Original Research Article

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A study on postnatal care and its correlates among recently delivered women visiting to BRD medical college Gorakhpur

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ABSTRACT

Background: Postnatal care is crucial in maintaining and promoting the health of the woman and the newborn baby. Despite the known benefits of the postnatal care, there are many access and utilization barriers to care. The present study was conducted on postnatal care and its correlates among recently delivered women visiting to BRD Medical College Gorakhpur.

Methods: For present cross-sectional study recently delivered women (RDW) defined as a post natal woman who had a baby between two months to six months of age at the time of data collection were taken as the study subjects. Complete post natal care was considered if RDWs had received post natal check-up (Post natal day -1, day-3, day-7,) along with immunization of child with BCG, OPV and three doses of DPT/Pentavalent vaccine. Sample size was calculated as 275 by using the formula 4PQ/L2 with an allowable error (L) of 20% including 10% extra for non/incomplete responders. The proportion of women receiving postnatal care was considered as 50.0% as by this proportion maximum sample size is arrived.

Results: A total of 269 recently delivered women (RDW) were taken as the study subjects. They belonged to age group 19-29 year (Mean age 23.7±6.7 year), either educated up to 12th standard and only few were graduate or post graduate. Majority of them belonged to middle or lower middle class.

Conclusions: Postpartum care utilization was associated with socioeconomic status, antenatal care received or not, planned pregnancy or not. Interestingly, access to care was not perceived as a top reason for not obtaining PPC.

Keywords: Postnatal care, Prenatal care, Socioeconomic status

INTRODUCTION

Child birth is a universally celebrated event. But immediately after birth, bleeding and infection pose the greatest risk to the mother's life, while preterm birth, asphyxia and severe infections pose greatest risk to newborn. The postnatal period, defined as the time immediately after the birth of the baby and up to six weeks (42 days) after birth, is critical for the newborn and the mother.

Around the world, it is recognised that postnatal care is crucial 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 newborn during the postnatal period. In addition, postnatal care provides health professionals with the opportunity to promote exclusive breastfeeding, personal hygiene, appropriate feeding practices, and family planning counselling and services. Moreover,

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postnatal care allows for the provision of postnatal vitamin A and iron supplementation to the mother and immunisation of newborns to provide them with optimal start to life. For this reason the World Health Organisation (WHO) recommends that mothers receive postnatal care within the first 24 hours followed by postnatal check-up on the second or third day, and then on the seventh day after delivery.

Despite the known benefits of the PPC visit, there are many access and utilization barriers to care. Among the women who do attend the PPC visit, the content and quality of the care can vary substantially. B.R.D. Medical College is a tertiary care hospital of Gorakhpur which provides antenatal care, intra-natal care and postnatal care services to patients visiting from Gorakhpur as well as nearby districts. A study on postnatal care among recently delivered women (RDW) attending B.R.D. Medical College Gorakhpur may reveal the factors that affect and/or reduce the likelihood of postnatal care utilization in this region.

METHODS

Study setting

The present study was conducted among patients visiting to Obstetrics and Gynecology. Department of BRD Medical College Gorakhpur.

Study design

Cross-sectional, hospital based study.

Study duration

From January to December 2016.

Sample size

Sample size calculation was done by using the formula 4PQ/L². The proportion of women receiving postnatal care was considered as 50.0% as by this proportion maximum sample size is arrived.

Sample size was calculated as 275 with an allowable error (L) of 20% including 10% extra for non/incomplete responders.

Study subjects

Recently delivered women (RDW) were taken as the study subjects.

Inclusion criteria

For present study a post natal woman who had a baby between two months to six months of age at the time of data collection were considered as RDW.

Exclusion criteria

Those post natal women who had lost her child and or not giving consent/complete information to participate in study were excluded.

Sampling technique

Data was collected from two sites of obstetrics and gynecology. Department. First site was obstetrics and gynecology. OPD (Room No. -15), second site was postpartum centre. RDWs that had a baby between two months to six months of age at the time of data collection were asked to participate in the study and to give written informed consent. Those refusing to give written consent for interview were excluded. Data was collected randomly from patients visiting on to OPD No.-15 on every Wednesday and to postpartum centre on every Saturday till the desired sample size is achieved.

Method of data collection

Data was collected on a predesigned and pre tested questionnaire. Questionnaire was comprised of three sections. In first section information regarding maternal socio-demographic factors including age in completed years, education, socio-economic status, were asked. In the second section relevant information regarding plan of pregnancy (yes, no), care received prior to pregnancy were asked. Third section included questions regarding posts natal care received whether or not (yes/no) and reasons/barriers for not receiving postnatal care (do not felt need for it, Felt need but too busy with baby, nearby health facility not present, other reasons). For present study purpose complete post natal care was considered if RDWs had received post natal check-up (post natal day -1, day-3, day-7,) along with immunization of child with BCG, OPV and three doses of DPT/Pentavalent vaccine.

Statistical analyses

We analyzed the data using SPSS software. To test differences between women who did and did not obtain postpartum care on select socio-demographic factors and other possible determinants, $\chi 2$ analyses were performed. Binary logistic analysis was done to find out important correlated of study.

RESULTS

A total of 275 RDWs had given consent to participate in the study. Out of these 6 RDWs had not given complete information hence had been excluded from study. Finally data collected from 269 RDWs were analysed.

Our study was a government hospital based study. Majority of RDWs included in present study belonged to age group 19-29 year (Mean age 23.7±6.7 year), about one third (31.6%) were illiterate and only few (11.5%) were educated above 12th standard. Majority of them belonged to middle or lower middle class.

Table 1: Socio-demographic characteristics of study sample.

