



Womens' Satisfaction on Postnatal Health Care Services in Chitwan Medical College, Bharatpur, Nepal

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ABSTRACT

Background: Maternal satisfaction is a key indicator of healthcare quality, particularly during the postnatal period. Positive postnatal experience is important for enhancing service utilization and maternal well-being. This study aimed to evaluate postnatal satisfaction levels and associated factors among women.

Methods: A descriptive cross-sectional study was conducted with 274 postnatal women at Chitwan Medical College from March to April 2020. Using a structured questionnaire based on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), satisfaction levels across various aspects were assessed. Descriptive statistics, chi-square test, and odds ratio were used for analysis.

Results: Approximately 54.7% of women reported satisfaction with hospital postnatal services with higher satisfaction in domains related to nursing behaviour (77.4%), and hospital cleanliness (96.4%). Satisfaction was associated with factors such as age, religion, education, income, and parity ($p < 0.005$). Primiparous women, those over 24 years of age, and higher-income families reported greater satisfaction.

Conclusion: Most of the women were satisfied with nursing care while areas such as medication, counselling, and cleanliness require attention. Enhancing maternal satisfaction can foster improved healthcare utilization which makes it necessary for health systems to align services with maternal expectations and cultural contexts.

Keywords: Maternal, postnatal care, satisfaction, women

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BACKGROUND

Maternal satisfaction is one of the commonly reported outcome indicators for quality of care during the postnatal period. Improving the quality and efficiency of health care throughout pregnancy, childbirth, and the puerperium is necessary to provide high-quality maternal-friendly services.(1) Women need to have a positive experience during the postnatal period. It is essential to ensure that women receive the required support and healthcare services throughout the post-natal period.(2) They must receive care and assistance throughout this time.(3) Delivery care can be made

safe, practical, and respectful by taking into account a woman's viewpoint and her needs during labour and attending to them as part of the quality-improvement program. A positive experience in childbirth is important to the woman, infant's health and well-being, and mother-infant relationship. (1)

The likelihood of the woman using the available services to their full potential is increased when she is satisfied with the services received.(4) Women who are satisfied with their postnatal care experiences are more likely to exclusively breastfeed their babies, have higher self-esteem, and have

greater maternal-neonatal bonding.(5) It is crucial to offer both the mother and the child timely postnatal care (PNC) to address any difficulties that may arise from the birth.

Study conducted in Eastern Nepal, only 33.1% of women were satisfied with the services provided to them.(8) However, another study in mid-western region shows more than half of the respondents (55.5%) are satisfied with maternity services, 40.7% are highly satisfied. Satisfaction on Maternity care services varies among women from different settings. Several factors contribute to the determinants of women's satisfaction with maternity care including structural elements such as pleasant physical environment, adequate human and medicinal resources; process determinants such as interpersonal behaviour, perceived provider competency, and emotional support; and outcomes related determinants such as the health of mothers and new-born and socio-demographic factors such as socioeconomic status, access, cost, and reproductive history.(9) However, there is a lack of studies which assess the satisfaction of women with postnatal care. Further, satisfaction with care during childbirth is a complicated phenomenon comprising numerous levels of satisfaction. Patients may be satisfied with one part of care but not with another, and experiences may vary across the components of different care providers. Hence, this study aimed to identify the level of satisfaction towards postnatal services among women during the postnatal period.

METHODS

This study employed a descriptive cross-sectional study design to assess the experience of postnatal health care services and the status of postpartum depression among Nepalese women of the postnatal ward of Chitwan Medical College. A total of 274 postnatal mothers who delivered within 6 weeks at Chitwan Medical College were enrolled from March to April 2020. Non-probability purposive sampling was done to obtain study samples. Women who gave birth at the hospital and were about to be discharged and those who could read and write were included in this study. Women who were admitted to the hospital after home delivery, had intrauterine fetal death, severely ill mothers, and women who were not willing to participate in the study were excluded from the study.

