

## Satisfaction on Intranatal Services among Mothers in Pokhara, Nepal

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### ABSTRACT

**Introduction:** Understanding maternal perception of care and satisfaction with services is a key determinant of service utilization. This study aimed to assess the level of satisfaction with intranatal services among mothers in Pokhara.

**Methods:** A cross-sectional study design was used among 165 mothers having under one child attending 33 Maternal and Child Health Clinic of Pokhara Metropolitan City. Systematic random sampling was adopted. Face-to-face interview technique with a structured interview schedule was used. Descriptive and inferential statistics were used for data analysis.

**Results:** The mean age was 25.64±4.547 years, 60% were multi-parous, and 41.8% had spontaneous vaginal delivery with episiotomy. The satisfaction of the mothers was 81.2%. Most of the mothers (90.3%) were satisfied with pain management and technical aspects of care. There was a significant association between age of mothers and parity with satisfaction with intranatal services. A majority of mothers (83.6%) had the willingness to receive service next time and 84.2% recommend services to their families and friends.

**Conclusion:** It is concluded that most of the mothers were satisfied with the intranatal services. The level of satisfaction was lowest in physical facilities and provision of respect and privacy. Hence, improvement in the physical environment of the health facilities and provision of respect and privacy of the mothers help to increase satisfaction in all the aspects of care.

**Keywords:** *Satisfaction, Intranatal services, Mothers*

### INTRODUCTION

Satisfaction is a complex and multifaceted concept embracing structure, process, and outcome of care.<sup>1</sup> The important determinants of the choice of health facility and the future utilization of services depend upon the satisfaction of the client. Satisfied clients will be more likely to return in the future and recommend the institution to their relatives/friends.<sup>2,3</sup> The utilization of the services and positive maternal and neonatal outcomes can be considerably enhanced by improving the quality of services and making them more acceptable to women.<sup>4</sup>

The mothers' satisfaction with the delivery service was found to be suboptimal.<sup>5</sup> Skilled attendance at every birth is promoted by the World Health Organization to reduce maternal mortality. It also recommends that to improve the quality and effectiveness of health care, mother's satisfaction should be assessed.<sup>6</sup> The level of maternal satisfaction on delivery care was 92.3% in Bangladesh and 86.1% in South Australia.<sup>7,8</sup> However, in African countries the level of satisfaction of mothers is not satisfactory; only 51.9% in South Africa and 56% in Kenya.<sup>9,10</sup>

A study conducted in 13 districts of Nepal showed the highest mean satisfaction score for the skill of service providers and cleanliness of facilities, the score was lowest. There was strong correlation between satisfaction with information received and involvement in decision making, politeness of staff and overall care at facility. Willingness to return to facility showed a strong association with information received, waiting time, and overall care at facility.<sup>11</sup> In Nepal, client satisfaction regarding the quality of maternity services can be upgraded by reducing waiting times and overcrowding, and giving the mothers adequate time to ask questions.<sup>12</sup>

For substantial changes in health-seeking behavior of mothers, there should be evidences on satisfaction with the quality of intranatal care. This study was therefore designed to assess mother's satisfaction with intranatal services.

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## METHODS

The cross-sectional study design was used to assess the satisfaction with intranatal services among mothers in Pokhara, Nepal. A systematic random sampling technique was used to collect data from 165 samples. The sample size was calculated by using Cochran's Formula [ $n = (Z\alpha^2 pq) / d^2$ ]. The mothers having under one-year child attending maternal and child health clinic of the respective ward and had vaginal delivery in hospitals having safe motherhood services were included in the study. The 33 maternal and child health clinics of Pokhara Metropolitan City were selected.

