1: Factors affecting women satisfaction with maternity services