MATERNAL CARE SERVICES UTILIZATOIN IN URBAN SLUMS OF DISTRICT AGRA : POPULATION BASED STUDY

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Abstract :

Background : *Despite continuous efforts by government functionaries the utilization and awareness regarding maternal care is still poor in India.*

Objective : *To know the extent of maternal care services utilization.*

Study Design : *Cross-sectional community based.*

Setting : *Urban slums of district Agra.*

Participants : *Married women aged 15-49 years, who have delivered a child during last one year interviewed at home.*

Statistical Analysis : *Software like Systat-12 for analysis and tests of significance like chi-square test were utilized.*

Results : *Only 16.1% of women had 3 or more ANC visits and only 3.6% had their first visit during first trimester. The antenatal check-ups influenced with the educational level of mothers ($p<0.001$). A majority of women (55.8%) did not receive any postnatal checkup after their most recent birth.*

Keywords : *Maternal care, Antenatal care, Male involvement, Safe motherhood, Millennium Development Goals.*

Introduction :

In 2007, the Safe Motherhood Initiative is celebrating its 20th anniversary. Although the decline is impressive but still a lot can be done to achieve the time bound target of 100 maternal deaths per lakh of life births by 2012[1]. Most of the maternal deaths can be prevented if women have access to basic medical care during pregnancy, childbirth and postpartum period [2].In India, these services are provided through the network of health centers in out-patient clinics, as well as through home visits by health workers [3]. However utilization o these services by the target population continues to be poor [4]. The present study was done to know the level of utilization of maternal care services in urban slums in Agra.

Material and Methods :

Present study was conducted in Agra, a district of U.P. state, India, during 2003-2004, a city of Taj Mahal, which was made by Emperor Shajahan in memory of his wife Mumtaj Mahal, who died during childbirth. In randomly

selected urban slums, those households were listed in which females had delivered babies with in the past one-year.

On the basis of Rapid Household Survey-RCH Project Phase-II, 1999, Antenatal coverage of Agra urban was taken as indicator for calculating the sample size. Taking 95% confidence limit with 10% precision and 20% non response rate, a sample of 360 women were interviewed on a pre-tested structured schedule for eliciting the study information. Non response rate was zero. A pilot study was carried out and necessary modifications were done in schedule before starting the study.

The information collected and analyzed with the help of Systat-12 software. The study was conducted in the selected slums of district Agra; hence the results cannot be generalized for the entire state/ country.

Results :

Profile of Respondents :

The mean age of females in the study group was 30.10 years (±5.65). Majority of women (69.70%) were in the age grouped 20 to 29 years. Literacy status revealed 41.3% illiterate and only 12.8% were having a schooling of 10 years or more. More than half (58.89%) of the respondents belonged to nuclear families. Majority of women (88.37%) were housewives. All the families were found to be in the lower socio-economic class.

Maternal Care :

Table-1

UTILIZATION OF MATERNAL HEALTH SERVICES* BY THE STUDY POPULATION

Period	Utilized	Not Utilized	Total
Antenaral	234(65%)	126(35.01%)	360
Natal	264(73.33%)	96(26.66%)	360
Postnatal	159(44.16%)	201(55.83%)	360

* A women who had received at minimum one antenatal visit, had her delivery conducted by a trained personnel and at least one postnatal visit said to have utilized maternal health service.

Table-1 stated the maternal care utilization by the women. Antenatal care was received by 65% of women. Only 44.4% of women received postnatal care, in spite of 73.3% of delivery conducted by a trained health staff.

Table-2

DEMOGRAPHIC CHARACTERISTICS OF THE WOMEN IN RELATION TO NUMBER OF ANTENATAL CARE

Characteristics	No Antenatal Visit N(%)	Number of Antenatal Visits		Total N(%)	P value
		1-2 visits N (%)	Three Visits N(%)		
Religion					
Hindu	90(71.4)	148(84.1)	54(93.1)	292(81.1)	P <0.05
Muslim	36(28.6)	28(15.9)	4(6.9)	68(18.9)	
Education					
Illiterate	86(68.3)	49(27.8)	14(24.1)	149(41.4)	P <0.001
<10	35(27.8)	103(58.5)	28(48.3)	166(46.1)	
10 or 10+	5(3.9)	24(3.6)	16(27.6)	45(12.5)	
Age group (Years)					
15-19	5(3.9)	3(1.7)	2(3.5)	10(2.8)	P >0.05
20-39	117(92.9)	171(97.2)	56(96.6)	344(95.6)	
40-49	4(3.2)	2(1.1)	0(0)	6(1.7)	
Total	**126(35.0)**	**176(48.9)**	**58(16.1)**	**360(100)**	

Number and Timing of Antenatal Care Visits:

The number of antenatal care visits and the timing of the first visit are important for the health of the mother and the outcome of the pregnancy. The World Health Organization recommends that all pregnant women should have at least four antenatal care (ANC) assessments by or under the supervision of a skilled attendant (W.H.O., 2006)[5]. These assessments should be spaced at regular intervals throughout pregnancy, commencing as early as possible in the first trimester. Table-2 reveals that only 16.1% of women had 3 or more antenatal visits. The antenatal visits were substantially inluenced (p<.001) by level of education.

