



## **Antenatal Care and Delivery Practices among Women in The Rural Areas of Uttar Pradesh**

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### **ABSTRACT**

*The major interventions under RMNCH + A program designed to ensure early registration of pregnancy and full ANC (Antenatal Care), skilled obstetric care, counselling and preparation for newborn care, birth preparedness, essential newborn care. To assess the antenatal care and delivery practices among women. The cross-sectional study was carried out in randomly selected villages of the Muradnagar Block of Ghaziabad district, Uttar Pradesh. A total of 300 women who had delivered within last six months were interviewed in a house-to-house survey. A study instrument was used to collect data. Maximum women were of 21 to 25 years of age (45.3%) and completed schooling till middle school (45.7%). Most of them were Hindu by religion (74.7%) and belonged to OBC caste (62%) and socio-economic class IV (37.3%). Majority of the women were of second parity (41.3%). Most of them had done antenatal registration during the first trimester of the last pregnancy (74.3%). Only half (50.3%) of them had at least four ANCs and most the women received tetanus toxoid injection (92%) and iron and folic acid tablets (79.3%) during last pregnancy. Around 74.7% women were counselled by ASHA about planning of the delivery. Majority delivered in the a health centre (91.3%). Utilisation of full antenatal services is limited. Institutional deliveries have increased. There is need of strengthening of current MCH services.*

**KEYWORDS:** Antenatal, ASHA, Institutional delivery, Birth preparedness

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### **INTRODUCTION**

The major interventions under RMNCH + A program designed to ensure newborn survival and wellbeing to ensure early registration of pregnancy and full ANC (Antenatal Care), skilled obstetric care, immediate newborn care and resuscitation services at delivery points, counseling and preparation for newborn care, birth preparedness through ASHA (Accredited Social Health Activist). Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM) which is a modification of National Maternity Benefit Scheme (NMBS). Under the scheme ASHA will identify pregnant women from Below Poverty Line (BPL) families and get them registered with sub-centre or Primary Health Centre (PHC). She will help these pregnant women to get at least four antenatal check-ups and counsel her for institutional delivery, breastfeeding, immunization, family planning etc [1-2].

This study takes cognize of these facts and has tried to delve in the depth about the prevalent practices about the antenatal care and subsequently recognizing the handicaps in the implantation of the strategies under the RMNCH + A programme. This study also aims to find out the antenatal care practices which ultimately will determine the maternal and newborn health status.

### **MATERIAL AND METHODS**

A community based cross-sectional study was carried out in randomly selected eight villages of the Muradnagar block of Ghaziabad district, Uttar Pradesh. The study participants were women who delivered within last six months. The participants were interviewed in a house-to-house survey. A total of 300 women who delivered within last six months in the selected area were interviewed. Semi-structured study schedule for in-depth interview of the women was used as the tool for data collection. All respondents were briefed about the need and objectives of the study and consent to participate in this study was taken from them. Modified B.J. Prasad's classification (2020) was applied to measure the individual's socioeconomic status [3]. The data will be collected and entered in MS Excel 2020 (version 16). Different statistical analysis was performed using SPSS software version 16. Descriptive statistics

was calculated for qualitative and categorical variables. Graphical representation of the variable was shown to understand the results clearly.

## RESULT AND DISCUSSION

Table 1 shows the distribution of the women of the children who were interviewed according to age. Maximum number of women falls in the age group of 21 to 25 years, 136 (45.3%). Followed by 26 to 30 years, 113 (37.7%) and more than 30 years of age, 38 (12.7%). Only 13 (4.3%) women were less than 20 years of age. The mean age of the women was 26 years with a standard deviation of 4.18. Majority of the women were educated up to middle school, 137 (45.7%) followed by 75 (25%) women who had completed intermediate. Out of 300, 287 (95.7%) of the women were homemakers.

Table 2 shows that majority of the women were Hindu 224 (74.7%) and 76 (25.3%) were Muslims. It shows 186 (62%) women belonged O.B.C. caste, and 63 (21%) belonged to general caste. Majority of the women belonged to the joint family 164 (54.7%) followed by nuclear family 99 (33%). 112 (37.3%) families belonged to Social Class IV followed by 88 (29.3%) belonging to Class II. Table 3 shows that majority of the women were of second parity (41.3%) followed by (33.3%) of women having parity of three or more. Only 76 (25.3%) women were primi. It shows (74.3%) of the women had done antenatal registration during the first trimester of the last pregnancy and (25.7%) women had not done antenatal registration.

Table 4 shows that (50.3%) of the women had done four or more antenatal visits and (41.3%) women had less than four antenatal visits. Remaining 25 (8.3%) women did not had any antenatal visit. In the present study, 92% of women received tetanus toxoid injection during last pregnancy. Majority of the women received iron and folic acid tablets (79.3%). Majority of the women received supplementary food from their nearest anganwadi centre (83%).

Table 6 shows 74.7% women were counselled by ASHA about planning of the delivery. Women who availed ambulance services to visit health facility were 45.3% and remaining 46% used other mode of transportation like personal vehicle or borrowed/rented vehicle or public transport.

Most of the women delivered in a health centre with majority delivered in the government centre (46.3%) followed by 45% women delivered in Private health centre. Still 8.7% women delivered at home. Out of 300 women, 71% women delivery was attended by a doctor followed 25 by ANM, nurses or ASHA and 4% by an untrained birth attendant.