The questionnaire of this study was divided into three parts: Socio-demographic and Obstetric characteristics of postnatal women, Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey Questionnaires. The content validity index (CVI) and face validity index (FVI) of HCAHPS were computed

using Microsoft Excel. The content validity of the test instrument was established by extensive literature review and consulting with supervisor and experts. The construct validity of HCAHPS was assessed by performing exploratory factor analysis (EFA using principal factor analysis with varimax rotation using IBM SPSS version 20. Firstly, the instrument was developed in English language then translated into Nepali language and retranslated into English version to retain the same meaning consulting with the experts. The internal consistency reliability of HCAHPS was analysed using IBM SPSS, by determining Cronbach's alpha.

Pretesting of the instrument was done in 10 women who have given live birth within one week and are about to be discharged from the Paropakar Maternity and Women's Hospital. After pretesting the instrument was revised and finalized to use for data collection.

Experience of postnatal health care services in postnatal mothers was measured using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey which comprised of 29 items, 20 substantive items that encompass critical aspects of the hospital experience were included in this study to measure the experience of postnatal health care services in postnatal mothers which include communication with doctors, communication with nurses, the responsiveness of hospital staff, cleanliness of the hospital environment, quietness of the hospital environment, pain management, communication about medicines, discharge information, overall rating of hospital, recommendation of hospital, and transition to post-hospital care.

After the completion of data collection statistical analysis was performed using SPSS 20.0 statistical software. All inspections were conducted on both sides and $p < 0.05$ was considered statistically significant. Measurement data were described by mean and standard deviation. Count data was described by frequency and percentage. Single-factor analysis of satisfaction of postnatal care services in postpartum mothers was analysed by chi-square test. This study was approved by Institutional Review Committee of Chitwan Medical College.

RESULTS

Table 1 shows the socio-demographic characteristics of postnatal women. More than half (52.6%) of women were less than 24 years with mean age of 23.83 (0.276). Nearly two-thirds (60.9%) of them were Hindu. About one-fifth of the women (25.5%) were involved in agriculture. Similarly, 56.6% were belonged to nuclear family and 52.9% and family income between NPR 16,000 to 30,000.

Table 1. Sociodemographic characteristics of postnatal women

Variables	Frequency (n)	Percentage (%)
Age		
Less than 24 years	114	52.6
More than 24 years	130	47.4
Mean Age	23.83±0.276	
Religion		
Hindu	167	60.9
Non-Hindu	107	39.1
Ethnicity		
Brahmin/Chhetri	97	35.4
Janajati	103	37.6
Dalit	74	27.0
Education Level		
Primary Level	70	25.5
Secondary Level	49	17.9
Higher Secondary and Above	155	56.6
Occupation		
Agriculture	70	25.5
Paid Service	110	40.1
Unpaid Service	94	34.3
Family type		
Nuclear	155	56.6
Joint	119	43.4
Average monthly family income (NPR)		
<15000	62	22.6
16000-30000	145	52.9
>30000	67	24.5

Table 2. The obstetrics characteristics of postnatal women

Characteristics	Frequency (n)	Percentage (%)
Parity		
Primi-parous	110	40.1
Multi-parous	164	59.9
Gender of the last child		
Male	111	40.5
Female	163	59.5
As per expectation		
Yes	208	75.9
No	66	24.1
Complication during pregnancy		
Yes	56	20.4
No	218	79.6
Medical diseases history		
Yes	31	11.3
No	243	88.7

