Utilization of Maternal Health Services – A Comparative Study

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Abstracts: Background & Objectives: The importance of maternal health services in reducing maternal and infant morbidity and mortality has received increasing recognition. Studies have shown that the uptake of maternal health care (MHC) in developing countries has significant consequences for both the safe transition of the mother through pregnancy and child birth, and the survival and health of the child during early infancy So the objective of this study is to examine the existing pattern of maternal health care utilization in Ahmedabad District. Methods: This was a cross sectional study done in Ahmedabad district during November 2010-december 2010. Results: Most of women were from the age groups 20 to 24 years. The iron folic acid tablet intake was found higher in urban women (82%) then rural women (66%). All over ANC visits given or taken were found more in urban area (84%) as compare to rural area (78%). While supplementary nutritional services are utilized more in rural area (64%). Almost equal number of institutional deliveries took place in both rural and urban area. The counselling regarding family planning and breast feeding were given more in urban area (81%). Interpretation & Conclusion: The analysis presented in this paper has enabled the examination of the differences in the maternal health care utilization between these very diverse sub-groups. Thus, it may be conclude that, there is a need for formulation of revised strategies for better and effective reach of maternal health care services in India as a whole. [Koria B et al NJIRM 2012; 3(4) : 38-41]

Key Words: Maternal Health services, Antenatal Care, Intra Natal care, Post natal care

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Introduction: The importance of maternal health services in reducing maternal and infant morbidity and mortality has received increasing recognition since the Cairo Conference on Population and Development. Previous studies have shown that the uptake of maternal health care (MHC) in developing countries has significant consequences for both the safe transition of the mother through pregnancy and child birth, and the survival and health of the child during early infancy. Although antenatal care alone cannot prevent all obstetric emergencies[1], the information provided by the antenatal service provider on danger signs, diet, and planning for delivery, along with testing for anaemia, malaria and high blood pressure are important for the successful management of pregnancies and the subsequent wellbeing of the child.

Despite the benefits of MHC, many women in India do not receive pre-natal care at all, and the care that is received is often characterised by an insufficient number of visits timed late into the pregnancy (NFHS 1992/93). Furthermore, the delivery care utilised in India is dominated by home births either in the natal or the marital household. Hence, high risk pregnancies are often not identified and given proper care. If these services are utilised properly then maternal and infant mortality and morbidity will be reduced to a significant level. So this study was done with the objective to examine the existing pattern of maternal health care utilization in Ahmedabad District.

Material and Methods: This was a cross-ectional study done in Ahmedabad district during November 2010-december 2010.A preformed and pre tested Performa was used to collect the data from beneficiaries with their informed consent. Data of urban area were collected from Chaman pura, Meghani nagar, Kalapi nagar, Parmeswar Na chapara-the field practice area of community department of B.J.Medical College, Ahmedabad. Rural area of Nandej PHC, Santhal PHC and Kuha PHC of Dascroi Taluka were used to collect the data from rural area. Total 100 women from urban and 50 women from rural area were interviewed for the same. Data entry and analysis was done in software epi.info 3.5.3.Chi-square test was used to see the significant association. Mothers who have delivered a baby within one year and residing in that particular area since last one year were

included in this study. Recall Bias and Loss of some documents' were limitations of this study.

Results and Discussion:

1. Demographic Profile of Women: This section presents a profile of the demographic and socioeconomic characteristics of mothers who have children aged less than one year. Table 1 describes the percentage distribution of those mothers by age, religion, educational level & occupational status. The study of background characteristics of mothers provides helps us to list possible correlating factors associated with the access to and utilization of reproductive services. Most of women were from the age groups 20 to 24 years, it was 56 % in rural area and 37% in urban area. This age group difference between both areas was found statically significant. This may be due to early marriage and poor acceptance of spacing family planning methods in rural area. In rural area 84% women were illiterate or studied up to primary level while in urban area 57% women have studied higher than primary level. Their educational status difference was found statistically significant. In urban are 20 % women were doing job & 42 % women have house hold business where as in rural area 64 % women were labourer. The difference was found statistically significant.