Table-3

DEMOGRAPHIC CHARACTERISTICS OF THE WOMEN IN RELATION TO TIMING OF FIRST ANTENATAL VISIT

Characteristics	No Antenatal Visit	Timing of First Antenatal visit.			Total N(%)	P value
		1st Trimester	2nd Trimester	3rd Trimester		
Religion						
Hindu	90(71.4)	10(76.9)	95(82.6)	97(91.5)	292(81.1)	**P <0.05**
Muslim	36(28.6)	3(23.1)	20(17.4)	9(8.5)	68(18.9)	
Education						
Illiterate	86(68.3)	1(7.7)	35(30.4)	28(26.4)	149(41.4)	**P <0.001**
<10	35(27.8)	3(23.1)	62(53.9)	66(62.3)	166(46.1)	
10 or 10+	5(3.9)	9(69.2)	25(21.7)	6(5.7)	45(12.5)	
Age group (Years)						
15-19	5(3.9)	1(7.7)	3(2.6)	1(0.9)	10(2.8)	**P >0.05**
20-39	117(92.9)	12(92.3)	111(96.5)	104(98.1)	344(95.6)	
40-49	4(3.2)	0(0)	1(0.9)	1(0.9)	6(1.7)	
Total	**126(35.0)**	**13(3.6)**	**115(31.9)**	**106(29.4)**	**360(100)**	

Regarding timing of first antenatal visit (Table-3), most (31.9%) of women had their first ANC visit in the second trimester.

Male Involvement in Antenatal Care:

Table-4 presents information on men's involvement during maternal care. It was observed that only 18.33% of husbands were present during antenatal checkup. When asked about the reasons for not accompanying during ANC, majority of them (72.45%) told that they didn't have time to go with them. 24.15% of them did not feel any need to go with them and 3.40% told that old family member did not permit them to go. From table-3 it is also clear that 32.5% of men did provide help in house hold work during pregnancy, while most of women (67.5%) did not get any help in house works from husband.

Table-4

INVOLVEMENT OF HUSBAND IN MATERNAL CARE

Type of activity	Response No = 360		Reasons for not involving in maternal care				
	Yes %	No %		Did't feel need %	Lack of time %	Denial of permission %	Total N
Accompany her to antenatal visits	18.3	81.7		24.2	72.5	3.4	294
Helping her in house hold work	32.5	67.5		23.6	41.7	2.2	243
Be with her in decisions regarding delivery	28.3	71.4		56.42	26.1	17.5	257
Be with her during delivery	87.5	12.5		11.11	88.89	-	45

Discussion :

Similarly, NFHS-3, India showed 25% of mothers had 1-2 antenatal care visits and 52% had three or more visits. 44% of mothers had their first antenatal care visits in the first trimester of pregnancy and another 22% had their first visit during their 4th or 5th month of pregnancy. Only 10% women had their first antenatal care when they were six or more months pregnant. Older women (age 35-49) are much less likely than younger women to have received antenatal care for their most recent birth, 98% of women with 12 or more years of education received antenatal care, compared with 62% of women with no education. For 50 percent of the pregnancies, the father said he was present during at least one of the mother's check-ups. For 17 percent of pregnancies, the mother had at least one antenatal check-up but the father was not present during any of the checku-up[6]. NFHS-3 results for Uttar Pradesh also reported that mothers received at least one antenatal check-up for only 66%, 26.6% of women, who had received 3 or more ANC visits, and only 25.7% with an ANC visit in first trimester of pregnancy. So antenatal care utilization in India varies greatly by state. 14.9% of mothers received postnatal care in U.P., reported by NFHS-3[7].

Similar findings reported in RHS-Agra slums that only 21.7% of women had 3 ANC visits, and only 10.4% had first visit in the first trimester[8].

Conclusion and Recommendations :

There should be a deliberate attempt at each and every level to understand the specific needs of the area to be intervened and a policy

decision and proramme planning to achieve excellence in public health. This is the right time to fill the gap between rhetoric and reality to achieve Millennium Developmental Goals.

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