Pregnancy planned

Yes	207	75.5
No	67	24.5

ANC visit during last pregnancy

More than four times	141	51.5
Four times	53	19.3
Less than four times	80	29.2

Type of delivery

Normal	159	58.0
Caesarean	78	28.5
Vacuum / Forceps	37	13.5

Complication after delivery

Yes	70	25.5
No	204	74.5

Breastfeeding process of child

Poor	129	47.1
Satisfactory	52	19.0
Good	93	33.9

Hours of sleep hrs per day after delivery

4-5 hours	67	24.5
6-8 hours	114	41.6
>8 hours	93	33.9

Table 2 shows the obstetric characteristics of postnatal women. More than half of the women were multiparous (59.9%). More than half of women delivered female children (59.5%). Three fourth (75.9%) of the child's gender was as per the expectation of the parents. The majority of postnatal women (79.6%) didn't have any complications during pregnancy. Most of the women (88.7%) didn't have any medical disease history. Three-fourth of the women (75.5%) had planned pregnancies. More than half of the women (51.5%) received antenatal care services more than four times which is appreciable. More than half (58%) of women had a spontaneous vaginal delivery. Around three-fourth (74.5%) of women had no complication after delivery. Around half of the women (47.1%) had no good breastfeeding process of the child. Nearly one-fifth of women (24.5%) could not sleep properly after delivery.

Table 3. Category of HCAHPS

Category of HCAHPS	Frequency(n)	Percentage (%)
Satisfaction	150	54.7
Dissatisfaction	124	45.3

According to the response rate of the satisfactory items in the HCAHPS question, the subjects were divided into those who were satisfied with the hospital's postpartum healthcare service and those who were not satisfied. Table 3 shows that 54.7% of women were satisfied with the hospital PNC services

Table 4. Bivariate analysis between socio-demographic characteristics and satisfaction level of postnatal services

Variables	Level of Satisfaction		χ^2	P	OR	CI, 95%
	Dissatisfied n (%)	Satisfied n (%)				
Age						
Less than 24	79 (54.9)	65 (45.1)	11.30	<0.001	1	Ref
More than 24	45 (34.6)	85 (65.4)			2.29	1.40-3.74
Religion						
Hindu	110 (65.9)	57 (34.1)	73.34	<0.001	1	Ref
Non-Hindu	14 (13.1)	93 (86.9)			12.82	6.72-24.47
Ethnicity						
Brahmin/Chhetri	48 (49.5)	49 (50.5)	110.88	<0.001	8.42	3.66-19.40
Janajati	10 (9.7)	93 (90.3)			76.73	28.75-204.79
Dalit	66 (89.2)	8 (10.8)			1	Ref
Education Level						
Primary and Secondary Level	66 (55.5)	53 (44.5)	8.84	0.003	1	Ref
Higher Secondary and Above	58 (37.4)	97 (62.6)			2.08	1.28-3.39
Occupation						
Agriculture	62 (88.6)	8 (11.4)	136.19	<0.001		
Paid Service	62 (56.4)	48 (43.6)				
Unpaid Service	0 (-)	94 (100.0)				
Family Type						
Nuclear	58 (37.4)	97 (62.6)	8.84	0.003	1	Ref
Joint	66 (55.5)	53 (44.5)			2.08	1.28-3.39
Average Monthly Family Income						
<30000	110 (53.1)	97 (46.9)	99.69	<0.001	1	Ref
>30000	14 (20.9)	53 (79.1)			4.29	2.24-8.23

Note: Person's chi-square test; OR=Odds Ratio, CI=Confidence Interval, Ref=Reference

Table 4 shows age, religion, ethnicity, education level, occupation, family type and monthly family income were found to have a statistical association with the level of satisfaction with the post-natal health care services ($p < 0.05$).

