

STUDY OF UTILIZATION OF POSTNATAL CARE SERVICES AND FACTORS AFFECTING IT AMONG WOMEN ATTENDING A TERTIARY HOSPITAL

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Abstract

Background: Up to six weeks after delivery, postnatal services are committed to supporting new parents and their families. The purpose of the current study was to examine postnatal care service consumption and the factors that influence it among women who visit tertiary hospitals. **Materials and Methods:** Present study was community based cross sectional study, conducted in urban health centre among mothers who delivered in last six months, and residing in urban health centre area. Tool of study was a pre-designed, pre-tested and semi structured questionnaire. **Result:** Among 288 postnatal mothers. Majority were from 19-24 years age group (61.81 %), educated high school & above (54.17 %), house wife (43.40%). 98.61 % deliveries were institutional, still there were 4 (1.39 %) home deliveries. All institutional deliveries received immediate postnatal care, while home delivered mothers received PNC service within 24 hrs., between 4-7 days & never in 0.69%, 0.35% & 0.35% mothers respectively. Majority were Consulted by ANM/ Nurse (42.16 %), followed by Doctor (35.54 %) & ASHAs/ AWWs (22.65 %). Among 40 mothers who received ≥ 2 Postnatal visit common reason was lack of Knowledge/ Not aware (92.50%), Not accessible (7.50%) & Not willing (2.50%). Majority were advised & counselled about immunization of newborn (98.61 %), maternal diet (94.43 %), exclusive breast feeding (89.90 %), family planning (88.50 %), care of newborn (81.53 %) & least were counselled about postnatal exercise (0.70 %). **Conclusion:** Maternal education, good antenatal care, institutional deliveries, level of awareness to maternal PNC services among women creates positive attitude towards the services which along with Efficient health services along with health workers leads to high utilization of postnatal care services.

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INTRODUCTION

Postnatal services are dedicated to provide support to families for their new born, until 6 weeks after delivery. Despite its being one of the most effective interventions for achieving the required reduction of neonatal deaths by 2030, the coverage of postnatal care (PNC) is among the lowest globally, when compared with other maternal and child interventions.^[1]

Around the world, it is recognized that postnatal care is crucial in maintaining and promoting the health of the women 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. India has made tremendous progress in recent years but needs to remain on track to achieve the Sustainable Development Goal (SDG) target of MMR below 70 per lac LB by 2030.

In general postnatal care uptake has been limited in south Asia and particularly in India.^[2,3]

According to the National Family Health Survey (NFHS-4), only 65 % women, reported receiving postnatal check-up within 2 days after their recent birth.^[4] Sustainable development goals established targets for all countries to reduce neonatal mortality to a maximum of 12 per 1000 live births by 2030. In addition to facility birth, postnatal care (PNC) is one of the effective interventions that could help countries to achieve this target. Postnatal care has also been highly recommended by the 2016-2030 Global Strategy for Women's, Children's and Adolescents health'.^[5]

Numerous variables, such as sociodemographics, economics, and the accessibility and availability of services for mother and child health, among others, might influence the use of postnatal care. The purpose of the current study was to examine postnatal care service consumption and the factors

that influence it among women who visit tertiary hospitals.

MATERIALS AND METHODS

Present study was community based cross sectional study, conducted in urban health centre working under department of community medicine, at ART Centre Ambala of Haryana, India. Study duration was of 1 year (January 2021 to December 2021). Study was approved by institutional ethical committee.

Study explained to subjects in local language & consent was taken for participation. Study population comprised mothers who delivered in last six months, and residing in urban health centre area. List of recently delivered women from these wards are collected from anganwadis in these wards and list of women, delivered in last six months, was prepared and obtained data by house to houses

approach of subjects. Tool of study was a pre-designed, pre-tested and semi structured questionnaire. The criteria for adequate postnatal service utilization were set by doing minimum 3 PNC visits.

Data was collected and compiled using Microsoft Excel, analysed using SPSS 23.0 version. Statistical analysis was done using descriptive statistics.