It is a known fact that education has an important influence on awareness. Low literacy rate is a major obstacle to health awareness in this area. Due to lack of education, the rural population and the poor urban population still prefer the deliveries performed at home by the Dais (nannies who are not medically trained, but are known for their experience in performing deliveries and are preferred to doctors in rural areas). A study by Ray et al[2] showed that practices of delivery at home in slums were found to be 34.7%, which corroborated with the findings of another study (31.7%) by Agarwal et al[3] Yet another study of urban slums identified prolonged waiting time, heavy workload at home and long distance as reasons for non–utilization. Women from this population tend not to use antenatal care services due to the traditional belief that medical attention is not required during pregnancy[4]

Table: 1 Demographic profile of Mothers

Variable	Urban (N=100) (%)	Rural (N=50) (%)	x^2
Age			
15-19	06(06)	04(08)	11.42*
20-24	37(37)	28(56)	
25-29	32(32)	16(32)	
30-34	17(17)	02(04)	
35 & Above	08(08)	00(00)	
Religion			
Hindu	62(62)	32(64)	2.4
Muslim	17(17)	09(18)	
Christian	11(11)	02(04)	
Others@	10(10)	07(14)	
Education			
Illiterate	18(18)	19(38)	22.93*
Primary	25(25)	23(46)	
Secondary	36(36)	05(10)	
Higher Secondary & above	21(21)	03(06)	
Occupation			
Job	20(20)	01(02)	46.61*
Household Business	42(42)	03(06)	
Laborer	16(16)	32(64)	
Housewife	16(16)	14(28)	

*Significant, P<0.05

2. Antenatal care: The iron folic acid tablet intake was found higher in urban women (82%) then rural women (66%) and this difference was found statistically significant. All over ANC visits given or taken were found more in urban area (84%) as compare to rural area (78%). This may be due to grass root level workers like ASHA, FHW, Anganwadi worker all are quite close to community in rural area and any how they may provide at least one ANC visit either at home or at MAMATA day in rural area while in urban area this may be due to easy accessibility of health services. Less PPTCT services were utilized in rural area (16%). This may be due to lack of awareness and also may be due to fear to be found positive, While supplementary nutritional services were utilized more in rural area

(64%). Awareness and accessibility of health care services heavily influence the health care–seeking behaviour of pregnant women from the rural and urban poor population. According to WHO (1994), most maternal deaths are preventable if women have access to basic medical care during pregnancy, delivery and post partum period. Most maternal deaths could be prevented if women had access to appropriate

Antenatal care among pregnant women is one of the important factors in reducing maternal morbidity and mortality. Unfortunately, many women in developing countries do not receive such care. High utilization rate of the ANC service results in lowering the risk of maternal mortality. [5, 6] Pregnancy-related complications are among the leading causes of death and disability for women aged between 15 and 49 in developing countries. Researches during more than a decade have shown that small and affordable measures can significantly reduce the health risks that women face when they become pregnant.

Table: 2: Antenatal Service Utilization

Service utilized	**Urban (N=100) (%)**	**Rural (N=50) (%)**	**x^2**
Registration	84(84)	39(78)	0.81
TT Injection@	84(84)	39(78)	0.81
Iron folic acid	82(82)	33(66)	4.77*
ANC Visit			
Not received / gone	16(16)	11(22)	1.19
One ANC visit	36(36)	19(38)	
Two ANC visit	28(28)	12(24)	
Three ANC visit	20(20)	08(16)	
Referral to PPTCT and test done	84(84)	08(16)	64.99*
Referral service utilized for complication or high risk@@	12(12)	06(12)	00
Supplementary nutrition utilized	52(52	32(64)	1.95

* Significant, P<0.05, @TT Injection – Either booster or two TT injection, @@Females given referral and they have gone to referral centre and utilized services for complication or high risk.

Health care during pregnancy, childbirth and postnatal period. Safe motherhood means ensuring that all women receive the care they need to be safe and healthy throughout pregnancy, childbirth and soon after childbirth. Millions of women who survive childbirth suffer from pregnancy related injuries, infections, diseases and disabilities, often with lifelong consequences. The reality is that most of these deaths and conditions are preventable. Research shows that approximately 80% of maternal deaths could be prevented if women had access to basic health care services, including well-equipped health facilities, medicines, and skilled health care providers. [7]

The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and a healthy baby.[8] With government antenatal care services in place, it is important to look at the reasons for under/ non–utilisation of these services. Addressing these issues will ensure increase in utilisation of these services and in turn decrease maternal and child mortality.