Table 5. Analysis between the obstetric characteristics and level of satisfaction

Variables	Level of Satisfaction		χ^2	P	OR	CI, 95%
	Dissatisfied n (%)	Satisfied n (%)				
Parity						
Primiparous	62 (56.4)	48 (43.6)	9.153	0.002	2.15	1.30-3.47
Multiparous	62 (37.8)	102 (62.2)			1	Ref
Gender of the last child						
Male	58 (52.3)	53 (47.7)	3.687	0.055	1	Ref
Female	66 (40.5)	97 (59.5)			1.61	0.98-2.62
As per expectation						
Yes	58 (27.9)	150 (72.1)	105.172	<0.001		
No	66 (100.0)	0 (-)				
Complication during Pregnancy						
Yes	56 (100.0)	0 (-)	85.144	0.001		
No	68 (31.2)	150 (68.8)				

Medical diseases history						
Yes	0 (-)	31 (100.0)	28.896	<0.001		
No	124 (51.0)	119 (49.0)				
Pregnancy planned						
Yes	62 (30.0)	145 (70.0)	80.026	<0.001	1	Ref
No	62 (92.5)	5 (7.5)			29.00	11.12-75.63
ANC visit during the last pregnancy						
More than Four Times	48 (34.0)	93 (66.0)	116.147	<0.001	1	Ref
Four Times	4 (7.5)	49 (92.5)			6.32	2.15-18.56
Less than Four Times	72 (90.0)	8 (10.0)			0.05	0.03-0.13
Type of delivery						
Normal	54 (34.0)	105 (66.0)	67.327	<0.001		
Caesarean	33 (42.3)	45 (57.7)				
Vacuum/Forceps	37 (100.0)	0 (-)				
Complication after delivery						
Yes	62 (88.6)	8 (11.4)	71.204	<0.001	17.75	8.02-39.29
No	62 (30.4)	142 (69.6)			1	Ref
Breastfeeding process of child						
Satisfactory	111 (66.1)	57 (33.9)	75.951	<0.001	13.93	7.13-27.02
Good	13 (12.3)	93 (87.7)			1	Ref
No of sleep hrs per day after delivery						
4-5 hours	62 (92.5)	5 (7.5)	111.695	<0.001	1	Ref
6-8 hours	51 (49.5)	52 (50.5)			12.64	4.69-34.01
>8 hours	11 (10.6)	93 (89.4)			104.84	34.73-316

Note: Person's chi-square test; OR=Odds Ratio, CI=Confidence Interval, Ref=Reference

Table 5 shows parity, gender of the last child, as per expectation, complication during pregnancy, medical disease history, pregnancy planned, ANC visit during last pregnancy, type of delivery, complication after delivery, breastfeeding process of a child, number of sleep hours per day after delivery, were found to have a statistical association with the level of satisfaction ($p < 0.001$).

DISCUSSION

This study assessed the level of postnatal care satisfaction among women in Nepal. The study found that 77.4% of the women were satisfied with the nurses' behavior (mean of 9.97 ± 1.39). Similarly, 64.6% of the postpartum women received timely, appropriate assistance from the nurses, and only 3.6% of the women were satisfied with the medication counselling provided by the medical professionals. Similarly, a study conducted at Koshi Zonal Hospital revealed that 45.5% of postpartum mothers were satisfied with the nursing care, and almost 33% were completely satisfied.(8) This depicts that likelihood of service quality after delivery will increase service utilization.

The majority of women (96.4%) agreed that their bathrooms and rooms were occasionally kept clean. According to a similar study, only 70% of women in 14 areas of Nepal agreed that cleanliness was maintained. (10) Similarly, 82.4% of mothers expressed satisfaction with the hospital's hygiene, according to a Chitwan research.(11) In the most recent survey conducted by the Care Quality Commission, 70% of women said that the wards were "very clean" (68).(12) Many studies have demonstrated that a clean hospital environment affects the postpartum mother's physical and emotional hemostasis. The significance of hygiene in the healing process has always been underlined by numerous medical and nursing philosophies.

Nearly three-fourths (70.4%) of the women in the research reported that their room was normally silent at night. According to 70% of women who participated in the most recent Care Quality Commission survey, wards were quiet and peaceful.(12) In this study, none of the patients received counseling while taking their medications. Similar findings were found in a study carried out at Koshi Zonal Hospital, where mothers expressed dissatisfaction with the communication

component that received the lowest score (14.9%).(8) The results of the two investigations are consistent since they were carried out in the same setting. The majority of maternity hospitals in Nepal prioritize creating a peaceful, quiet environment for both the mother and the baby to give them a sense of security.

