

## Utilization of Antenatal Services by Pregnant Women Attending Mamta Divas in Rural Areas of Bhavnagar District of Gujarat

Dr. Vibha Gosalia\*, Dr. Harsha Solanki \*, Dr. Sanat Rathod\*\*, Dr. Mehul Parmar\*\*\*, Dr. M.P. Singh\*\*\*\*

\* Assistant Professor, \*\*Tutor, Department of Preventive & Social Medicine, \*\*\*Assistant Professor, Department of Obs.& Gynecology, \*\*\*\*Professor & Head, Department of Preventive & Social Medicine, Government Medical College, Bhavnagar

**Abstracts:** Background: Mamta divas is an important health program implemented in India to reduce maternal and infant mortality rate. According to WHO, most maternal deaths are preventable if women have access to basic medical care during pregnancy, delivery and post partum period. Objectives: To assess utilization of Antenatal services by pregnant women attending Mamta Divas in rural areas of Bhavnagar district, Gujarat. Methods: A community based, cross-sectional study was carried out in 22 sessions (Mamta divas) selected by simple random sampling from 11 Talukas of Bhavnagar district & 210 pregnant women interviewed by pre tested questionnaires. Results: Most of the pregnant women were registered in first trimester (61.4%). Only 63% and 65.3% of them received two doses of tetanus toxoid & Iron folic acid supplement respectively. During their visit, 23.8% of pregnant women were counselled for nutrition, 25.2% for danger sign of pregnancy and 20.5% for institutional deliveries. Conclusion: Health education of all pregnant women should be done at individual level by female health worker. All pregnant women should be counselled for institutional deliveries & all components of Antenatal care. More emphasis should be put on identifying the danger signs, examining the abdomen, & Hb and urine examination during visit at Mamta divas. [ Gosalia V et al NJIRM 2012; 3(5) : 74-76]

**Key words:** Utilization, Antenatal services, pregnant women, Mamta divas

**Author for correspondence:** Dr. Vibha Gosalia, Assistant Professor, Department of Preventive & Social Medicine, Government Medical College, Bhavnagar-364001. E mail: vibhadvyas@gmail.com

**Introduction:** Maternal health is important to communities, families & the nation due to its profound effect on health of women, immediate survival of the newborn & long term well-being of children particularly girls. Every year in India, 28 million pregnancies take place with 67,000 maternal deaths<sup>1</sup>. Tetanus and anaemia claim a large number of maternal deaths because of very little or no care during antenatal & postnatal period. Majority of maternal deaths (80%) can be prevented through effective and timely maternal health care<sup>2</sup>.

Antenatal care(ANC) is an important determinant of high maternal mortality & one of the basic components of Reproductive & Child Health Program on which the life of mothers and babies depends<sup>3</sup>. The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and a healthy baby<sup>4</sup>. It includes routine follow up provided to all pregnant women at primary care level from screening to intensive life support during pregnancy and up to delivery<sup>5</sup>, which is provided by the government through primary health centre but most of these services are not utilized by the women due to lack of awareness or access to health care services. So to ensure proper

utilization of these services & to create awareness, proper communication of women at their area is needed that can be fulfilled by Mamta divas which is the first point of contact for antenatal mothers to health facility providing all basic components of ANC at community level & organized once a month in every Anganwadi/sub centre<sup>6</sup>. Therefore present study was carried out to assess the utilization of antenatal services by pregnant women attending Mamta divas in rural areas of Bhavnagar district.

**Material and Methods:** We have carried out a community based cross-sectional study during Routine Immunization Monitoring in all (11) Talukas of Bhavnagar district over a period of one year for which schedule of Mamta divas was taken from Chief District Health officer. We have selected two sessions/sites in each Taluka by simple random sampling. Thus total 22 sessions in different villages (sub centre/Anganwadi) were observed on Wednesdays (Fixed Immunization day). All pregnant women (total 210 women) attending Mamta divas were interviewed by structured pretested questionnaire for various antenatal components such as registration, antenatal examination, investigations &

counselling. Data were analyzed & compared with various studies done previously and presented in the form of tables.

**Results & Discussion:** In the present study, total 210 pregnant women were interviewed out of which 103(49%) were between 20-24 years of age & 138(66%) of women were illiterate. Most of the women were housewives 96(45.7%) & 75(35.7%) of women were employed as unskilled work which includes labor work, farming, brick making. Majority of women were belonging to lower socio-economic group (92.8%) according to revised B.G. Prasad's classification [Table 1].

