

POST NATAL CARE UTILIZATION AMONG RURAL WOMEN IN NORTHERN PUNJAB; A CROSS SECTIONAL SURVEY

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ABSTRACT

Objective: The objectives of the study were to determine the frequency of mothers utilizing postnatal care (PNC) for themselves, to identify the reasons of non-utilization of the services and health problems faced by them in the post natal period.

Study Design: Descriptive cross sectional study.

Place and Duration of Study: This study was conducted in rural Gujranwala (Northern Punjab) from June to Dec 2014.

Material and Methods: A total of 176 females having child of less than one year were chosen by systematic random sampling through household registers of four randomly chosen basic health unit (BHU). Data was collected through a pre tested questionnaire by trained lady health workers .SPSS version 20 was used for analysis.

Results: PNC within six weeks after delivery was utilized by 59 (33.5%) of the respondents while only 26 (14.8%) utilized PNC within 24 hours after delivery. However, majority i.e. 117 (66.5%) didn't utilized the post natal care following delivery. The major problems faced by the respondents were weakness 27 (15.3%), fever 19 (10.8%) and vaginal pain 18 (10.2%). Some (17.8%) mothers reported to have more than one postpartum health problem. Utilization of PNC was significantly associated with the educational status of the respondent and place of last delivery.

Conclusion: Though women face a variety of problems in post natal period yet PNC utilization among mothers is poor. Literacy of the respondents and place of last delivery were found significantly associated with the utilization of PNC.

Keywords: Maternal mortality, Postnatal care, Postpartum period.

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INTRODUCTION

A postpartum period or postnatal period is the period beginning immediately after the birth of a child and extending for about six weeks. Less frequently used are the terms puerperium or puerperal period¹. It is the critical time in which fatal maternal complications such as postpartum hemorrhage, sepsis, and eclampsia can occur , the majority of maternal deaths (62%) occur soon after birth due to haemorrhage and in the first week after delivery due to hemorrhage and

eclampsia².

Essential routine postnatal care (PNC) for all mothers includes in immediate and early period assessment of bleeding and body temperature and referral for complications such as bleeding, infections, or postnatal depression, counseling for breastfeeding and breast care in early postnatal period, management of anaemia ,completion of tetanus toxoid immunization (if required), counseling on danger signs (excessive bleeding,foul vaginal discharge,fever,severe abdominal pain, excessive tiredness or breathlessness, edema with severe headaches or blurred vision, painful, engorged breasts), and

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counseling on family planning and nutrition in late period³.

Maternal mortality is a major concern of maternal health in developing countries. The global maternal mortality rate (MMR) is 210 maternal deaths per 100 000⁴ live births with most of them occurring in developing countries. The South East Asian region has persistently high rates of maternal and infant mortality that has largely remained resilient to change⁵. The higher rates in the region have basic underlying determinants, which include the poverty, illiteracy, gender gaps and social inequity⁶. In India 64% women do not receive antenatal care and only 18% deliver in some health facilities. Sri Lanka remains a remarkable exception as a result of the huge investments it has made in providing primary health care and education to its population. In Sri Lanka almost 94% of births are attended by skilled health workers, which is a reflective both of women status and efficiency of health services⁷.

Despite having basic human right to be protected while undergoing pregnancy and childbirth⁸, in Pakistan with maternal mortality rate of 260 per 100,000 live births, an estimated 12,000 maternal deaths occur annually⁴. In a country wide hospital study in the Society of Obstetrics and Gynaecology of Pakistan (SOGP), it was found that 84.6 % deaths were due to direct causes⁹. Most of these deaths are preventable as shown by the difference in mortality experience of developing and developed countries¹⁰. Main reasons for this high figure is that maternity services are lagging much behind the required standards^{11,12}, and many Pakistani women report an inability to avail these services at their own¹³ that's why we are far behind in achieving millennium development goal five (MDG-5)¹⁴.

According to a survey the utilization of postnatal care was just 34%., the common health problems perceived by women during the postnatal period were weakness (27%), mastitis

(27%), vaginal bleeding (20%), fever (13%) and vaginal pain (13%)¹⁵.