Face to face interview was done by using a structured interview schedule which was developed through extensive literature review. Part I socio-demographic characteristics, part II obstetrics characteristics and Part III scale measuring mothers' satisfaction with the four dimensions of intrapartum care. It included physical facilities and staff accessibility (8 items), interaction with providers and staff of the facility-related satisfaction (13 items), pain management and technical aspects of care (8 items) and provision of respect and privacy (3 items). Satisfaction was measured on a five-point Likert scale ranging from very dissatisfied (1) to very satisfied (5). Overall satisfaction and satisfaction on the four domains were measured based on the mean score. Part IV includes questions related to mothers' acceptance of services and their recommendations.

Data was collected after getting ethical approval from the Nepal Health Research Council and approval from Office of Pokhara Metropolitan. Informed written consent was obtained from each subject prior to data collection and confidentiality was maintained. The collected data was edited, organized, coded and analyzed using a computer package with SPSS software. Data were analyzed by using descriptive and inferential statistics i.e Chi-square.

## RESULTS

Table 1: Background Information of the Mothers

Characteristics	Frequency	Percentage
Age group		
Less than 20 years	8	4.8
20-34 years	149	90.4
35 years and above		
Mean $\pm$ SD: 25.64 $\pm$ 4.547 years	8	4.8

Family type		
Joint	91	55.2
Nuclear	71	43.0
Extended	3	1.8
Religion		
Hinduism	145	87.9
Christianity	12	7.3
Buddhism	8	4.8
Education		
Illiterate	3	1.8
Literate	162	98.2
Literate (n=162)		
Just read and write	2	1.2
Primary	33	20.0
Secondary	67	40.6
Higher secondary	42	25.5
Bachelor and above	18	10.9
Occupation		
Home maker	99	60.0
Business	30	18.2
Service	28	17.0
Agriculture	6	3.6
Labour	2	1.2
Family income		
Sufficient for less than six months	2	1.2
Sufficient for less than one year	45	27.3
Sufficient for one year and surplus.	118	71.5

Most (90.4%) of the mothers were between the age of 20 and 34 years with the mean age of 25.64  $\pm$  4.547 years, 55.2% belonged to joint family, 98.2% were literate and 60% were homemaker.

Table 2: Obstetric Characteristics of the Mothers

Characteristics	Frequency	Percentage
Mode of present delivery		
Spontaneous vaginal delivery with tear	54	32.7
Spontaneous vaginal delivery(SVD) with episiotomy	69	41.8

Spontaneous Vaginal Delivery with intact perineum	26	15.8	More than 24 hours	4	2.4
Assisted vaginal delivery (Vacuum)	16	9.7	Complications (new born)		
Parity			Yes	10	6.1
Primiparous	66	40.0	No	155	93.9
Multiparous	99	60.0	If Yes, complications (n=10)		
Planned pregnancy			Meconium stained	7	70
Yes	150	90.9	Fetal distress	2	20
No	15	9.1	Birth asphyxia	1	10
ANC visits			Complications (mother)		
less than 4 times	5	3.0	Yes	22	13.3
4 times	76	46.1	No	143	86.7
More than 4 times	84	50.9	If Yes, complications (n=22)		
Sex of the recent baby			Postpartum hemorrhage	14	63.64
Male	86	52.1	Retained Placenta	3	13.63
Female	79	47.9	Prolonged labour	5	22.73
Duration of labour pain			More than half (60.0%) of the mothers were multiparous, 90.9% had planned pregnancy, 41.8% had spontaneous vaginal delivery (SVD) with episiotomy, 93.9% of the newborn had no complications, and 86.7% had no complications during childbirth.		
Less than six hours	30	18.2			
6 to 12 hours	88	53.3			
12 to 24 hours	43	26.1			

Table 3: Mothers Satisfaction on Dimensions of Intranatal Services

Dimensions of care (n=165)	Level of satisfaction		Mean $\pm$ SD
	Satisfied	Dissatisfied	
Dimensions			
Physical and staff accessibility	119(72.1%)	46(27.9%)	26.49 $\pm$ 4.10
Interaction with providers and staff of the facility	134(81.2%)	31(18.8%)	45.67 $\pm$ 6.20
Pain management and technical aspects of care	149(90.3%)	16 (9.7%)	29.05 $\pm$ 3.17
Provision of respect and privacy	106(64.2%)	59(35.8%)	9.85 $\pm$ 2.55
Overall satisfaction	134 (81.2%)	31 (18.8%)	111.08 $\pm$ 13.64

Most (90.3%) of the mothers were satisfied with pain management and technical aspects of care. The majority (81.2%) had overall satisfaction with intranatal services.