RESULTS

In present study, we interviewed 288 postnatal mothers. Majority were from 19-24 years age group (61.81 %), educated high school & above (54.17 %), house wife (43.40 %), residing in nuclear family (59.03 %), had ≤ 4 family members (48.61 %), had family income of $> 10,000$ rupees (46.53 %), husband Educated Up to middle level (45.49 %) & Occupation of husband was Agriculture /Labour (57.99 %).

Table 1: Socio demographic characteristics of postnatal mothers

Characteristics	Number	Percentage (%)
Age (in years)		
19-24	178	61.81%
25-30	89	30.90%
>30	21	7.29%
Education of mother		
Illiterate	2	0.69%
Up to primary level	48	16.67%
Up to middle level	82	28.47%
High school and above	156	54.17%
Occupation of mother		
House wife	125	43.40%
Agriculture/ Labour	48	16.67%
Service	92	31.94%
Business	23	7.99%
Type of family		
Nuclear	170	59.03%
Joint	118	40.97%
Family size		
≤ 4	140	48.61%
5-7	98	34.03%
> 7	50	17.36%
Income (Rs)		
$>10,000$	134	46.53%
10,000-5000	92	31.94%
5000-2250	41	14.24%
<2250	21	7.29%
Education of husband		
Illiterate	19	6.60%
Up to primary level	40	13.89%
Up to middle level	131	45.49%
High school and above	98	34.03%
Occupation of husband		
Agriculture /Labour	167	57.99%
Service	58	20.14%
Business	63	21.88%

In present study 98.61 % deliveries were institutional [Government hospital (Municipal corporation) - 49.31%, Government hospital (Medical College)- 21.53%, Government hospital (Subcentre)- 11.11% & Private hospital - 16.67%], still there were 4 (1.39 %) home deliveries. All institutional deliveries received immediate postnatal care, while home delivered mothers received PNC service within 24 hrs., between 4-7 days & never in 0.69%, 0.35% & 0.35% mothers respectively. Maximum mothers received ≥ 3 postnatal visits/ services within 42 days of delivery (86.11%), while 9.72% received 2 postnatal visits, 3.82% received 1 postnatal visits & 1 mother did not received any postnatal visit.

Among 287 mothers who received PNC services, majority were Consulted by ANM/ Nurse (42.16 %), followed by doctor (35.54 %) & ASHAs/ AWWs (22.65 %). Among 40 mothers who received ≥ 2 Postnatal visit common reason was lack of Knowledge/ Not aware (92.50%), Not accessible (7.50%) & Not willing (2.50%).

Table 2: Details of utilization of postnatal services

Variables	Number of mothers	Percentage (%)
Place of delivery		
Government hospital (Municipal corporation)	142	49.31%
Government hospital (Medical College)	62	21.53%
Government hospital (Subcentre)	32	11.11%
Private hospital	48	16.67%
Home	4	1.39%
First PNC service		
Never	1	0.35%
Within 24 hours	2	0.69%
Between 2-3 days	284	98.61%
Between 4-7 days	1	0.35%
Number of postnatal services within 42 days of delivery		0.00%
Never	1	0.35%
1 postnatal visit	11	3.82%
2 postnatal visits	28	9.72%
≥ 3 postnatal visits	248	86.11%
Person Consulted in Postnatal visit (n=287)		0.00%
Doctor	102	35.54%
ANM/ Nurse	121	42.16%
ASHAs/ AWWs	65	22.65%
Reason for not receiving ≥ 2 Postnatal visit (n=40)		
Lack of Knowledge/ Not aware	37	92.50%
Not accessible	3	7.50%
Not willing	1	2.50%

We interviewed study participants about postnatal advice they received during postnatal visits. Majority were advised & counselled about immunization of newborn (98.61 %), maternal diet (94.43 %), exclusive breast feeding (89.90 %), family planning (88.50 %), care of newborn (81.53 %) & least were counselled about postnatal exercise (0.70 %).

Table 3: Postnatal advice

Postnatal advice	Number of mothers (n=287)	Percentage (%)
Immunization	283	98.61%
Diet	271	94.43%
Exclusive Breast Feeding	258	89.90%
Family Planning	254	88.50%
Care of newborn	234	81.53%
Exercise	2	0.70%

DISCUSSION

Postnatal care provides health professionals with the opportunity to promote exclusive breastfeeding, personal hygiene, appropriate feeding practices and family planning counseling and services. Inadequate availability of health infrastructure and resources along with huge economic inequity, gender disparities, societal norms and attitudes of community and service providers might be related to low levels of utilization of health care services.