The World Health Organization (WHO) has strongly stressed on improvements of maternal health services as part of its safe motherhood initiative (SMI) and to fill the gap between the expectation of mothers and offered program³. There is no established evidence-based protocol defining optimal timing and number of PNC visits with a health provider. A general guide line can be that if the mother is in a facility, she and her baby should be assessed within one hour of birth and again before discharge. The stay for 24 hours is recommended especially after a complicated birth. If birth occurs at home, the first visit should target the crucial first 24 hours after birth. Follow up contacts are recommended at least at 2-3 days, 6-7 days, and at 6 weeks¹⁶.

Considering the bad indicators of maternal health, the study is a help to assess the utilization of health services by rural women in the most vulnerable time in their life, and identifying the barriers in their use. It also identified the problems faced by the mothers in the post partum period, so that appropriate, need based services are delivered. The objectives of the study were to determine the frequency of mothers utilizing postnatal care (availed at least three of the services during 6 weeks) for themselves, to identify the reasons of non-utilization of the services and to determine the self-reported health problems faced by women in post natal period.

MATERIAL AND METHODS

This was a descriptive cross sectional study conducted in Gujranwala district, Punjab over six months span from June 2014 to Dec. 2014. Sample was selected using multistage random sampling. Four basic health units (BHUs), i.e. BHUs of Kilaske, Bhoma bath, Gondlan, and Verpal, were chosen randomly from a list of all BHUs(88) in the rural Gujranwala, to include a representative sample of the district. A list of households having child of less than one year was obtained through household registers (kept by LHVs) of chosen

BHU. Equal number of eligible mothers (n=44) were included from all units using systematic sampling to make a total of 176 sample size. If a women had given last birth by caesarean section

were trained in data collection. Ethical approval was taken prior to data collection from internal review board of Pakistan Institute of Medical Sciences (PIMS). Data was collected after taking

Table-1: Demographic profile of Mothers (n= 176).

Variable	No of cases	%age
Occupation		
House wife	169	96.0%
Employed	7	4.0%
Educational Status		
Uneducated	72	40.9%
Primary	19	10.8%
Middle	24	13.6%
Matric	45	25.6%
Intermediate	6	3.4%
Graduation	6	3.4%
Post-graduation	4	2.3%
Pregnant		
Yes	30	17.0%
No	146	83.0%
Family Type		
Joint	133	75.6%
Nuclear	43	24.4%
House		
Own	134	76.1%
Rented	42	23.9%

Table-2: Association of literacy, parity, and place of delivery with utilization of PNC.

Variables	Postnatal Checkup		p-value
	No (n=117)	Yes (n=59)	
Husband education			0.67
Illiterate	38 (32.4%)	19(32.2%)	
literate	79 (67.6%)	40 (67.8%)	
Female education			0.04*
Illiterate	54 (46.15%)	18(30.5%)	
literate	63 (53.85%)	41(69.5%)	
Place of delivery			0.03*
Home	57 (48.72%)	18 (30.5%)	
Health facility	60(51.28%)	41(69.5%)	
Parity			0.67
3 or less	47 (40.17%)	21 (35.59%)	
4 or more	70 (59.83%)	38 (64.41%)	

*p significant at p<0.05

or didn't give consent or was found absent, the next household from the list was chosen. Data was collected through a pre tested structured questionnaire which was improved after a pilot study. In each BHU, two lady health workers

the verbal informed consent and analyzed using SPSS version 20. Mean and standard deviation have been used to express the continuous variables like age, age at marriage, parity and age of last born child, while frequencies and

percentages to express the categorical variables like family type, employment, educational status, house ownership status, utilization of postnatal care and health problems faced in postnatal period. Chi square test was applied to determine the association of educational status of the respondent and the spouse, income, place of delivery and parity with utilization of PNC with $p < 0.05$ taken as significant.

RESULTS

A total of 176 mothers were interviewed. Age of the respondents ranged from 18 to 45 years with mean age of 29.15 ± 4.93 years. Mean age of marriage was 20.81 ± 3.63 years. Mean parity was 2.65 children (SD 1.40). Mean age of the last born child was 5.95 months \pm (SD 3.07). The demographic profile of mothers is shown in table-1.

The occupation of spouses were laborer 79 (44.9%), shopkeepers 39 (22.2%), farmers 11 (6.3%), and 13 (7.4%) were employed in some kind of private job while 8 (4.5%) of the respondents were unemployed at the time of interview. Income of 110 (62.5%) households was less than 10,000 while 2 (1.1%) had income of more than 40,000, while rest 64 (36.4%) were in the intermediate income bracket.

