



UTILIZATION OF POSTNATAL CARE SERVICES IN RURAL AREA OF WESTERN RAJASTHAN, INDIA

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ABSTRACT

Introduction- Maternal and child health care is one of the components of primary health care. According to World Health Organization, 50-70% of maternal deaths occur in post-partum period. The study is aimed to assess the utilization of postnatal care services and associated factors in rural area of Western Rajasthan.

Materials and Methods- This community based cross sectional study were conducted in the rural area of western Rajasthan. All women of study area, which delivered between 1st July 2013 to 30th June 2014, were included in the study.

Results- Only 35.86% mothers received 2 or more postnatal care services within 42 days of delivery. The main reason behind this was lack of knowledge/ unawareness about benefits of postnatal services. The important factors associated with low utilization of postnatal services were lower literacy level of mother, lower socio-economic status, working mothers, nuclear family and parity of mother.

Conclusion- The present study revealed low utilization of postnatal care services among the study population. Advancement of health facilities, encouragement of service provider, sustainable maternal and child health programs and creating awareness will support to achieve furthermore better results in the postnatal services utilization.

Key words- Health facility, maternal health care, postnatal care, rural area

INTRODUCTION

Maternal and child health care is one of the eight basic components of primary health care in declaration of Alma Ata.¹ Promoting women's health improves not only individual health but also the health of the family, community and the nation.² Most of the maternal deaths can be prevented if women had visited maternal health services during pregnancy, childbirth and the postnatal period.^{3,4} The Millennium Development Goal-5 (MDG5, WHO), focuses to improve maternal health, with targets to reduce maternal mortality by three quarters between 1990 and 2015, and to

achieve universal access to reproductive health by 2015.⁵ Since MDGs were not achieved in 2015, Sustainable Development Goals (SDGs) came into action particularly SDG-3 to improve the condition of health including maternal health.⁶

According to World Health Organization, 50-70% of maternal deaths occur in postpartum period.¹ Postnatal period defined as the first six-weeks after birth is critical to health and survival of the mother and her newborn.⁷ World Health Organization (WHO) recommends that mothers receive postnatal care within the first 24 hours, followed by post-

natal check on the second or third day and then on the seventh day after delivery.⁸

Utilization of postnatal care can be affected by large number of factors including socio-demographic factors, economic factors, accessibility and availability of maternal and child health services etc. Therefore, present study was conducted with the objective to assess the utilization of postnatal care services and associated factors in rural area of western Rajasthan.

MATERIALS AND METHODS

This community based cross sectional study was conducted at the Banar gram panchayat, a rural field practice area of Department of Community Medicine, Dr. S. N. Medical College, Jodhpur, Rajasthan. Banar gram panchayat covered five villages with a population of 8615⁹. The subjects for present study were married women which were residing in study area since one year and delivered during the time period of 1st July 2013 to 30th June 2014. A list of women, which were fulfilling above criteria, was prepared and obtained data by house to houses approach of subjects. In Study area (Population-8615), 198 married women delivered during 1st July 2013 to 30th June 2014. All these women were included in the study. Tool of study was a pre-designed, pre-tested and semi-structured questionnaire. Data was entered in Microsoft excel version 2010 and analyzed by SPSS version 21.

Ethical approval & consent: The Subjects were assured before interview that information obtained from them will be kept confidential. Their approval was sought before collection of data.

RESULTS

A total of 198 women had delivered during 1st July 2013 to 30th June 2014. All of these were included in the study. Out of 198 mothers, 64.14% of mothers were belonged to 15-24 years of age group with mean age of 23.70 ± 3.17 years. 50.50% of mothers were illiterate. The other characteristics of mothers are shown in table 1.

As shown in table 2, out of 198 mothers, only 71 (35.86%) mothers received 2 or more postnatal care services within 42 days of delivery. The main reason behind this was lack of knowledge/ unawareness about benefits of postnatal services. Almost all mothers who received postnatal care services received advice about diet, Exclusive breast feeding, care of newborn, immunization of child and family planning. No one mother received advice about postnatal exercise.

Table 1: Sociodemographic characteristics of mothers (n=198)

Characteristics	Mothers (%)
Age group (In Years)	
15-24	127 (64.14)
25-34	69 (34.85)
≥ 35	2 (1.01)
Occupation	
Housewife	177 (89.39)
Working	21 (10.61)
Religion	
Hindu	180 (90.91)
Muslim	18 (9.09)
Others	0 (0)
Type of family	
Joint	143 (72.23)
Nuclear	55 (27.78)
Literacy Status	
Illiterate	100 (30.5)
Primary	23 (11.62)
Middle	40 (20.2)
Secondary & Higher Secondary	25 (12.63)
College	10 (5.05)
Socioeconomic status*	
Class I	6 (3.03)
Class II	85 (42.93)
Class III	78 (39.39)
Class IV	29 (14.65)
Class V	0 (0)
Parity	
I	71 (35.86)
II	58 (29.29)
III	35 (17.68)
≥ IV	34 (17.17)
Place of delivery	
Institution	175 (88.38)
Home	23 (11.62)