Table 4: Association between Socio-demographic Characteristics and Mothers Satisfaction

Variable	Level of satisfaction(n=165)		P Value	OR (95% CI)
	Satisfied, n (%)	Dissatisfied, n (%)		
Age				
Up to 25	74(88.1%)	10(11.9%)	0.021*	2.590 (1.133-5.919)
Above 25	60(74.1%)	21(25.9%)		

Family type				
Nuclear	59(83.1%)	12(16.9%)	0.590	1.246 (0.560-2.770)
Joint/Extended	75(79.8%)	19(20.2%)		
Education (n=162)				
Secondary and above	108(83.1%)	22(16.9%)	0.237	0.588 (0.243-1.427)
Up to primary	26(74.3%)	9(25.7%)		
Occupation				
Unemployed	88((83.8%)	17(16.2%)	0.259	1.575 (0.713-3.479)
Employed	46(76.7%)	14(23.3%)		
Religion				
Hindu	119(82.1%)	26(17.9%)	0.448	1.526 (0.509-4.572)
Others	15(75.0%)	5(25.0%)		
Family income				
Sufficient for one year and surplus	99(83.9%)	19(16.1%)	0.162	0.560 (0.247-1.270)
Sufficient for less than one year	35(74.5%)	12(25.5%)		

\*Statistically significant at  $p < 0.05$ , OR: Odds ratio, CI: Confidence interval

There was a significant association between age and overall satisfaction with intranatal services. It showed that mothers up to 25 years were 2.590 (1.133-5.919) times more likely to be satisfied than mothers above 25 years.

Table 5: Association between Obstetric Characteristics and Mothers Satisfaction

Variable	Level of satisfaction(n=165)		P Value	OR (95% CI)
	Satisfied, n (%)	Dissatisfied, n (%)		
Mode of present delivery				
Spontaneous vaginal delivery	122(81.9%)	27(18.1%)	0.530	1.506 (0.451-5.030)
Vacuum delivery	12(75.0%)	4(25.0%)		
Parity				
Primiparous	61(92.4%)	5(7.6%)	0.003*	4.345 (1.574-11.998)
Multiparous	73(73.7%)	26(26.3%)		
Planned pregnancy				
Yes	122(81.3%)	28(18.7%)	0.900	1.089 (0.288-4.119)
No	12(80.0%)	3 (20.0%)		
Sex of present delivered baby				
Female	67 (84.8%)	12(15.2%)	0.257	0.632 (0.284-1.403)
Male	67(77.9%)	19(22.1%)		
Complications (newborn)				
No	127(81.9%)	28(18.1%)	0.349	0.514 (0.125-2.114)
Yes	7(70.0%)	3(30.0%)		
Complications (mother)				
No	117(81.8%)	26 (18.2%)	0.611	0.756 (0.256-2.234)
Yes	17(77.3%)	5(22.7%)		

\*Statistically significant at  $p < 0.05$ , OR: Odds ratio, CI: Confidence interval

There was a significant association between parity and overall satisfaction with intranatal services. The primiparous mothers were 4.345 (1.574-11.998) times more likely to be satisfied than multiparous mothers.