Home delivery was reported by 75 (42.6%) respondents in their last pregnancy. Among institutional deliveries, 56 (31.8%) were in private facility while only 45 (25.6%) were in some government facility.

Postnatal care within 6 weeks after delivery was utilized by 59 (33.5%) of the respondents. Among these, only 26 (14.8%) utilized postnatal care within 24 hours after delivery. However, majority i.e. 117 (66.5%) didn't utilize the postnatal care following delivery.

Of 59 cases who utilized PNC services, 55 (93.2%) mothers reported to have their BP checked, 49 (83.1%) had their fever checked, 32 (54.2%) got the advice for breast care, 32 (54.2%) got the nutritional advice, 13 (22.03%) had blood test for anemia, 29 (49.2%) were counseled about

family planning, 15 (25.4%) had been given awareness about the danger signs (blurred vision, headache, epigastric pain, high BP and 9 (15.3%) about puerperal depression on at least one postnatal visit. Out of 59 mothers who utilized PNC, care was provided by doctors in 21 (35.5%), by lady health workers / community midwives in 35 (59.3%) and by TBA in 3 (5.1%) respondents. PNC was provided in home to 20 (33.8%) respondents, while 39 (66.1%) respondents received it in some health facility.

Regarding the type of health problems faced in the post partum period, 27 (15.3%) of the mothers had weakness, 19 (10.8%) had fever, 18 (10.2%) suffered from vaginal pain, 14 (8%) had headache, 13 (7.4%) had raised BP, 12 (6.8%) had mastitis, 10 (5.7%) suffered from some urinary problem, 8 (4.5%) of the respondents reported to have heavy vaginal bleeding, 8 (4.5%) mothers reported tension/depression, 3 (1.7%) had fits while 44 (25.0%) respondents didn't report any problem in the postnatal period. figure shows reasons for not utilizing PNC.

Educational status of the respondent and parity was significantly associated with the utilization of postnatal care ($p < 0.05$) as shown in table-2.

DISCUSSION

A large number of maternal and neonatal deaths occurs during the first 48 hours after delivery. Although the study included both those who delivered outside and within a health facility, the utilisation of postnatal care was found to be low. Moreover, care within 48 hours was found to be infrequent. The findings have much to do with the internal milieu of Pakistani society, in which gender is an important organizational element. Gender inequality has led to insufficient investment in women by the family and the state. The majority of Pakistani women are illiterate and dependent upon someone else's will to decide for them and most women don't have liberty to seek service whether contraceptive, antenatal, natal or

postnatal resulting in high unmet need and maternal mortality ratio¹⁷. Added on this are issues of non availability of needed services even when they are sought, similar is the case in many other developing countries with similar socio demographic background¹⁸.

In our study, 59 (33.5 %) of the respondents utilized the post natal care within 6 weeks after delivery. It is in accordance with Pakistan Living

and thus increasing the chances that it might end up in termination²².

In Pakistan the one of the several measures to improve the Maternal, neonatal and child health services includes a nationwide health network with thousands of first level care facilities and outreach services by community based health workers for providing maternal and child health care to the rural populations²³. In our

