

POSTNATAL CARE SERVICE UTILIZATION AMONG MOTHERS IN EASTERN REGION OF NEPAL

Ishwari Sharma Paudel, Sailesh Bhattarai, Rajan Bikram Rayamajhi, Surya Bahadur Parajuli and Paras Kumar Pokharel

Abstract:

Background: Utilization of postnatal care is very vital to reduce maternal morbidity and mortality in an underdeveloped country like ours. This service is utilized very less by the mothers in comparison to antenatal care services.

Objectives: The objective of the study was to assess the availability of postnatal care among the mothers in eastern Nepal and to assess the proportion of utilization of post natal care among them with child less than 24 months of age.

Methodology: A descriptive cross sectional study was conducted among 235 mothers with house to house visit using random sampling.

Results: 98% of the respondents had received postnatal care services and 89.7% of them received their first postnatal care within 24 hours of delivery. It was also observed that white coat bearers were the main source of awareness regarding the utilization of postnatal care services.

Key words: *Postnatal care, Antenatal care, Maternal mortality, Utilization of health services*

Introduction:

Postnatal care is preeminently about the provision of a supportive environment in which a woman, her baby and the wider family can begin their new life together. Adequate utilization of postnatal care can help reduce mortality and morbidity among mothers and their babies ^[1]. Postnatal care includes identification and management of mother's and newborn's complications of postnatal period and referral to appropriate health facility as and when required, promotion of exclusive breast feeding, personal hygiene and nutrition education, postnatal vitamin A and iron supplementation for the mother, immunization for the newborn and postnatal family planning counseling and

services ^[2]. Nepal Government recommends three postnatal visits, first within 24 hours of delivery, second on the third day and third on the seventh day after delivery ^[2]. Since most maternal deaths occur during delivery and the postpartum period due to complications, the first week after delivery is the most critical time in the postnatal period, with most complications occurring in the first two days. The most common fatal complications are postpartum haemorrhage, sepsis, complication of unsafe abortion, prolonged or obstructed labour and eclampsia ^[3]. The socio-cultural practices around the childbirth such as maternal seclusion after delivery and cultural beliefs in a community play a vital role in

non-utilization of postnatal care services in Nepal. [7] Utilization of postnatal care by women influences both women and children's lives, in terms of reducing repeated pregnancies and increasing effective contraceptive use. Therefore, a proper understanding of the utilization of health care during the postnatal period can reduce maternal mortality [1]. However, there is very less information about uptake of postnatal care among the mothers in the community. Considering the government program of safe motherhood and postnatal care for maternal health services in Nepal, assessment of the current situation of the utilization of postnatal care is needed. Postnatal care is of utmost importance for the sound health of both the mother and newborn, especially among the women in the peripheral region of our country where access and utilization to healthcare is less.

Methodology

A descriptive cross sectional study was done among 235 mothers with child less than 24 months of age in Ilam district of Eastern Nepal. The sample size was calculated based on a similar research conducted nearby Kathmandu.[1] With the help of the female community health volunteer of the community, data was collected by house to house visit with pretested questionnaire to find out the postnatal care utilization among them. This was done by the third year medical students of B. P. Koirala Institute of Health Sciences during their residential posting in epidemiological skills in health management under school of public health and community medicine. For the validity of the study, students were oriented and trained about the data collection and analysis. Proper data collection skills and entering them in the software was ensured prior to conduction of the research. Data was entered in excel

software and analyzed using SPSS 17.0 software. Ethical clearance was taken from the Institutional ethical review board and verbal consent was taken prior to the study among the participants and was acknowledged for their participation in the study.

Results

In this study, 235 mothers were included. Among which, more than four fifth (82.1%) of them fell in 20 to 34 years of age group and less than half (45.2%) of them were hill Janajati by ethnicity. Regarding the religion, less than two third (65.1%) of them were hindu and many (74.4%) of them were house makers by occupation. It was also observed that, 8.5% of them were illiterate (Table 1).

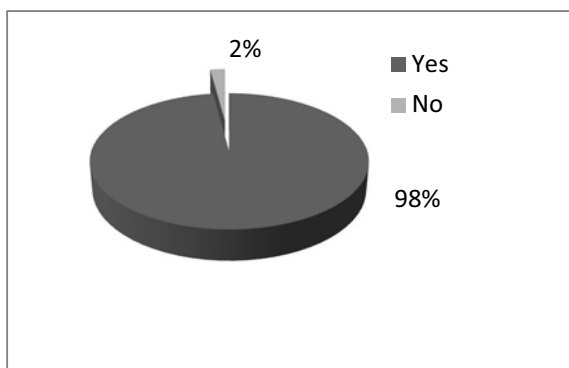
Table 1: Distribution of sociodemographic characteristics among the respondents (n=235)