Characteristics		Sample	Percentage
Maternal age, in completed years	Up to 19	39	14.4
	19 to 29	162	60.2
	30 to 39	108	40.1
Maternal education	Illiterate	85	31.6
	Up to 8 th	80	29.7
	9 th to 12 th standard	73	27.1
	Graduate	15	5.6
	Post graduate	16	5.9
SES	Lower	93	34.6
	Lower middle	82	30.5
	Middle	81	30.1
	Upper middle	8	3.0
	Upper	5	1.9

Table 2: Maternal characteristics as a predictor of utilization of post-partum care.

Variable	(N=269)	Total	Post partum care		n volue
			Yes	No	p-value
Planned pregnancy	Yes	161	96 (59.6%)	65 (40.37%)	X ² =4.02, df=1, p=<0.05
	No	108	51 (47.2%)	57 (52.7%)	
Any care received prior	Yes	211	119 (56.4%)	92 (43.6%)	X ² =23.2, df=1, p=<0.05
to pregnancy	No	58	12 (20.68%)	46 (79.3%)	
Full ANC received	Yes	138	123 (89.1%)	15 (10.8%)	X ² =29.2, df=1, p=<0.05
	No	131	79 (60.3%)	52 (39.7%)	
Parity	<2	180	138 (76.7%)	42 (23.3%)	X ² =13.1, df=1, p=<0.05
	>2	89	49 (55.05%)	40 (44.9%)	
Type of delivery	Normal delivery	198	132 (66.7%)	66 (33.3%)	
	LSCS	71	71(100%)	0	

Table 3: Predictors of post-partum care.

	Evm/D)	95% C.I. for EXP(B)	
	Exp(B)	Lower	Upper
Planned pregnancy (Yes)	1.410	0.835	2.380
SES 3 and Less (RC)			
SES(1)	1.143	0.132	5.385
SES(2)	1.037	0.146	6.021
ANC received (Yes)	1.236	0.748	2.042
Constant	0.518		

Table 2 displays the bivariate analyses of select maternal demographic and socioeconomic characteristics by postpartum visit status. Post-partum care utilization was found significantly higher among women who had a planned pregnancy (59.6%) as compared those whom pregnancy was unplanned. RDWS who had received full antenatal care during pregnancy were more likely to receive postpartum care (89.1%) in comparison to those who had not received full antenatal care (60.3%). All women who delivered by LSCS had received complete post-partum care. Other factors found significant for higher utilization of post-partum care were lower parity and care received prior to pregnancy.

Binary logistic regression analysis was carried out to identify possible associated factors for postnatal care. In

the model, postnatal care was dependent variable [coded as postnatal care received- yes = 1 and no = 0] and socioeconomic status, antenatal care received or not, planned pregnancy or not. In the final step of the model, this analysis revealed that post natal care received was 1.41 times higher among the RDW who had planned their pregnancy, 1.143 times in those who belonged to higher socioeconomic status as compared to socioeconomic class III and below (reference category).

Important reasons for not seeking PPC indicate that women who lacked PPC did not felt need of post-partum care (17%) while majority (48%) felt fine during post-partum period. Almost one third (31%) reported that they were two busy with their babies so they can not avail post-partum care in spite of felt need of post-partum care.

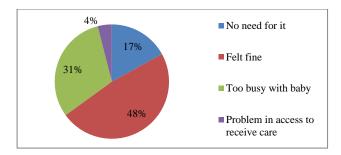


Figure 1: Reasons of not receiving postnatal care.

DISCUSSION

Our study was a government hospital based study. Majority of RDWs included in present study belonged to age group 19-29 year (Mean age 23.7±6.7 year), about one third (31.6%) were illiterate and only few (11.5%) were educated above 12th standard. Majority of them belonged to middle or lower middle class.

Postpartum care utilization was found significantly higher among women who had a planned pregnancy (59.6%) as compared those whom pregnancy was unplanned. The intent of the pregnancy may also influence maternal regard for postpartum health.³

RDWs who had received full antenatal care during pregnancy were more likely to receive post-partum care (89.1%) in comparison to those who had not received full antenatal care (60.3%). Similarly study by Kogan et al reported that the strongest indicator of whether a woman would obtain PPC was her use of prenatal care.⁴ One would expect that a continuum of maternal care may reflect a women's commitment to life-long health.

In the final step of the binary logistic regression analysis revealed that post natal care received was 1.41 times higher among the RDW who had planned their pregnancy, 1.143 times in those who belonged to higher socioeconomic status as compared to socioeconomic class III and below (Reference category). Similar results were shown by various other studies. 3-5

Important reasons for not seeking PPC indicate that women who lacked PPC did not felt need of post-partum care (17%) while majority (48%) felt fine during post-partum period. Almost one third (31%) reported that they were two busy with their babies so they can not avail post-partum care in spite of felt need of post-partum care. Similar findings that, access to care was not perceived as a top reason for not obtaining PPC in various other studies.^{6,7}

An interesting finding of our study was that perceptions about the barriers to postpartum care were the result of a perceived low value of the postpartum visit. This indicates a need for health care facilities and providers to make concerted efforts to increase knowledge about the importance of the postpartum visit, identify community resources, and develop targeted interventions.⁸

A multitier approach, targeting individuals, families, and communities may be necessary to improve PPC utilization rates. Women who do not have an adequate support system in place may find it exceedingly difficult to set aside time to care for their personal healthcare needs.

Limitations

The present study was a cross-sectional study. It relied on maternal recall and may be subject to bias. As this study took place in a hospital setting hence findings may not be generalizable. However, this study contributes to identifying barriers to post-partum care and emphasises on post-partum care.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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