3. Intra natal care: Intra-natal care is important for the survival of mother and the child. Utilization of Emergency services like Ambulance were more in Urban area(46%) as compare to Rural area(14%)and also this difference was found statistically significant. This may be due to lack of awareness of free transportation for institutional delivery provided by Government of Gujarat like 108 ambulance service.

Another important thrust of the Reproductive and Child Health Programme is to encourage deliveries in proper hygienic conditions under the supervision of trained health professionals. Almost equal number of Institutional deliveries took place in both rural and urban area. According to NFHS III (2005-06) total number of institutional deliveries are 40.8% (Urban 69%, Rural 43.1%).

So we can say that numbers of institutional deliveries are going on increase in both rural and urban area. This may be explain by implementation and utilization of various schemes like Janani Surksha Yojana, Chiranjeevi Yojana , 108 ambulance service etc under NRHM since 2005.

Table 3 Utilization of Intra - natal Care

Service Utilized	Urban (N=100) (%)	Rural (N=50) (%)	x^2
Ambulance Service	46(46)	07(14)	14.94 *
Delivery Place			
Hospital / Health center	81(81)	39(78)	0.19
Home	19(19)	11(22)	
Type of delivery			
Vaginal	79(79)	43(86)	1.08
Caesarian	21(21)	07(14)	
Complications	12(12)	06(12)	0
Utilized any scheme@	53(53)	31(62)	1.1

* Significant, P<0.05, @Any scheme-Janani Suraksha Yojana, Chirnanjeevi Yojana etc.

Table 4 Utilization of Post - natal services

Service Utilized	Urban (N=100) %	Rural (N=50) %	x^2
Hospital stay			
48 hrs	60(60)	31(62)	0.42
> 48 hrs	21(21)	08(16)	
Post natal visits@	81(81)	49(98)	8.34*
Supplementary Nutrition received	52(52)	39(78)	9.44*
Counseling on breast feeding	81(81)	38(76)	0.51
Counseling on breast feeding	81(81)	29(58)	9.02*

* Significant, P<0.05, @Post natal visit – one, two or three PNC visits

4. Post natal care: The health of a mother and her newborn child depends not only on the health care she receives during her pregnancy and delivery, but also on the care she and the infant receive during the first few weeks after delivery. Postnatal check-ups soon after the delivery are particularly important for births that take place in non institutional settings. This was found significantly higher in rural area (98%). Also the supplementary nutrition services were available more in rural area (78%), while also the supplementary nutrition services counseling regarding family planning and breast feeding were given more in urban area (81%) this may be because of more institutional deliveries or may be due to recall bias too.

Conclusion: The study reveals that some of the factors, governed maternal health utilization were education of women and pregnancy related problems and delivery related complications. The analysis presented in this paper has enabled the examination of the differences in the maternal health care utilization between these very diverse sub-groups. Thus, it may be conclude that, there is a need for formulation of revised strategies for better and effective reach of maternal health care services in India as a whole and the states under consideration.

References:

1. Vilar, J and Bergsjo. Scientific Basis for the Content of Routine Antenatal Care. Acta Obstetrica et Gynecologica Scandanavica, 1987 ; 76, 1-14
2. Ray SK, Mukherjee B, Dobe M, Sengupta D, Ghosh M, Chaudhuri N. Utilization of maternal services in West Bengal. Indian Pediatr 1993,30:351–4.
3. Agarwal P, Singh MM, Garg S. Maternal health–care utilization among women in an urban slum in Delhi. Indian J Community Med 2007,32:203–5.
4. Jejeebhoy SJ. Maternal mortality and morbidity in India: priorities for social sciences research. J Family Welfare, 1997, 42(2): 30–51
5. Bartlett Linda, A. et al. Where Giving Birth is a Forecast of Death: Maternal mortality in four districts of Afghanistan, 1999-2002, The Lancet, 2005 ; 365: 864-870.
6. Kilpatrick, J. Sarah et al. Preventability of Maternal Deaths: Comparison between Zambian and American referral hospitals, Obstetrics and Gynecology, 2002 ; 100: 321-326.
7. http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8_4.pdf Date access 2012, May 25.
8. Park JE, Park K. Text Book of Preventive and Social Medicine, 18th edition M/s. Banarsidas Bhanot Publishers: Jabalpur, 2002: 386.