*Using Modified B G Prasad Classification 2014

Table 2: Details of utilization of postnatal services

Post natal services	Mothers (%)
Postnatal visit within 42 days of delivery, n=198	
Nil	16 (8.08)
One	111 (56.06)
Two or more	71 (35.86)
Person Consulted in Postnatal visit (n=182)	
Doctor	88 (48.35)
ANM/ Nurse	85 (46.7)
ASHAs/ AWWs	9 (4.95)
Reason for not receiving ≥2 Postnatal visit (n=127)	
Lack of Knowledge/ Not aware	115 (90.55)
Not accessible	12 (9.45)
Objection from family members	0 (0)
Postnatal advice received about	
Diet	175/182 (96.15)
Exercise	0/182 (0)
EBF	175/177 (98.87)
Care of newborn	175/177 (98.87)
Immunization	175/177 (98.87)
Family Planning	168/182 (92.31)

Table 3: Association of utilization of postnatal services with different factors

Factors	Postnatal Visit		Total	OR	95% CI	P-Value
	≥ 2 visit	<2 visit				
Literacy status of mother						
Illiterate	29 (29)	71(71)	100 (100)	0.677	0.160-2.871	0.597
Primary	8 (34.78)	15 (65.22)	23 (100)	0.750	0.146-3.839	0.729
Middle	18 (45)	22 (55)	40 (100)	0.953	0.224-4.056	0.948
Secondary & higher secondary	11 (44)	14 (56)	25 (100)	0.883	0.187-4.169	0.875
College	5 (50)	5 (50)	10 (100)	1		
Socioeconomic status						
Class I	4 (66.67)	2 (33.33)	6 (100)	9.093	1.020-81.041	0.048
Class II	34 (40)	51 (60)	85 (100)	5.133	1.313-20.063	0.019
Class III	28 (35.90)	50 (64.10)	78 (100)	4.349	1.168-16.193	0.028
Class IV	5 (17.24)	24 (82.76)	29 (100)	1		
Occupation of mother						
Housewife	68 (38.42)	109 (61.58)	177 (100)	2.303	0.579-9.157	0.236
Working	3 (14.29)	18 (85.71)	21 (100)	1		
Parity of mothers						
1	30 (42.25)	41 (57.75)	71 (100)	0.348	0.101-1.204	0.095
2	18 (16.67)	40 (83.33)	48 (100)	0.276	0.080-0.953	0.042
3	12 (33.33)	24 (66.67)	36 (100)	0.412	0.121-1.408	0.157
≥4	11 (33.33)	22 (66.67)	33 (100)	1		
Type of family						
Joint	54 (37.76)	89 (62.24)	143 (100)	1.603	0.678-3.790	0.282
Nuclear	17 (30.91)	38 (69.09)	55 (100)	1		

(Figures in parenthesis indicate percentage)

In present study, postnatal care reduced by lower socioeconomic status, lower literacy of mothers, working mothers, parity and nuclear type of family.

DISCUSSION

Postnatal care is essential in maintaining and promoting the health of the woman and the newborn baby, while providing an opportunity for health professionals to identify, monitor and manage health conditions, that may develop in the mother and new-born during the postnatal period.⁸

In the present study, 91.9% of mothers receive postnatal visit but only 35.8% of mothers received 2 or more PNC visits. Most of mothers received PNC by doctors (48.35%) and ANMs (46.70%). The proportion of mothers with no postnatal care was quite low (8.1%) in comparison to AHS 2012-13¹⁰ for Jodhpur rural district (34%) and 16.4% for Rajasthan. This difference can be explained on the basis of increase in the number of institutional deliveries and giving ASHAs to additional responsibility of postnatal care. Malik et al (2015) revealed that 2.7% of mothers did not receive any post-natal visit and 62.8% of subjects were received 3 or more PNC visits. Majority of mothers (97.1%) received PNC by ANM/ASHA.¹¹ Arvind Sharma et al (2014) found that only 35.1% of mothers received 2 or more post-natal checkups within 10 days of delivery which was almost similar to our study.¹² Jat

et al showed that only 37.4% women received any PNC within two weeks of delivery in Madhya Pradesh.¹³ Paudel, et al found in his study that 79.0% mothers had used the postnatal services.¹⁴ Bhattacharjee S. et al, in Darjeeling district, reported that percentage of mothers who received any postnatal visit was 72.6%.¹⁵

Present study showing that main reason of not receiving 2 or more postnatal care visit within 42 days of delivery was lack of knowledge/ Unawareness (90.55%). Only 9.45% of study subjects saying that facilities are not accessible to them. Arvind Sharma et al also found that most common reason of not receiving post natal check-up was that mother was not aware about this and nobody visited in 57.6% cases.¹² Achrya LB, Cleland J stated that the main reason for the non-use of postnatal health services is the lack of awareness or not perceiving a need for it.¹⁶

Present study observed that almost all mothers who opted single one PNC visit received advice on diet (96.15%), family planning (92.31%), immunization (98.87%), exclusive breast feeding (98.87%) and newborn care practice (98.87%). No one mother received advice on postnatal exercise. Paudel et al found in his study that mothers who got advice on diet, family planning and postnatal exercise 89%, 71.1% and 67.9% respectively in postnatal visit.¹⁴