Characteristics		Frequency	Percentage
Age (Yrs.)	<20	22	9.4
	20-34	193	82.1
	35-49	20	8.5
Ethnicity	Hill Brahmin	50	21.3
	Hill Chettri	25	10.6
	Terai caste	15	6.4
	Newar	26	11.1
	Hill Dalit	13	5.5
	Hill Janajati	106	45.2
Religion	Hindu	153	65.1
	Buddhist	45	19.1
	Kirat	29	12.3
	Christian	8	3.4

Educational Status	Illiterate	20	8.5
	Literate	215	91.5
Occupation	House maker	16	4.4
	Service	11	4.
	Business	34	14.5
	Farmers	6	2.6
	Skilled workers	6	2.6
	Students	2	0.9

More than half of them were married (56.6%) before 20 years of age while one third of them were pregnant (34.5%) at age less than 20 years and 28.1% had their first live birth before the age of 20 years. Similarly, more than two third of the mothers had closed birth interval of less than 24 months (70.2%) which correlates with less use of family planning means in this area. Almost all of the respondents (98.0%) had at least one antenatal visit (Fig.1).

Fig.1: Proportion of respondents who received postnatal care. (n = 235)



Among the respondents, 86.8% were aware about free delivery service and equal proportion of them were aware about travel incentive provided by (86.4%) government. Health workers were found to be the (53.8%) main source of awareness about postnatal care services followed by (36.6%) television and (33%) family members (Table 2).

Table: 2. Medium of awareness about postnatal care among the respondents (n = 235)

Medium for awareness about PNC	Percentage*
Health workers	53.8
TV	36.6
Family members	33.9
Peers	24.4
Radio	19.9
Newspaper	8.6
Husband	5.0
Hoarding boards	0.9
Others	1.8

*Multiple responses

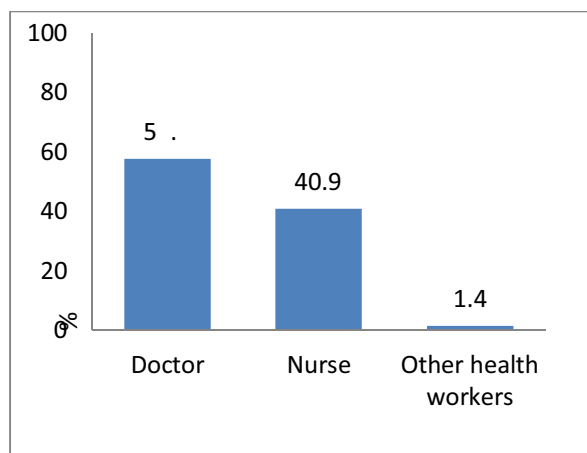
Table. 3: Suggestions for improving postnatal care by the respondents. (n=235)

Suggestions	Percentage*
Availability of Postnatal Care at village level	13.6
Increased awareness	28.5
Support from family	9.8
Availability of trained health worker	48.9
More medicines required	15.7
Availability of transportation	4.3
Infrastructure	3.4
Free medicine/Affordability	3.4

*Multiple resp

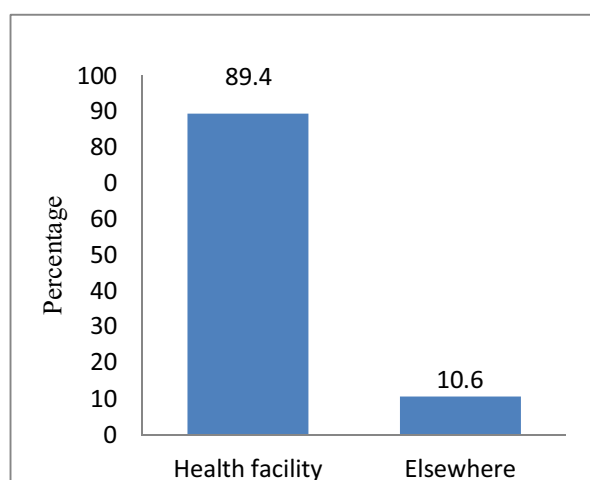
Around four out of every five women had access to a health facility within distance of 30 minutes on foot. Majority of the respondents were attended by a skilled care provider (81.3%) and other health worker (9.4%). More than half of the respondents were attended by a (57.7%) doctor and (40.9%) nurse (Fig.3).

Fig. 3: Healthcare worker providing postnatal care service to the respondents (n = 235)



The mothers having postnatal care accounts for 94% among which seven out of ten women had their first postnatal care within 4 hours of delivery (72.3%) while 6% of mothers did not have any postnatal care at all. Around 89.4% of the respondents delivered their babies in health facilities and the rest delivered elsewhere. It included home/vehicle deliveries (Fig. 2).