Table 6: Mothers Acceptance of Service and their Recommendations

n=165		
Characteristics	Frequency	Percentage
Place of present delivery		
Government facilities	125	75.8
Private health facilities	40	24.2
Willingness to receive service on next time		
Yes	138	83.6
No	27	16.4
Recommendations to family/friends		
Yes	139	84.2
No	26	15.8
Suggestions for improving service		
Maintain cleanliness	58	35.2
Not to scold	33	20.0
Increase number of beds and facilities	29	17.6
Allow at least one visitor continuously	18	10.9
Provide information of free maternity services clearly	14	8.5
provide treatments properly	7	4.2
No comments	6	3.6

Regarding facilities near about (75.8%) were delivered on government facilities and the majority (83.6%) had the willingness to receive service on next time. The majority (84.2%) replied they would recommend the facilities to their families and friends.

## DISCUSSION

Regarding the dimensions of care, 90.3% were satisfied with pain management and technical aspects of care. The finding is consistent with the study conducted in Nepal, that is 93.8%.<sup>13</sup> Majority (81.2%) were satisfied with interaction with providers and staff of the facility and 72.1% were satisfied with physical and staff accessibilities and 64.2% were satisfied with the provision of respect and privacy whereas the study conducted in Kathmandu Medical College Teaching Hospital revealed 73.3% of mothers were satisfied in communication and information techniques, 72.2% of mothers were satisfied with physical

and staff accessibility and 69.3% of mothers were satisfied with attitude and behavior of health care provider.<sup>14</sup> Another study conducted in Ethiopia showed 89.5% and 78.4% were satisfied with the courtesy and respect of health care providers and measures taken to assure their privacy respectively.<sup>15</sup> In contrast to this study carried out in Eritrea depicted only 13.1% of women were satisfied with the provision of physical facilities and 18.4% were satisfied with pain management methods.<sup>16</sup> This could be due to the high flow of cases, inadequate physical facilities and shortage of human resources.

Regarding overall satisfaction, 81.2% were satisfied with maternity services. This finding is similar to the study conducted in Nepal which showed 83.9% and a study done in Northwest Ethiopia revealed 81.7% of satisfaction.<sup>5, 14</sup> The finding contrasts with a study conducted in Ethiopia i.e 60.8%.<sup>17</sup> This variation may be due to a real difference in the quality of services provided, the expectation of mothers, type of health facilities, or a combination of them.

There was significant association between age and parity with satisfaction of intranatal services whereas the study conducted by Panth and Kaphle<sup>13</sup> showed no significant association between any variables.<sup>18</sup> The study carried out in Ethiopia depicted significant association with maternal age, marital status, educational status and monthly income with satisfaction with intranatal services.<sup>15</sup>

Regarding acceptance of the service, 83.6% had the willingness to receive service on next time, 84.2% of the respondents replied they would recommend their families and friends for those facilities where as study conducted by Shrestha et al.<sup>19</sup> showed 92.8% recommend to others. A study conducted by Ethiopia, supported the present findings in which 95.8% were reported to use the service again and 96.6% were recommended the services for their family and friends.<sup>15</sup> In present study, 35.2% of the respondents were provided suggestion on maintain cleanliness of the facilities, 20% suggested on not to scold on clients, 17.6% suggested on increase number of beds and facilities and 3.6% had no comments whereas the study conducted in Nepal,<sup>12</sup> showed 42% suggested on maintain cleanliness of the facilities, 26% for better provision of bed, 18% for more helpful behavior from health workers not scolding on clients and 17% of the respondents had no comments.

The findings of the study may provide insights for developing appropriate planning; intervention and making protocols for improving satisfaction of women with intranatal services. It might be useful for the future researcher.

## CONCLUSION

It is concluded that most of the women are satisfied with the intranatal services. The level of satisfaction was lowest in physical facilities and provision of respect and privacy. Age and parity are significantly associated with overall satisfaction of intranatal services. Majority of the women were interested to receive the service again and recommended the same health facilities for their own relatives and friends. Improvement in physical environment of the health facilities and provision of respect and privacy of the mothers might play a vital role in order to increase satisfaction in all the aspects of care.

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