



UTILIZATION OF MATERNAL HEALTH SERVICES IN RURAL AREA OF DISTRICT GHAZIABAD

Vimal Arya

Assistant professor, department of community medicine, MLBMC, Jhansi Corresponding author

Kumar Gunjan

Surveillance Medical officer, NPSP WHO, Badaiyu (U.P.), India

ABSTRACT **Introduction-** Maternal and Reproductive Health Services in health systems constitutes a large range of curative and preventive health services. This study was done to visualize the utilization of maternal health services.

Material and Methods- It was a community based cross sectional study conducted for a period of 1 year. Multistage sampling was used and the sample size was found to be 433 females. A semi-structured questionnaire was used to collect the relevant data. Analysis in form of proportion was done using SPSS software.

Results- Maximum number of mothers (45.96%) were in the age group of 20-24 years. (76.01%) received 3 or, more times ANC, (17.05%) received 2 times ANC. 100% mothers registered under ANC were received TT injection. Among which (97%) mothers received booster dose of TT injection, (68.21%) received 2 doses and (3.76%) received only one dose of TT.

Conclusion- The literacy of women is the key to improve antenatal care of pregnant women hence efforts should be made to have information, education and communication activities (IEC) targeted to educate the mothers.

KEYWORDS : .maternal, health services, rural area.

Introduction- Maternal and Reproductive Health Services in health systems constitutes a large range of curative and preventative health services of particular importance to the health of women of reproductive age. It also refers to population-based services such as behavior change and health communication. The term "Maternal and Child Health" is widely used by many national and international organizations for the set of services related to maternity and basic childhood health care such as deliveries and immunizations. Maternal health encompasses all activities such as Antenatal Care, Delivery Care, Postnatal Care and Maternal Complications around Delivery catered and provided to a woman of their reproductive age (from 15 to 49 years). On the other hand, Child Health includes all medical assistance such as Childhood Vaccination Coverage, Child Illness and Treatment and Childhood Mortality to right after birth [1]. Global observations show that MMR ranges from 8 per 100,000 live births in developed countries to 760 per 100,000 live births in African countries in year 2011 [2]. According to United Nations MDG report 2012, the current Maternal Mortality Rate (MMR) of India is 212 per one lakh live births, whereas the country's MDG in this respect is 109 per one lakh live births by 2015 whereas in Uttar Pradesh current MMR is 359 per one lakh live births. India has done better on infant health, and is well within reaching the MDG of reducing IMR to 42 per 1000 live births. As per the latest estimates, India's IMR stands at 47 [3]. Various studies and data published regarding maternal and child health services were carried out in urban and rural areas including Uttar Pradesh but the concept of community based approach in rural areas is quite recent. Factors related to place of residence and socioeconomic status may account for variation in utilization pattern of maternal and child care services. Hence we need our own community based information. Thus keeping in view of all these facts in mind and realizing the need for such a community based data regarding utilization of maternal and child health services, the present study on utilization of maternal and child health has been undertaken in rural areas of Ghaziabad district, Uttar Pradesh.

Material and Methods- It was a Community based cross sectional study carried out in community development Block of Dist. Ghaziabad for a period of 1 year from August 2015- July 2016. Mean prevalence (P) = 48.1%. The sample size is calculated by the formula $(n = Z.Z.P.Q/L2)$ Sample Size for Maternal Health Services $(n) = 4.48.1.51.9/4.8.4.8 = 433.33$. Hence sample size for maternal health services = 433

Multistage sampling technique was used to cover the sample size for present study:

Stage 1. For the study, Dasana Community development block of Ghaziabad was selected by simple random sampling method.

Stage 2. Out of selected Community development block Dasana, 4

subcentres were selected by simple random method Bhauwapur, Duhai, Attor, Bomota sub centers was selected by simple random sampling method.

Stage 3. Under the selected sub centers, village Shahpur, Bijnauli, Attor and Bomota was selected by simple random sampling method and number of respondents were equally divided in these four villages, households in that villages were studied till the desired sample size is achieved.

House to house visits were made till respondents could be found in 4 villages in 4 sub centers. Interview was conducted at the house of the respondents. Being cross sectional study, only one visit was made to each individual mother. A pre-designed and pretested proforma was used during the data collection. In the first part of the proforma socio-demographic data were collected. Both bivariate and multivariate analyses have been used. Data was coded and correlated tables were prepared and data analyzed using SPSS (version 16.0) package.

Results and Observations-

Table 1 - Age Wise Distribution of Mothers.

Age group (in years)	(n= 433)	
	Number	%
<20	7	1.61
20-24	199	45.96
25-29	159	36.72
30-34	59	13.63
≥35	9	2.08
Total	433	100

he above table shows that maximum number of mothers (45.96%) were in the age group of 20-24 years followed by (36.72%) in the age group of 25-29 years.

