

## Assessment of Utilization of Postnatal Care Services in Tertiary Care Center of Delhi

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### Abstract

**Objective:** To assess the utilization of postnatal care services in tertiary care center of Delhi.

**Design:** Retrospective hospital data based study.

**Sitting:** Postnatal clinic in department of obstetrics and gynecology at UCMS & GTB Hospital, Delhi.

**Sample:** Total attendance of postnatal women in postnatal clinic were analysed in department of obstetrics and gynecology at UCMS & GTB Hospital, Delhi, from April 2011 to June 2012 in duration of 15 months. Total 1484 women were received postnatal care services after discharge from same institute in this duration of 15 months.

**Result:** Only 9.3% of women received postnatal care after discharge from same institute. Amongst them majority were educated (82%) and primipara (57.7%). After utilization of postnatal care services majority (96.1%) were accepted the contraceptive methods and majority of women (89.4%) were continuing exclusive breast feeding to their babies.

**Conclusion:** The study shows unacceptably low utilization of postnatal care services. It shows the coverage of postnatal care services are inadequate, especially in India. This is an important message to health service providers and policy makers to strengthening not only antenatal health services and institutional deliveries but also postnatal care services to reduce maternal and neonatal morbidity and mortality.

**Keywords:** Contraception, Maternal mortality, Postnatal care, Tertiary care center,

### □. Introduction

The postnatal period (or called postpartum, if in reference to the mother only) is defined by the WHO as the period beginning one hour after the delivery of the placenta and continuing until six weeks after the birth.<sup>(1)</sup> Up to two third of maternal death occurs after the delivery.<sup>(2)</sup> Therefore, postnatal care in most important maternal health care intervention for prevention of impairments, disabilities and also reduction of maternal mortality. Maternal mortality is a major concern of maternal health in developing countries like India in the year 2009, maternal mortality ratio (MMR) in India was 212 as compared to 12 per 100,000 live births in developed countries.<sup>(3,4)</sup> For the prevention of maternal morbidity and mortality, WHO recommends postnatal visits within six to 12 hours after birth, three to six days, six weeks, and at six months (6-6-6-6 model) in order to ensure women's physical and mental well-being.<sup>(1)</sup> Despite this recommendation seven out of ten women do not receive any postpartum care as per demographic health survey.<sup>(5)</sup> Moreover, mothers often only seek postnatal care in the event of complications after birth.

In developing countries low utilization of postnatal care has been related to lack of knowledge about its importance, lower level of education, lack of access to health services, lack of counseling of postnatal care in institutional deliveries, and women's tendency to give priority to health needs of their infants then their own. Another major factor for non utilization of post natal care is socio culture practices with child birth such as maternal seclusion after delivery and cultural beliefs in the community.<sup>(6,7)</sup> According to the 2005-06 National Family Health Survey (NFHS-3), only 42% of women reported receiving postnatal check-up after their recent birth. Of these, only about a third received check-up within the first two days after birth. Unfortunately, this data is collected from health care center where birth had occurred.<sup>(8)</sup> Utilization of postnatal care influences both women and children's lives, by recognizing the complications and also reduces repeat pregnancies by increasing acceptance of contraceptives. The Government of India introduced several policy measures and interventions to tackle the burden of infant and maternal mortality by reorienting the National Population Policy (2000), the National Health Policy (2002), the Reproductive and Child Health Programme (Phase I - 1997-2004, Phase II - 2005-2010), and the National Rural Health Mission (2005-2012) and now National Health Mission has proposed, wherein improvement of postnatal coverage is one of the major intervention strategies to reduce infant and maternal mortality rates.<sup>(9)</sup> The Government of India has recommended that all mothers and newborns should receive three postnatal checkups within 42 days of delivery as follows: first within 48 hours, second between 3-7 days and the third within 42 days of delivery.<sup>(10)</sup> But unfortunately, still postnatal care uptake is very limited.

Therefore, the objective of our study is to assess the utilization of postnatal care services among women who delivered in tertiary care center.

### □ □ . Material & Methods

This study is retrospective based on hospital data. The data collected from postnatal clinic in the department of obstetrics and gynecology, Guru Teg Bahadur Hospital, Delhi between April 2011 to June 2012, duration of 15 months. The postnatal clinic is for the postnatal women who had delivered in same hospital and during discharge they were counseled for postnatal care and visits in postnatal clinic. As the study is retrospective hospital data based, all postnatal women included who had attended the postnatal clinic after delivery within six months of postnatal period, in same institution. Data analyzed under following parameters like age, parity, residence, education of women, mode of delivery, number of postnatal visits and complications. Data were entered and analyzed on SPSS version 11 and simple frequencies and percentages were drawn and chi-square test applied to analyze the significance of utilization of postnatal care services.

### □ □ □ Results

**3.1. Demographic information-** Total 1484 women attended the postnatal clinic out of 15099 women who had delivered in the same tertiary care center in same duration. Majority of women were between 15 to 25 years of age and had first pregnancy. Only few women came in postnatal clinics who had three or more than three children. Majority of postnatal women were literate amongst them more than half were secondary educated and only few were illiterate and majority of them belonged to Delhi. [Table1]

**Table No.-1. Demographic information-**

1.Age(yrs)	N(1484)	Percentage (%)
15-25	992	66.8
26-35	472	31.8
>35	20	1.4
2.Residency		
Outside Delhi	192	13
Delhi	1292	87
3.Education		
illiterate	268	18
Primary education	149	10
Secondary education	837	56.4
Tertiary education	230	15.6
4.No. of children		
One child	857	57.7
Two children	427	28.8
Three children	146	9.8
Four children	37	2.6
>Four children	17	1.1
5.Mode of delivery		
Vaginal delivery	898	60.5
Caesarian section	586	39.5

**3.2. Utilization of postnatal care-** All delivered women in the institution received postnatal care for two days in case of uncomplicated vaginal deliveries and more than two days in complicated vaginal deliveries and post cesarean cases before being discharged.

