



QUALITY OF CARE PROVIDED TO MOTHERS DURING LABOR AND DELIVERY ASSESSED BY LABOR AND DELIVERY SATISFACTION INDEX (LADSI)

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ABSTRACT **Introduction:** Understanding maternal expectations is an important ingredient in making childbirth a safe and satisfying experience. Knowledge gained from the study will assist to identify aspects of care that produce a high degree of patient satisfaction. Knowledge gained from the study can also lead to improved communications and relationships between mothers and providers of maternity care.

Objective: To study level of satisfaction regarding quality of care provided to mothers during labor and delivery.

Method: A cross-sectional study was conducted among 1035 mothers admitted in in post-partum wards of Obstetrics & Gynecology department of Government Medical College, Kottayam. Socio demographic details were recorded and maternal satisfaction was assessed using LADSI six point likert scale-(strongly agree-agree-mildly agree-strongly disagree-disagree-mildly disagree).

Results: The overall satisfaction of quality of care provided to mothers during labor and delivery in Kottayam medical college came to be as 64.8%. A significant association between variables like age, income, occupation, parity, hours spent in labor room, place to overall satisfaction

Conclusion: Care givers need to fully understand the expectations the mothers have and provide care that is consistent with those expectations. The Prenatal, antenatal, delivery and postnatal care should be enhanced to increase maternal satisfaction in the health services and provide maternal-friendly outcome.

KEYWORDS : LADSI, Maternal expectations, Postnatal Care.

INTRODUCTION

Maternal satisfaction is one of the frequently reported outcome measures for quality of care, and it needs to be undertaken to improve the quality and efficiency of health care during pregnancy, childbirth, and puerperium to provide quality maternal-friendly services. The launch of the National Health Mission (NHM), led to a substantial increase in the number of the institutional deliveries.(1) However, this increase in the numbers has not translated into commensurate improvements in key maternal and new-born health indicators. Estimates reveal that approximately 46% maternal deaths, over 40% stillbirths and 40% newborn deaths take place on the day of the delivery(1) Transformational changes in care provision include meticulous adherence to clinical protocols by the service providers at the health facilities and empathetic attitude towards pregnant women at the health facilities.(1) Respectful maternity care contributes to a positive outcome for both the mother and newborn, furthermore, supporting the cognitive development of the baby later in life.(2)

To improve the quality of care at Public Health Facilities, Quality Assurance Standards for District Hospitals, Community Health Centers, Primary Health Centre and Urban-Primary Health Centre is drafted, and the implementation is operationalized through the National Quality Assurance Program.(1) The question confronting health systems in India is how best to reform, revitalize and resource primary health systems to deliver different levels of services.(3) The Government of India has introduced LaQshya- Labour room Quality improvement initiative guidelines, aims to improve quality of care in labour room.(1) Studies show 20-60 % satisfaction rate to childbirth services provided in public health facilities, More so for caesarian births than vaginal births.(4,5) Services are provided to the community with the objective of fulfilling their satisfaction however the end outcomes are barely achieved.(5)

The last two decades has seen progress in the institutional births, however, reductions in maternal and neonatal mortality remain slow.(6) It is necessary to shift attention to quality of care in health facilities to reduce the morbidity and mortality that results from poor care.

Knowledge of a women's opinions and satisfaction with post-natal services allows to make improvements and ensure that the services are women-friendly.(4) Knowledge gained from the study will assist to identify aspects of care that produce a high degree of patient satisfaction. Knowledge gained from the study can also lead to

improved communications and relationships between mothers and providers of maternity care.

Methodology

A cross sectional study was conducted among mothers admitted in post-partum wards of Obstetrics & Gynecology department of Government Medical College, Kottayam. A sample size of 1035 was identified considering the satisfaction level from childbirth services to be 59% at 95% confidence interval and 2% margin of error.(4) All patients admitted in the ward were included in the study if they were at low risk for maternal or fetal complications during labour and delivery. All mothers who had a normal spontaneous delivery were included in the study. Mother who underwent caesarian section were excluded from the study. Informed written consent was taken from all mothers. Socio demographic details will be recorded. Maternal satisfaction was assessed using LADSI questionnaire using a six-point likert scale-(strongly agree, agree-mildly, agree-strongly, disagree-disagree, mildly disagree). (7) The range of scores were from 38-228 and the overall score equal or greater than 190 is considered satisfactory. All the data which was collected were coded and entered in Microsoft Excel sheet which was re-checked and analyzed using SPSS statistical software version 22. Quantitative variables were summarized using mean and standard deviation (SD). Categorical variables were represented using frequency and percentage. Independent sample t-test and ANOVA were used to test statistical significance of difference between means of variables among two independent groups. Pearson Chi-square test and Fisher's exact test were used for comparing categorical variables between groups. Pearson correlation test was done to find out significance between two quantitative variables. A p value of <0.05 was considered statistically significant.