Table 2- Distribution of Mothers according to ANC Received in the last Pregnancy

Total number of ANC Received	(n=346)	
	Number	%
Only 1	24	6.94
Only 2	59	17.05
≥3	263	76.01
Total	346	100

The table shows that (79.91%) mothers were registered for antenatal check up in their last pregnancy. Among those who registered for ANC (56.07%) were registered in first trimester, (35.26%) in second

trimester. (76.01%) received 3 or, more times ANC, (17.05%) received 2 times ANC.

Table 3- Distribution of Mothers According to receiving of Tetanus Toxoid

Tetanus toxoid Received	(n=346)	
	Number	%
Yes	346	100
No	00	00
Total	00	100

If received Tetanus Toxoid, how many doses:

Doses of Tetanus toxoid Received	(n=346)	
	Number	%
1	13	3.76
2	236	68.21
Booster	97	28.03

Table shows that all (100%) mothers registered under ANC were received TT injection. Among which (97%) mothers received booster dose of TT injection, (68.21%) received 2 doses and (3.76%) received only one dose of TT.

Table 4- Distribution of Mothers according to receiving of IFA tablets.

IFA tablets Received	(n=346)	
	Number	%
Yes	337	97.40
No	9	2.6
Total	346	100

If received IFA tablet than for:

IFA tablets were taken for	(n=337)	
	No.	%
≥100 days	68	20.18
50-100days	153	45.40
<50days	116	34.42
Total	337	100

Regarding receiving of IFA tablets (97.40%) mothers received Iron-folic acid tablets. (20.18%) took IFA tablets for 100 days or more, (45.40%) took for 50-100 IFA tablets while (34.42 %) took for less than 50 days or more.

Table5- Distribution of Mothers According to advice given during last pregnancy

Advice given	(n=346)	
	Number	%
Proper nutrition	307	88.73
Care of baby	319	92.20
About danger sign of pregnancy	278	80.35
About institutional delivery	331	95.66
About expected date of delivery	346	100

From the study it was found that (100%) mothers were told about expected date of delivery, (95.66%) advised for institutional delivery, (92.20%) for care of baby, (88.73%) were told about proper nutrition, (80.35%) told about danger sign of pregnancy.

Discussion- Maximum number of mothers 46.11 % were in the age group of 20-24 years in rural area group whereas majority were 42.78% seen in the age group of 25-29 years in urban slum. Paras Agarwal et. al (2004) found in their study that 44% mothers were 24-29 years of age group, 35.5% belongs to 18- 23 years and 21% belongs to 30 years or above who availed antenatal care [4]. Afrin Sagir et. al (2006) found in their study that 64.9% mothers were in the age group of 21-30 years ,27% were 31-40 years, 5.4% were less than 20 years and 2.7% were above 40 years [5]. Zulfia khan et. al (2007) observed in their study that 84.8% mothers belong 20- 30 years of age group, whereas 15.2% mothers belong 31-40 years of age group. Distribution of Mothers according to ANC received in the last pregnancy. In the rural area (63.09%) of mothers received antenatal check up whereas in urban slum group only (36.90%) mothers received antenatal check up in the last pregnancy [6].An ICMR task force study (1996-97)on determinants of ANC utilization in rural areas of India seen that 73.9% had atleast one antenatal contact with ANM or had visited a

government health facility during pregnancy for antenatal services. In Assam, According to NFHS –3(2005-06) shows that mothers received antenatal check up for only 36.3%. In urban it was 68.9% and for rural it was 32.3% [7]. An assessment of Janani Suraksha Yojana (JSY) in West Bengal(2007) seen that most (98 percent) of the women had antenatal check-ups done for 3 times or more The present finding is much lower than the above mentioned studies. In the present study it was found that in rural area regarding TT immunization all the mothers registered under ANC were received TT injection[8]. But in urban slum only 74.19% mothers received TT injection. P.K. Mony et. al (2001) in their study in slums of Vellore town, Southern India found that completed TT taken by 94.1% mother whereas 5.9% did not take TT which is almost similar to present study[9]. Afrin Sagir et al (2006) in their study found that majority of the mothers were received adequate doses of Tetanus Toxoid injections [5].

Conclusion- Out of 180 mother's majority of mothers (159) (88.33%) received antenatal care in their last pregnancy. Utilization of three or more antenatal check up was seen to be lower (16.13%). Factors for not taking ANC were found that due to household work and unavailability of money was the main cause. The literacy of women is the key to improve antenatal care of pregnant women hence efforts should be made to have information, education and communication activities (IEC) targeted to educate the mothers. Poverty alleviation and raising the socio-economic status of the women and families need to be strengthened so that health of women receives its due importance.

Conflict of interest- none declared

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