In the present study, no significant association was seen between the literacy level and postnatal services; although mothers opting for two or more postnatal visits increased with the increase in literacy level. In congruence to our study, study conducted by Paudel et al (2014) also found that postnatal services received by mothers significantly increased with literacy status of mothers.¹⁴

In the present study, percentage of mothers opting for two or more postnatal visits increased significantly with the increase in their socio-economic status. This could be because mothers of low SES are usually labourers and hence they do not go for further check-ups for fear of losing their daily wages. Paudel et al (2014) also found that mothers who had high family income were more likely to have obtained postnatal care (PNC) service than women with low income.¹⁴ Bhattacharjee S et al (2012) too observed that mothers belonging to high SES were associated with a significant higher likelihood of postnatal care utilization.¹⁵

Present study showing that percentage of mothers who made two or more postnatal visit was higher among housewives (38.4%) compared to working mothers (14.3%). This difference too can be explained on the basis of time constraint, inability to get further leaves or fear of loss of daily wages on the part of working mothers.

In the present study, it was observed that mothers belonging to joint families (37.8%) were received higher percentage of two or more postnatal visit compared to mothers of nuclear type of families (30.9%) but association was found insignificant. Similar finding was observed by Paudel et al (2014).¹⁴

Present study revealed that the percentage of mothers opting for two or more postnatal visits was significantly more in the primipara mothers. Incongruence to our study, Bhattacharjee S et al (2012) observed that mothers with high birth order received more postnatal visit.¹⁵

CONCLUSION

The present study revealed an unexpected low utilization of postnatal care services among the study population. The present study highlights the different barriers such as literacy status, socioeconomic status, occupation of mothers, type of family and parity impeding women's utilization of maternal health services. Advancement of health facilities, encouragement of service provider, sustainable maternal and child health programs and creating awareness will support to achieve furthermore better results in the area of postnatal services utilization.

REFERENCE

1. Park K., Text book of preventive and social medicine, 23th ed, Bhanot Publishers, Jabalpur, 2015.
2. Nagral K. Concept of safe motherhood in ayurved. *J Fam Welf* 1997;43(2):53-57
3. Policy project. Maternal and Neonatal Program Index (MNPI): A tool for maternal health advocates. Published Project Report: Maternal Health and Child Study; 1999.
4. World Health Organization. Making pregnancy safer: why is this issue important? 2004. Available from: <http://www.who.millenniumgoalsformaternalhealth.html>. (Accessed on October 9th, 2015)
5. World Health Organization. Accelerating progress towards achieving maternal and child health Millennium Development Goals (MDGs) 4 and 5 in South-East Asia: Report to high-level consultation; 2009.
6. Millennium Development Goal Report 2015. Available from: [http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20\(July%2015\).pdf](http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%2015).pdf) (Accessed on July 15th, 2016)
7. Warren C, Daly P, Toure L, Mongi P. Postnatal care. In: Lawn J, Kerber K, eds. Opportunities for Africa's Newborns. Cape Town, South Africa: Partnership for Maternal, Newborn and Child Health, 2006: 79-90. <http://www.who.int/pmnch/media/publications/africanewborns/en/index.html> (Accessed on June 6th, 2015).
8. World Health Organization. WHO technical Consultation on postpartum and postnatal care. Maternal, newborn, child and adolescent health; Geneva: WHO; 2010. Available from: http://www.who.int/maternal_child_adolescent/documents/WHO_MPS_10_03/en/. (Last accessed on September 14th, 2015.)
9. Number of villages under each gram panchayat. Annexure-I; Available from: www.slbcrasth.com/jodhpur.pdf. (Last accessed on May 10th, 2015)
10. Annual health survey 2012-2013 fact sheet, Rajasthan. Available from www.censusindia.gov.in. (Last accessed on August 15th, 2015)
11. Malik JS, Kalhan M, Punia A, Sachdeva S, Behera BK. Utilization of Health Services under Janani Suraksha Yojna in Rural Haryana. *Int J Med Public Health* 2013;3:176-9.
12. Sharma A, Thakur PS, Kasar PK, Tiwari R, Sharma R. Utilization of post natal care in tribal area of Madhya Pradesh: A community based cross sectional study. *Int J Med Sci Public Health* 2014;3:1266-1271
13. Jat TR, Ng N, San Sebastian M. Factors affecting the use of maternal health services in Madhya Pradesh state of India: a multilevel analysis. *Int J Equity Health* 2011;10:59.
14. Paudel DP, Nilgar B, Bhandankar M. Determinants of postnatal maternity care service utilization in rural Belgaum of Karnataka, India: A community based cross-sectional study. *Int J Med Public Health* 2014;4:96-101.
15. Bhattacharjee S, Datta S, Saha JB, Chakraborty M. Maternal health care services utilization in tea gardens of Darjeeling, India. *J Basic Clin Reprod Sci* 2013;2:77-84.
16. Acharya LB, Cleland J. Maternal and child health services in rural Nepal: does access or quality matter more? *Health Pol Plan* 2000;15:223-9.