Original Article

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Utilization of Post Natal Maternal Health Services in a Rural Area of Panvel Taluka in Maharashtra

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Abstract

Background: Postnatal period is a critical phase in the lives of mothers wherein most life threatening complications and maternal and infant deaths occur. Yet, this is the most neglected period for the provision of quality care. Almost half of postnatal maternal deaths occur within the first 24 hours and 66% occur during the first week. *Objectives:* i) To study the utilisation of post natal maternal health services in a rural area. ii)To study the socio demographic co relation of utilisation of post natal maternal health services. *Methodology:* A cross sectional community based study was carried out in a rural area of Panvel Taluka between Oct 2015 to Nov 2015. 210 women who had delivered in the last 5 years were included in the study. *Analysis:* was done using SPSS version 20 and applying appropriate statistics. *Results:* 72% women did not receive postpartum check-up within 1 week. Education was found to be the most significant determinant of post natal care utilisation. The major component of services in PNC period were seen to be physical examination (84.7%) and counselling on breastfeeding (86.6%), contraceptive advise 40%. Almost 50% were told about the warning signs in postpartum period. Only 8% were advised to be tested for anaemia and only 20% took IFA tablets. Conclusion: PNC visit within 1 week of delivery remains a neglected aspect. Other components of post natal care like warning signs and anaemia in postpartum period need to be emphasised.

Keywords: Post Natal Care; Utilisation of Maternal Health Services; Rural.

Introduction

Motherhood is the most important part of a woman's life. But it can be a life threatening event as well.The days and weeks following childbirth – the postnatal period – is a critical phase in the lives of mothers and newborn babies. Most serious life threatening complications and maternal and infant deaths occur during this time. Yet, this is the most neglected period for the provision of quality care. almost half of postnatal maternal deaths occur within the first 24 hours [1] and 66% occur during the first week[2].

Around the world, 72% of women give birth attended by skilled personnel [3]. The maternal mortality ratio has decreased from 380 to 210 per 100,000 live births between 2000 and 2013. Yet, in South-East Asia and sub-Saharan Africa only 67% and 48% of women give birth with the assistance of skilled personnel, respectively [3]. Postnatal care reaches even fewer women and newborns : less than half of women receive a postnatal care visit within 2 days of childbirth [4].

Women in rural India experience more episodes of illness. These women have less access to health care facilities and this situation is directly linked to poverty, young reproductive age, low socioeconomic status, low education etc [5]. Keeping in view the above mentioned factors, it is necessary to check the availability of PNC services in rural area & their utilisation by females. The present study is an attempt towards this.

AIM

To study the utilisation of post natal maternal

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health services in rural area of Panveltaluka of Raigad district of Maharashtra.

Objectives

i. To study the utilisation of post natal maternal health services.

ii. To study the socio demographic co relation of utilisation of post natal maternal health services in rural area.

Materials and Methods

Area of Study: Ulwe village in Raigad district of Maharashtra state.

Type of Study: Cross sectional community based study.

Period of Study: The study was conducted from a period between October2015 to November 2015.

Eligibility Criteria: Females residents of Ulwe having had a delivery in the last 5 years are included in survey.

A predesigned & pretested questionnaire was used to get information regarding socio demographic factors, the antenatal care they received, place of delivery & postnatal care received during their last delivery. All the women included in the study were informed about the purpose of the study and informed verbal consent was taken. All the questions were asked in the language understood by them.

Sample size was determined by referring the book of WHO publication of 1991 titled Sample size determination in health studies written by Lwanga S. K. and Lemeshow S [6]. For this anticipated Population proportion (P) was 65.5, confidence level [100(1-α) %] set to 95% and Precision (ε) set to 10%. Formula was n= (z) 2 p (1-p) / ε^2 where z is (confidence coefficient) which was 1.96. Thus the sample size derived was 203 for P=0.65 and ε =0.1 So it was decided to take sample size of more than 203 from rural area .

Thus 210 females were interviewed and included in our sample size.

Operational Definitions

Respondent women: women who had a child less than 5 years at the time of interview and were a resident for previous 5 years or more and who were willing to participate in this study were included.

Health education received: If respondent women told that she received advice regarding rest, nutrition, exercises, counselling, breast feeding, immunization during pregnancy from health worker then it was considered as a health education received.

JSY Eligible Woman: Respondent woman who fulfilled the criteria of beneficiary under JSY scheme was considered JSY eligible women [7].

JSY Benefit: Respondent woman who received monetary benefit of JSY scheme considered as JSY benefited women [7].

Post Natal Visit

Respondent women who had paid at least one visit to health facility within seven days of deliverywas considered as post natal visit paid.

Analysis

Data was entered in MS Excel and analysed using SPSS statistical software version 20.

Results

Total number of women who participated in the study was 210. The age range was between 17 years to 38 years (mean = 23.9±0.9 years). Majority of the study subjects were in the 21-24 years age group (35.7%) with 7.1% of women aged 19 years or less. Overall 43% women were young mothers aged below 25 years. Majority of the women were in the older age group of 25 – 32 years (52%) out of which 80% of the women got married in the age group of 18 – 24 years. Education of the respondents was relatively less as compared to their spouse with majority of the subjects being educated upto high school (29.5%) and their spouse uptohigher secondary (43.8%). Most women were housewives (95.7%), living in nuclear families (63.8%) and multipara (62.9%).61.4% of the respondents belong to family with classs I per capita income according to modified B. G. Prasad May 14 scale (Table 1).

88.6% of all deliveries were institutional. Deliveries conducted in private hospital were 56.2% and whereas deliveries in govt. hospitals were only 36.2%. 88.6% of the deliveries were conducted by skilled personnel, with majority of them being gynaecologists i.e 86.2%. In our study we observed that 11.4% of deliveries were home deliveries and were conducted by the village Dai. The respondents were not aware whether the dai was a trained dai or not (Table 2).