As total institutional deliveries were 15099 in 15 months but only 1484 women (9.3%) obtained postnatal care in postnatal clinic after discharge. Majority of women visited between one to three weeks of delivery and secondarily between three to six weeks postnatal. Most of them were not using any methods of contraception prior to present pregnancy, only few postnatal women were using contraception amongst them condom was popular one. The data shows acceptance of contraception among women who visited the postnatal clinic was very high as compared to previous contraceptive use. After obtaining postnatal care majority of women accepted exclusive breast feeding to their babies and contraception. Most of them have accepted temporary method of contraception (condom and Copper-T), whereas fewer have accepted the permanent methods (tubal ligations and vasectomy). [Table2]

**Table No.-2. Visits and utilization of postnatal care**

	N(1484)	Percentage (%)
1.Postnatal visits		
<1 week	5	0.33
1 week to 3 weeks	724	48.3

3 weeks to 6 weeks	621	42.2
>6 weeks	134	9.2
<b>2. Breast feeding</b>		
Exclusive	1327	89.4
Non exclusive	128	8.6
Intrauterine death	29	2
<b>3. Use of contraception</b>		
<b>a) Before postnatal visits</b>		
Not accepted	1203	81
Accepted	281	19
condom	253	17
Copper T	15	1
OCP*	11	0.75
Tubal ligation	2	0.15
<b>b) After postnatal visits</b>		
Not accepted	58	3.9
Accepted	1426	96.1
condom	678	45.68
Copper T	613	41.30
OCP*	5	0.33
DMPA**	1	0.06
Tubal ligation	127	8.6
Vasectomy	2	0.12

OCP\*-Oral contraceptive pills, DMPA\*\*Depot Medroxyprogesterone Acetate

Most of postnatal women were asymptomatic and without any complications. Only 5.5% were had associated complications like urinary tract infections, hypertension, respiratory tract infections, postpartum hemorrhage. [Table3]

**Table No.-3.** Associated complications in postnatal care

Complications	Frequency(N83)	Percentage (5.5%)
Urinary tract infection	26	1.7%
Hypertension	17	1.2%
Respiratory tract infection	8	0.5%
Anemia	8	0.5%
Postpartum hemorrhage	5	0.33%
Seizure	5	0.33%
Heart disease	4	0.26%
Gaped episiotomy	4	0.26%
Hypothyroidism	2	0.13%
Others	4	0.26%

#### □ V. Discussion

This study is hospital data based evaluation of utilization of postnatal care in tertiary center. The utilization of postnatal care services in tertiary center after discharge of women is significantly and unacceptably very low (9.3%, one tailed P value= $<0.0001$ ). This level of postnatal care utilization which is very lower particularly in a tertiary care center of metropolitan city impules us to review our health policies regarding not only antenatal care but also postnatal care of mothers. Since most maternal deaths occur in postnatal period due to complications.

Our data shows significantly difference between women's awareness toward importance of postnatal care and actual utilization of postnatal care facilities, as all postnatal women counseled regarding postnatal care and contraception before discharge. But only 9.3% of women returned back for further postnatal care. Another recent study also shows poor postnatal care utilization in India.<sup>(11)</sup> This is very low as compared to in Nepal<sup>(12)</sup> and in developed countries where it is nearly 90%.<sup>(13)</sup> Other studies also state that postnatal care uptake has been limited in south Asia and particularly in India.<sup>(8,14)</sup>

Amongst women who received postnatal care most of them were educated. It shows education of women is a positive factor for utilization of postnatal care similarly other studies.<sup>(15,16)</sup> Women who had one child were more concerned for postnatal care as compared to multiparous women. Amongst the women who utilized of postnatal care, majority of them were exclusively breast feeding their babies and opted contraception during postnatal care. There is statistically significant difference in acceptance of exclusive breast feeding and contraception after postnatal care utilization. (P value= $<0.05$ )

Making strong efforts for utilization of postnatal care will not only improve the health of mother and child but also solves the population problem especially in India.

In our study the main factors for utilization of postnatal care were high education status and location of residence near health center. Several studies show that low educational status and difficult access to health services are the one of the major factors for non utilization of postnatal care services. <sup>(15,16)</sup>

During this period of study (15 month) 70 maternal deaths were reported in the hospital, majority of them were died in postnatal period (81%). Although this data is not directly related to the study but it depicts that most of maternal death occurs in postnatal period only.

**Limitation of study-**As this study is on hospital based data so we could not able to take interview of postnatal women regarding detail evaluation of factors for non utilization of postnatal care and not able to assess actual depth of this problem.

## V. Conclusion

The study shows, unacceptable, very poor utilization of postnatal care in the tertiary care center of Delhi. It is an important issue, to evaluate further to know the factors for lower postnatal care acceptance amongst postnatal women especially after institutional delivery in metropolitan city. Therefore, there is an urgent need to assess the actual quality of postnatal care services provided to mothers.

So in India not only institutional births but also essential postnatal care services has to be promoted by strengthening the targeted policy interventions as postnatal care can have additional and substantial benefits in enhancing maternal and child health outcome. As antenatal care is provided at all level of centers similarly postnatal care facilities should be available to all mothers. This is an important message to both service providers and health-policy makers to need for strengthening postnatal care services to all mothers in India through targeted policy interven

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