Fig. 2: Place of delivery among respondents (n = 235)



Most of woman (94.9%) women reported that postnatal care was provided to them by a skilled female health worker present at the

nearest health facility. Respondents reported that (48.9%) trained health manpower, (28.5%) increased awareness about its importance and (15.7%) availability of more medicines at local level was necessary to improve the postnatal services in the community.

Discussion

Our study showed that 82.1% of the respondents were in the age group 20-34 years and thus did not fall under high risk category, with mothers less than 20 years of age and more than 35 years of age accounting for only 9.4% and 8.5% respectively. This less proportion of high risk pregnancy is coherent to the results of a similar study done by Paudel IS in eastern Nepal which showed 11.5% of child birth before 20 years of age and only 4.7% after 35 years of age [6]. According to the Nepal Government policy under the Safe Motherhood and New-born Health, three postnatal visits are recommended: first within 24 hours of delivery, second visit on the third day and third visit on the seventh day after delivery [2]. The National Maternity Care Guidelines in Nepal recommended that postnatal care should be available at the level of the sub-health post and outreach clinics and that all postnatal women should be followed up within two days [8]. Our study showed that around 9 out of 10 mothers (89.7%) received their first postnatal care within 24 hours of delivery which was very high compared to the annual health report on postnatal care utilization in (52%) eastern development region and in (51%) Nepal. [2] This figure was still high compared to a similar study done among rural women (34%) in Nepal. [1]

This high rate of postnatal care utilization in our study correlated with availability of health facility within 30 minutes' walk for 77.9% of the mothers and the study area being an

economical hub of this region and easy access to healthcare facilities with border nearby. Our study did not find any significant association between type of family members and postnatal care services. This finding is consistent with a similar study done in Nepal ^[1] but contradicted to another study of Nepal which indicated that women living in a joint (extended) family are more likely to use maternal health services during the postnatal period than those living in a nuclear family ^[9]. It was found that women who had fewer children (less than 2) and had received antenatal care were more likely to use postnatal care as found in a study in Massachusetts ^[10]. The proportion of women with at least one antenatal visit was also found to be high (98%) compared to the figures for Eastern Development Region (80%) and Nepal (85%) ^[2].

The high rate of antenatal visit could be due to increased awareness of the antenatal incentive program under which a mother gets NRs. 400 extra if she completed 4 antenatal visits as per the guidelines with institutional delivery and first postnatal care. ^[2] Postnatal care utilization was seen in majority of mothers who had at least some secondary level education which was consistent to many other studies conducted in different parts of Asia and Africa ^[11, 12, 13].

No association was observed between occupation of wife and postnatal visits but occupation of husband was seen as a positive influential factor. The result was supported by a similar study done in Nepal ^[1] and another from Bangladesh which showed a higher use of quality care for postpartum morbidity by wives of businessmen and service workers ^[14]. Healthcare awareness of women was seen as a strong influential factor along with distance to health facilities, level of education, occupation and the husband's occupation for

utilisation of postnatal care as found in a study in Uganda ^[15].

Health problems were perceived in postnatal period in only a small proportion of mothers (8.5%) in our study which was similar to a study (10%) in Nepal ^[1]. This could be due to mothers and their families being not aware of signs and symptoms of health problems or that they did not perceive minor illness as a health problem ^[1]. The most common problems encountered were vaginal bleeding followed by delayed healing of caesarean scar and others like fever and episiotomy wound infection. Our study results concur with the Nepal Multiple Indicator Surveillance (1997), which showed that ten per cent of mothers had health problems postnatally ^[16].

Conclusion

It was observed that majority of the mothers were aware about the postnatal care and more than two third of them had postnatal care within four hours of delivery. Postnatal care was provided by either a doctor or a nurse. Provision of antenatal and postnatal care in nearby health facilities also helped to increase the coverage of antenatal and postnatal coverage. Since most of our respondents were primigravida, anxiousness about their pregnancy outcome might have contributed to the increased antenatal and postnatal visits. Our study area being an economical hub with easy access to roads, borders and feasibility to health centers might also have contributed to better postnatal awareness and utilization of postnatal services.

Limitation of the study

Data collection was done during the day time only and this led to missing of vulnerable mothers with low socioeconomic status who work on daily wages. This group of women

has less access to quality healthcare utilization including postnatal care. This could have led to selection bias. Due to lack of information about the study population, mothers having live child less than 24 months were included in the study rather than 12 months. This could have led to recall bias.

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Address of Correspondence: Lecturer, Department of Biochemistry, Gandki Medical College, Pokhara, Nepal. E-mail: yadav.raazu.raj2@gmail.com