In the study majority of the women were of second para (41.3%) followed by 33.3% women were multipara. Only 25.3% women were primi (Table 3). In a community-based cross-sectional study done in the rural area of Pondicherry by Vijayalakshmi *et al.* (2014) showed that majority of the participants were primi (42.6%) followed by 40.4% were of second para. Only 17% participants were multi-para (more than three) [4-5]. Most of the women (74.3%) had done antenatal registration during the first trimester of the last pregnancy and remaining 25.7% women did antenatal registration after first trimester. Similarly as per NFHS-4, in rural area women age 15-49 who had a live birth in the five years, 76.1% of them registered the last pregnancy during the first trimester and 23.5% later and 0.3% did not know [6-8].

Only 50.3% of the women had done four or more antenatal check-ups and 41.3% women had less than four antenatal visits. Remaining 8.3% women did not have any antenatal visit (Table 4). Similarly a study shows that around 58.5% of the women had four antenatal check-ups done during pregnancy and for 41.5% four ANC visits were not done. 92% of women received tetanus toxoid injection during last pregnancy. Similarly, a study shows 91.5% women received TT injection during last pregnancy [8-10].

Majority of the women received iron and folic acid tablets (79.3%). Similarly, in the study all the participating received IFA but around 72.8% women consumed IFA for three months or more [10-13]. Majority of the women received supplementary food from their nearest Anganwadi (83%). As per NFHS-4, 57.5% women received supplementary food during pregnancy anganwadi centre. In the present study, 74.7% women were counselled by ASHA about planning of the delivery (Table 5). 76.2% women planned place of the delivery for the birth [14-15].

**Table 1: Distribution of women according to the demographic variables. (n=300)**

Sl. No.	Demographic variables	Number (%)
1	<b>Age (in years)</b>	
	< 20	13 (4.3)
	21-25	136 (45.3)
	26-30	113 (37.7)
	>30	38 (12.7)
2	<b>Literacy Status</b>	
	Illiterate	13 (4.3)
	Primary	25 (8.3)
	Middle	137 (45.7)
	High School	13 (4.33)
	Intermediate	75 (25.0)
	Graduate	37 (12.3)
3	<b>Occupation</b>	
	Homemaker	287 (95.7)
	Labourer	7 (2.3)
	Farmer	0
	Business	0
	Semi-Skilled	0
	Skilled	0
	Semi-profession or profession	6 (2.0)

**Table 2: Distribution of the women according to social variables. (n=300)**

Sl. No.	Social variables	Number	Percentage (%)
1	<b>Religion</b>		
	Hindu	224	74.7
	Muslim	76	25.3
2	<b>Caste</b>		
	General	63	21.0
	O.B.C.	186	62.0
	SC/ST	51	17.0
3	<b>Type of family</b>		
	Nuclear	99	33.0
	Joint	164	54.7
	3 generation	37	12.3
4	<b>Social Class</b>		
	II	88	29.3
	III	49	16.3
	IV	112	37.3
	V	51	17.0
	Total	300	

**Table 3: Distribution of the women according to the parity and antenatal registration during first trimester of the last pregnancy. (n=300)**

Sl. No.	Particulars	Number	Percentage (%)
1	<b>Parity</b>		
	Primi	76	25.3
	Second	124	41.3
	Three or more	100	33.3
2	<b>Antenatal registration</b>		
	Registered	223	74.3
	Not registered	77	25.7

**Table 4: Utilization of the antenatal services by the women. (n=300)**

Sl. No.	Antenatal services	Number	Percentage (%)
1	<b>Number of antenatal visits to any health centre</b>		
	4 or more	151	50.3
	Less than 4	124	41.3
	None	25	8.3
2	<b>Injection Tetanus toxoid</b>		
	Taken at least one TT injection	276	92.0
	Had none	24	8.0
3	<b>IFA tablets</b>		
	Taken IFA tablets	238	79.3
	Had not taken IFA tablets	62	20.7
4	<b>Supplementary food received</b>		
	Received packets of supplementary food	249	83.0
	Not received	51	17.0

**Table 5: Distribution of the women according practices regarding delivery of their children. (n=300)**

Sl. No.	Delivery practices	Number	Percentage (%)
1	<b>ASHA helped in the planning for the delivery</b>		
	Yes	224	74.7
	No	76	25.3
2	<b>Mode of transport</b>		
	Ambulance	136	45.3
	Others	138	46.0
	NA (Home delivery)	26	8.7
3	<b>Place of the delivery</b>		
	Government health centre	139	46.3
	Private nursing home or hospital	135	45.0
	Home	26	8.7
4	<b>Birth attendant</b>		
	Doctor	213	71.0
	ANM/ASHA/Nurse	75	25.0
	Dai (untrained birth attendant)	12	4.0

**CONCLUSION**

Women who availed ambulance services to visit health facility were 45.3% and remaining 46% used other mode of transportation like personal vehicle or borrowed/rented vehicle or public transport. Most

of the (91.3%) women delivered in a hospital while 8.7% were delivered at home. Similarly, in the study done by Qazi *et al.* (2019) that 95% of babies were delivered at hospital and only 5% home delivered [10]. Out of 300 women, 213 (71%) women delivery was attended by a doctor followed 75 (25%) by ANM, nurses or ASHA and 12 (4%) by an untrained birth attendant. As per NFHS-4, in rural area the majority of births were attended by doctors (49.5%), followed by ANMs, nurses, midwives, LHV (27.7%), and dais (TBAs) (12.9%).

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