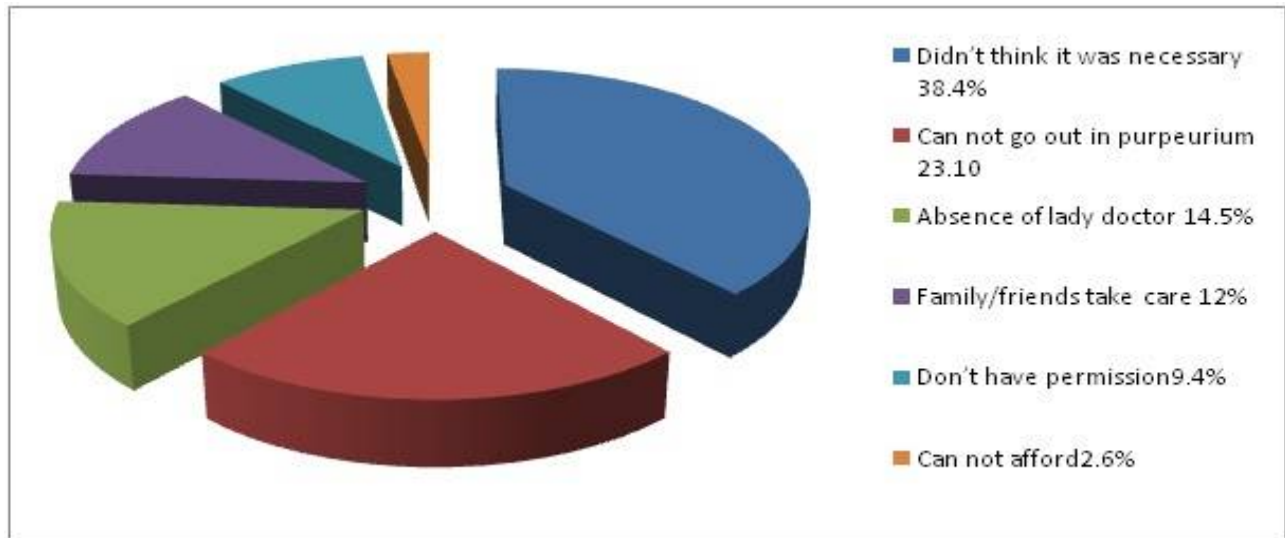


Figure: Reasons for not utilizing postnatal care(n=117).

Standard Measurement Survey of 2012-13¹⁹. Only 24.7% of the respondents received care in the most vulnerable time i.e. within 24 hours after delivery, while 66.5 % didn't utilize the post natal care following delivery. In a survey on squatter settlements of Karachi only 24% women had a postpartum check up²⁰. This figure shows that the situation in Pakistan is worse than many developing countries, in India the reported figure is 40%, in Philippines and Indonesia it is 58% and 72% respetively²¹.

Advise on family planning is an essential component of the post natal care (PNC). Insufficiency of the services was evident from the fact that 8.6% of respondents were pregnant at the time of interview. The percentage is alarming as only the mothers of less than one year olds were interviewed and pregnancy at this time is quite troublesome and usually unwanted

study 35 (59.3%) of the population received post natal care through lady health workers or community midwives. LHWs are a main source of provision of antenatal as well as postnatal maternal and neonatal care, but the quality of care imparted is questionable as knowledge, skills and competencies of the workers have been serious concerns for many^{24,25}, and the problems faced by these workers also lead to compromised quality of care²⁶.

The women can face a variety of problems in post natal period. In our survey 75% mothers reported to have some type of health problem post partum. The problems were ranging from weakness, fever , vaginal pain, mastitis, urinary problem and tension/depression to potentially fatal problems like heavy vaginal bleeding ,raised blood pressure and fits. Heavy vaginal bleeding was reported by 4.6% respondents , the

percentage is less than another study done in Karachi where it was 7.5%²⁷ but still indicating the need to avail health facility as 37.6% of maternal deaths are attributable to hypertension and post partum hemorrhage alone^{2,28}.

In our study 52 (42.5%) respondents gave birth at home. Almost same figures have been reported in a study done in Karachi²⁷. Despite WHO stress on institutional delivery, trends of birth by non-skilled birth attendants widely prevail not only in Pakistan but also in India and other non developed countries²⁹. Private sector was the choice of the majority who gave birth in some health facility. Although there are issues regarding quality of care and presence of staff in Government facility, private sector is non regularized and mostly run by semi skilled birth attendants especially in sub urban and rural areas. Place of birth was significant predictor for utilization of PNC ($p<0.05$), mothers giving birth in health facility were more keen to seek the PNC.

CONCLUSION

As per our study findings, though women faced several problems in the post natal period yet the utilization of PNC among mothers was poor following delivery. Women having even a few years of schooling were more likely to utilize the PNC as compared to illiterate women ($p<0.05$). Utilization of PNC was also significantly associated with the place of last delivery and mothers who had given birth in some kind of health facility, whether public or private had better PNC utilization ($p<0.05$). Literacy of the husband or parity didn't show significant association with utilization of PNC.

RECOMMENDATIONS

PNC services should be made available in the villages, and more health workers and traditional birth attendants should be trained in providing PNC. Mothers should be visited at least twice during the postnatal period by local health workers. Awareness programmes on postnatal care should be implemented; targeting women, mother-in-laws and husbands.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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