RESULTS

Of the 1035 mothers who were enrolled in the study, 435 (42%) were in the age group of 26-30 years. Of the study participants, 44.4% belonged to upper middle-income class, 42% belonged to lower middle income class and 11.2% belong to high income group. We found that 41 (4%) resided outside the state. Most of the mothers were multigravida 559(54%) and 609 (59%) mothers spent at least 12-24 hours in the Labour room before delivery.

We observed a good satisfactory score in age group 26-30 years followed by 21-25 years and then follows age group 18-20 years. As age increases, satisfaction decreases. Of the participants 41% had bachelor's degree. 31.8% of study group had secondary school

education and 23.5% had master's degree. Women with secondary school education had good satisfaction scores, as level of education increases, satisfaction decreases. Those who belonged to a lower middle class have good satisfactory score. While 90.7% of mothers spent 4 hours in labor room after delivery, 3-8% spend 4-12 hours in labor room after delivery and 4-5% spend 12-24 hours in labor room after delivery. Good satisfaction scores occurs in group that spend minimum time in labor room.

A significant association was observed between patient satisfaction levels and age, education, income. (Table1)

Table – 1 Association Between Satisfaction, Age, Education, Income,

	Satisfied with health service	Chi Square Value	Df	Asymptotic significance (2-sided)
Age	671	714.317 ^a	4	.000
Education	671	655.399 ^a	3	.000
Income	671	533.713 ^a	3	.000
Hours in labour room before delivery	670	847.372 ^a	2	.000
Hours in labour room after delivery	670	176.082 ^a	4	.000

The overall satisfaction of quality of care in labour and delivery in Kottayam medical college came to be 64.8% with 100% satisfaction for child care. Close to 90% of postpartum mothers were satisfied with the care received during labor and delivery, with 90.7% accepting that they received sufficient attention to the safety of both mother and baby. However, 49.9 % of postpartum mothers felt unnecessary interventions were carried out on mother or baby during labor and delivery. Of the mothers 57 % only agreed that their wishes were always respected during labor and delivery. Around 94.6 % of postpartum mothers agreed feeling in control of what happened during labor and delivery. Of the mothers 4.9% felt some mistakes were made in the care received from the staff during labor and delivery. In addition, 96.9 % of postpartum mothers strongly agreed that they would be happier if the staff were more capable. Moreover, 60.6% of postpartum mothers agreed that they would be more satisfied if the staff were more considerate during labor and delivery”.

When it came to quality of staff care, 96.7% of postpartum mothers strongly agreed that the nurses gave the care and attention required and 96.8 % of postpartum mothers strongly agreed with doctors giving attention. However, 63.2 % of postpartum mothers agreed that staff treated them with indifference. and 60.6 % of postpartum mothers would have liked a better response from staff during labor and delivery”. It was interesting also to see that 62.8 % of postpartum mothers agreed to a wanting the management of labor and delivery done differently”, and 63.1 % of postpartum mothers felt too many equipments were used during labor and delivery. In addition, 62.6 % of postpartum mothers felt there were too many staff or students involved in labor and delivery. Of the mothers, 35% strongly agreed that there were occasions when no one explained the procedures, 64.8 % of postpartum mothers felt there were too many vaginal examinations.

DISCUSSION

This is one of the first few studies that has looked into the quality of care given to postpartum mothers in South India. The findings from our study identified an overall maternal satisfaction of 64.8% with a 100% approval of child care. We also observed that satisfaction level decreases with increasing age and education levels.

The satisfaction level observed in this study is similar to a few other studies that have been conducted in this regard specifically in public health facilities.(4) It has been observed in our study that though the patients were satisfied with health care staff however they were disappointed with the nonchalant attitude and also felt a lack of informed decision making regarding procedures. This raises the concern regarding the presence of interpersonal interaction with care providers. Another concern in our study was the lack of privacy the mothers faced in labor room which was highlighted in the satisfaction survey, hence measures need to be taken to improve their privacy during childbirth and postpartum hospital stay. Studies reveal a strong positive associations on the provision of such measures with women's childbirth satisfaction.(4)

We observed that the satisfaction levels decreased with increasing

income. Mothers belonging to low socio-economic strata might not be able to understand appropriate clinical aspects of care. Still, they want care that is affordable and accessible, and hence accept services irrespective of their comfort levels. The service provider must consider all mothers equally and provide them with the necessary emotional support, care and privacy during delivery.(8)

There are few limitations to the study, as we were conducting interviews postnatal rooms or within health facility, this might have led to some women providing more positive accounts of care than their actual experience. The study excluded women who underwent Caesarian section and women with fetal and maternal complications. Complications could have been probably explained by care rendered to the client. Despite the limitations of study, our findings are relevant to women's experience during labor and delivery.

CONCLUSION

This study was able to identify a need for improvement in client interaction and service provision to postnatal mothers. In addition efforts towards technical information provision to clients and enhanced privacy could improve the satisfaction levels of mothers and ensure better outcome of labor for both mother and baby.

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Declarations

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Conflict of interest: None declared

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