Household factors, such as accessibility; awareness and knowledge; socioeconomic status and financial difficulties; women's empowerment; traditional beliefs and cultural practices and background characteristics have been found to play a significant role in the use of postnatal services by postpartum mothers.^[6]

Among 210 mothers in study by Sharma A et al,^[7] 82.4% were 15-24 years of age and 71.9% of mother received post-natal check-up within 10 days of

delivery. Regarding number of post-natal check-up, 36.6% of mothers received one postnatal check-up, 18.5% two, 14.7% three and only 1.9% received four post-natal check-up. The education/occupation of mothers, cast, education of husband, place of delivery, person conducting delivery and level of knowledge of mother about need of postnatal check-up were significantly associated ($P < 0.001$) with utilization of post-natal check-up.

Upadhyai N et al,^[8] studied 488 women, 52.5% received postnatal care at least once within first 48 hours of delivery. Only 76(15.5%) received all recommended PNC visits. 83(17%) reported to have some health problems after delivery. Socio-economic status, Education, number of ANC visits, place of delivery, type of delivery, and perceived health problem after delivery were found to be significant factors affecting postnatal care utilization.

In study by Pandey D et al,^[9] among 360 mothers, 93.9% mothers received first postnatal check-up

within 24 hrs. 1.11% of mothers between 2-3 days and 1.67% of mothers received first postnatal check-up between 4-7 days while 3.33% of mothers didn't receive any postnatal check-up. Regarding number of post-natal visits, 58.33% mothers received 3 or more postnatal visits, 35% of mother received 2 PNC visits, while 3.3% did not receive a single postnatal visit. The education of mothers, joint type of family, high socioeconomic status, early registration of pregnancy, minimum 4 ANC visits and institutional deliveries were found significantly associated with utilization of postnatal check-up. Similar findings were noted in present study.

Aregahegn D et al,^[10] conducted a study based on interviewer-administered questionnaires among randomly selected 306 postpartum women. 202 (66.7%) visited a health facility for postpartum care. Use of early postnatal care services was prevalent in 45.5% of cases (95% CI = 39.9-50.5). Physical examination (37%) and family planning (31%) services were the two most commonly used services. Early postnatal care service use was highly influenced by factors such formal education, prenatal care, institutional birth, and seeking medical guidance.

In study by Uppadhaya SK et al,^[11] from rural area of western Rajasthan noted that 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. Poorer mother literacy levels, lower socioeconomic position, working moms, nuclear families, and mother parity were significant risk factors for reduced postnatal treatment utilisation.

Jahnavi K, et al,^[12] studied 236 postnatal mothers, 97.9% of the mothers received postnatal care and 2.7% mothers didn't receive the postnatal care. In the present study post-natal advice was received by 67.8%, 82.2% and 55.1% of mothers regarding family planning, breast feeding and baby care respectively. Majority (79.9%) of mothers travelled greater than 5 kms for delivery and only 20.1% of mothers travelled less than 5 kms for delivery. Number of institutional deliveries and deliveries assisted by skilled health personnel were more compared to other studies probably because of awareness created during antenatal visits, maternity benefit scheme and role of ASHA workers. Similar findings were noted in present study.

Non-marginalized women and women with at least three ANC visits were more likely than their counterparts to deliver in an institution. Contacts with health worker during pregnancy, marginalization, at least three ANC visits and institutional delivery were the strong determinants for utilization of PNC services.^[13]

The uptake of PNC services among mothers is mainly influenced by mother and partner education level, occupation status of the partner, household income, decision making power, knowledge of available PNC services, knowledge of at least one

postpartum danger signs, and place of delivery. Therefore, PNC awareness campaigns, training and economic empowerment programs targeting mothers who delivered at home with primary education background and low economic status are needed.^[14]

CONCLUSION

Maternal education, good antenatal care, institutional deliveries, level of awareness to maternal PNC services among women creates positive attitude towards the services which along with Efficient health services along with health workers leads to high utilization of postnatal care services.

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