**Table 1: Sociodemographic Profile of Pregnant Women**

Sociodemographic profile	Frequency (N=210)	%
<b>Age of women</b>		
15-19	25	11.9
20-24	103	49.0
25-30	67	31.9
30 and above	15	7.2
<b>Education of women</b>		
Illiterate	138	65.7
Up to primary	58	27.6
Above primary	14	6.7
<b>Occupation of women</b>		
Housewives	96	45.7
Skilled work	39	18.6
Unskilled work	75	35.7
<b>Education of husband</b>		
Illiterate	108	51.4
Up to primary	69	32.9
Above primary	33	15.7
<b>Socioeconomic status</b>		
Class I	5	2.4
Class II	10	4.8
Class III	35	16.7
Class IV	71	33.8
Class V	89	42.4

All pregnant women had been asked whether they received antenatal care during their visit [Table 2]. The timing of first antenatal care is imperative for the mother's health and for the foetus & it should be done as early as possible in the first trimester. In this study most of them (61.4%) registered in 1<sup>st</sup>

trimester which is higher than National Family Health Survey-III (NFHS III) & District Level Household Survey (DLHS) (2007-08) data of Gujarat<sup>7,8</sup>.

**Table 2: Components of Antenatal Care**

Components of ANC	Frequency (N=210)	%
Early registration	129	61.4
Weight measurement	198	94.3
BP taken	198	94.3
HB estimation	102	48.6
Urine examination	58	27.6
Antenatal examination (abdominal)	58	27.6
Nutritional / dietary advices	50	23.8
Counselling for danger signs	53	25.2
Counselling for institutional deliveries	43	20.8
Advice for next antenatal sessions	190	90.8
Full course of TT received (2 dose) (N=176*)	111	63.0
Full course IFA received (100 tablets) (N=176*)	115	65.3

\* 34 women were excluded as they were in 1<sup>st</sup> trimester

Majority (94.3%) of pregnant women were undergone for BP and weight measurement while abdominal examination had been done in only 27.6%, Hb estimation in 48.6% and urine examination done only in 27.6% of cases. If we compare it with NFHS III data, 72% pregnant women had an abdominal examination, 64% had their blood pressure checked, and 63% had their weight measured. Blood and urine tests were conducted for 60% and 58% of women respectively which is higher as compared to our study which might be due lack of availability of logistics & trained staff at session sites. During their contacts with health workers, pregnant women are expected to be told about danger signs of pregnancy, diet and for institutional delivery which is very less in our study as compared to study done by AK Ravishankar<sup>9</sup>. This may be due to more workload during sessions, so that health worker could not give enough time for counseling.

According to NFHS III data 76% of pregnant women received two doses of TT which is higher than in our study (63%) while IFA supplementation is 65% which is almost similar to our study (65.3%)<sup>7</sup>. The reason in difference could be due to regional variation and availability & accessibility of the ANC services to beneficiaries. Nutritional deficiencies, particularly Iron deficiency anemia are often exacerbated during pregnancy, because of the additional nutrient requirements of foetal growth. All the pregnant women should be motivated by health workers to consume at least 100 tablets of iron and folic acid during pregnancy.

**Table 3: Knowledge of pregnant women about Mamta Divas**

	Frequency (N=210)	%
<b>Heard about Mamta divas</b>	180	85.7
<b>Source of Information</b>		
FHW	102	48.5
AWW	30	14.3
ASHA	50	23.8
Relatives	10	4.8
Banner	12	5.7
Friends	6	2.8
<b>Having Mamta card</b>	195	92.9
<b>Reason for coming at Mamta divas</b>		
Within village	98	46.7
FHW/ASHA told	64	30.5
Wt /BP measurement	25	11.9
All facilities are available	11	5.2
Tablets are given	10	4.8
Came along with child	6	2.9

The effectiveness of ANC depends on the utilization of services available at Mamta divas. Most of them were aware about the Mamta divas (85.7%) and information regarding Mamta divas received mainly from FHW [Table 3]. Reason for attending session in majority of cases was nearby location of session sites in the village (46.7%).

**Conclusion :** The present study concluded that awareness and accessibility of facilities at Mamta divas has significant influence on the health seeking behaviour of women. Health workers in

the rural areas are playing a pivotal role in providing ANC, so training of these field workers should be done for effective implementation of Mamta divas & we have to give more importance on counselling part of all aspect of ANC during training of field workers such as dietary advices, recognition of danger signs in pregnancy and motivation for institutional deliveries. We should also try to improve logistic available at all remote places, so important components of ANC (like weight/BP measurement, urine examination, Hb estimation, IFA tablets) are not avoided.

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