Table 1: Distribution of rural respondent women according to socio demographic variables.

Variables	Frequency
Age in years:	
≤20	15 (7.1%)
21- 24	75 (35.7%)
25 – 28	64 (30.5%)
≥29	56 (26.7%)
Religion:	
Hindu	199 (94.8%)
Muslim	10 (4.8%)
Christian	1(0.5% or 0.4%)
Others	0 (0.00%)
Education:	
Illiterate	15 (7.1%)
Primary	16 (7.6%)
Middle School	58 (27.6%)
High School	62 (29.5%)
Higher Secondary	44 (21.0%)
Graduate	15 (7.1%)
Husband's Education:	
Illiterate	11 (5.2%)
Primary	3 (1.4%)
Middle School	22 (10.5%)
High School	92 (43.8%)
Higher Secondary	47 (22.4%)
Graduate	35 (16.7%)
Occupation:	
Housewife	201 (95.7%)
Nonagricultural worker	8 (3.8%)
Agricultural	1 (0.5%)
Type of Family:	
Nuclear	134 (63.8%)
Joint	76 (36.2%)
Per capita income:	
Class I	129 (61.8)
Class II	76 (36.2%)
Class III	2 (1%)
Class IV	2 (1%)

Table 2: Distribution of rural respondent women according to place and assistance during delivery (n=210).

Variables	Frquency
Delivery conducted at:	
Govt hospital	68 (32.4%)
Private	118 (56.2%)
Home	24 (11.4%)
Hospital By:	
Medical officer	5 (2.4)
Gynecologist	181 (86.2%)
Home by:	
Trained person	0(0.00%)
General practitioner	0(0.00%)
ANM	0 (0.00%)
Local dai	24 (11.4%)

Table 3: Distribution of rural respondent women according to JSY eligibility & benefit and Health services after delivery (n = 210).

Variable	Frequency
JSY eligibility:	
Yes	210 (100%)
No	0 (0.00%)
JSY benefit received:	
Yes	0 (0.00%)
No	210 (100%)
Post natal visit received within 1week:	
Yes	58 (27.6%)
No	152 (72.4%)
No. of post natal visits:	
1 – 2 visits	157 (74.8%)
>2 visits	37 (17.6%)
None	16 (7.6%)
Health services received after delivery:	
Physical examination	178 (84.7%)
Counselling on breastfeeding	82 (86.6%)
Contraception	84 (40.0%)
Blood test for anemia	17 (8.09%)
I/FA Tab	43 (20.4%)
Information on warning signs of problems	102 (48.5%)

Table 4: Relation of education with utilisation of postnatal services

Skilled Attendance	Illiterate	Education Primary	Middle School	High School	Higher Secondary and Above	Graduate
Yes	15	16	57	60	59	
No	0	0	1	2	0	
Total	15	16	58	62	59	
X2			2.762			
P Value			0.737			
Significant/Not significant			Not Significant			
PNC VISITS	**Illiterate**	**Education Primary**	**middle school**	**high school**	**higher secondary**	**Graduate**
YES	4	2	4	26	22	
NO	11	14	54	34	37	0
Total	15	16	58	60	59	00
X2			24.471			
P Value			0.001			
Significant/Not significant			Significant			

74% had received at least one post natal visit however more than 72% women did not receive postpartum check-up within 1 weeks. The major component of services in PNC period were seen to be physical examination(84.7%) and counselling on breastfeeding(86.6%). Contraceptive advice was given to only 40%. Almost 50% were told about the warning signs in postpartum period. It was seen that only 8% were advised to be tested for anaemia and only 20% took IFA Tablets (Table 3).

Table 4 depicts relation of post natal maternal health care utilization i.e. number of PNC visits and skilled attendance at birth in relation to education. All were significantly associated with education of the respondents. Utilization of all these services was relatively lower among respondents with lower literacy.

Discussion

Less than half of women interviewed in the national surveys –NFHS- 3 [8] had institutional delivery and same can be said for the postpartumcheck-up. Although institutional deliveries were high in the present study i.e 88.6%, only 27.6% received a postpartum check-up within 1 week

It has been observed in NFHS 3, the proportion of

births occurring in a health facility is higher for younger mothers and lower parity. It is most important to have the first postnatal check-up within a few hours of birth. Another important time for a postnatal check-up is six weeks after delivery. Majority of women (72.4%) did not receive any postnatal check-up after their most recent birth [9]. Only one-quarter of women (27%) received a health check-up within the critical first two days after delivery. The likelihood of a birth being followed by any postnatal check-up and that within two days increases with the educational level of the mother and the household wealth index. There were no marked variations by mother's age, but utilization of postnatal check-ups decreases with increasing birth order [9]. However in this study, education was seen to be significantly associated with utilization of post partum care.

Recommendations

i. Although utilization of post natal maternal health care services was higher in the present study, post natal visit within 1 week was low. Due importance needs to be given to early post natal check up in order to detect and manage life threatening complications at the earliest and thereby reduce maternal mortality. Hence focus on female education should be one of the foremost strategies for improving utilization of maternal health services and thereby improving outcomes of maternal and child services. Besides these visits give opportunity to the health care providers to examine the mother and newborn.

ii. Contact with health care providers during the antenatal period should be utilised to increase awareness regarding post natal care and importance of post natal check ups.

iii. Immunisation and under five clinics should also be proactive in offering postnatal services to the newly delivered mothers when they visit the clinics with thir newborns.

iv. Home visits will always remain one of the mainstays of post natal care especially in rural areas and health staff especially ASHA and AWW need to undergo training and retraining in post natal care.

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