According to the current study, only 54.7% of women expressed satisfaction with the postnatal care they received while in the hospital. Similarly, a survey conducted in 14 districts of Nepal found that 86% of women are happy with the healthcare facility's services. (10) The majority of mothers (89.88%) expressed satisfaction with the delivery service, according to a descriptive, cross-sectional survey carried out in the maternity ward of Bheri Zonal Hospital in Nepal. Additionally, the survey showed that the degree of satisfaction with interpersonal and technical components of care was higher (93.82%) than with informational aspects (91.57%) and statements pertaining to health facilities (91.01%).(1)

In terms of association of level of satisfaction with socio-demographic characteristics, numerous studies have demonstrated a correlation between postpartum women's age and their level of satisfaction with institutional services. According to this study, women over 24 are twice as likely to be satisfied as those under 24 ($p < 0.001$, 95%CI=1.40-3.74). Younger mothers were more than five times as likely to be satisfied as their counterparts (95%CI=1.76-17.7).(13) Age of marriage is the reason for the discrepancy between Hosanna's and this study's findings. When compared to the study by Hosanna, the marriage age has been raised in Nepal.

According to this study, postpartum Hindu mothers had a greater likelihood of being satisfied than non-Hindu mothers by more than 12 times ($p = 0.001$, OR=12.82, 95%CI=6.72-24.47). Similarly, postnatal non-Hindu mothers were more than three times as satisfied as postnatal Hindu mothers ($p = 0.025$, OR=3.490, 95%CI=1.093-11.142), according to a study done to evaluate maternal satisfaction with relation to perinatal care and influencing factors in tertiary institutions in western Nepal.(15)

According to this study, women with higher secondary education and above had a twofold higher chance of being satisfied (95%CI=1.28-3.39). Similarly, a research in Bhaktapur, Nepal, found that patients who completed secondary school were more likely to be satisfied than those who did not (95%CI=2.90-49.56) (71).(14) On the other hand, the Malawian study revealed that education had no apparent effect on the use of PNC services. The women's level of education demonstrated a correlation with their level of contentment. This might have resulted from the study of women's similar sociocultural

environments, similar methodologies, and similar data collection times about delivery.

Compared to multiparous women, prim parous women in this study are more than twice as satisfied with the postnatal services (95% CI=1.30-3.47). However, multiparous women were more than 1.5 times ($p = 0.020$, 95%CI=1.072-2.314) more satisfied than prim parous women, according to a study done at a western Nepali tertiary hospital.1 This might have resulted from variations in methodology, timing of data collection concerning delivery, and similar sociocultural backgrounds of the study participants. Pregnant women who experienced complications are more than 17 times more satisfied than those who did not (95% CI=8.02-39.29) in the study. Mothers without obstetric complications were more satisfied than mothers with obstetric complications, according to a study done in Malawi ($p = 0.019$, OR=2.744, 95%CI=1.146-6.570). This could likely be because women in challenging situations experience higher levels of stress.(16) Women's varied sociocultural environments may be the cause of the discrepancies in these findings.

CONCLUSION

Although most women are satisfied with the postnatal care they receive, there is still room for improvement in the way medical staff behave, the cleanliness of the hospital setting, and medication counselling. One important factor influencing the quality of maternal and neonatal services is the level of satisfaction with them. Higher levels of satisfaction lead to better treatment compliance and increased care usage, therefore hospitals may be able to improve services by knowing what influences mother satisfaction. To offer care that meets the mothers' expectations, caregivers must be well aware of what those expectations are. Increased mother satisfaction in healthcare facilities and maternal-friendly services should be the goals of the health system's design.

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Conflict of Interest

The authors declare no conflict of interest.

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