

## INFLUENCE OF M.C.H. CARE ON RURAL OBSTETRICS

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### SUMMARY

The present study attempts to assess the impact of various maternal care services rendered through primary Health Centres, on expectant mothers from rural areas. Case records of 215 mothers admitted in Mandur Hospital for delivery were analysed. Parameters like age and parity of expectant mothers, Tetanus Toxide coverage, Haemoglobin levels, pregnancy outcome, range of birth weight, maternal mortality etc. were studied.

### Introduction

It is well known fact that women during reproductive period have to undergo great stress and strain and require special care. Having realised this problem various programmes like regular antenatal care services, expanded immunisation programmes, supplementary nutrition, health education, family welfare programme etc. are made available to the expectant mothers even in the remote villages through the network of primary health centres and its attached subcentres. If these programmes are strictly followed then there can be a remarkable improvement in mother and child health so also a fall in the infant mortality and maternal mortality.

The present study attempts to assess the impact of these services on the expectant mothers from rural areas.

### Material and Methods

The study was conducted at Rural Health cum Training centre Mandur of

the Dept. of Preventive & Social Medicine of Goa Medical College. The antenatal mothers were provided with institutional care and domicillary care. Three to four visits of the mothers to antenatal clinic were ensured. During these visits a detailed obstetrical examination of the mother was done by the specialist from Post Partum Programme. Routine investigations like blood, urine and stools were done. The mothers given tetanus toxoid immunisation and prenatal advice. Domicillary visits were made by MCH staff to follow-up the expectant mothers at home, distribute folifer tablets, motivate them to undergo delivery in hospital attached to health centre and practice family planning.

The study is based on the analysis of case records of 215 mothers admitted in Mandur Hospital for delivery. The following parameters were used for evaluation of services.

1. Age, parity of expectant mothers.
2. Tetanus toxoid immunisation of mothers.
3. Haemoglobin level of antenatal cases.

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4. Pregnancy outcome.
5. Range of Birth weight.
6. Maternal Mortality.

*Observations*

Case records of 215 mothers who were receiving antenatal care at Mandur Hospital were analysed, the following observations were made.

Majority of the mothers (92.5%) that get admitted at Mandur Hospital for delivery were in the age group of 21-35 years; however, the youngest and the oldest were of 17 and 40 years of age respectively. Only 3.72% cases were below 20 years of age and there were none above the age of 40 years.

Maximum number of cases 171 (79.5%) were Hindus while 44 (20.47%) were Catholics 64 (29.8%) cases were illiterate and 151 (70.2%) were educated. Most of the cases (70.7%) were housewives while 59 (27.4%) were labourers and 4 (1.9%) were holding an office job, 150 (69.7%) came from low socioeconomic group while 65 (30.3%) were from upper socio-economic group. 127 (59.1%) cases had unitary type of family while 88 (40.9%) belonged to joint family.

From Table I it is seen that the

mothers were from primipara and first gravida to 8th para and 8th gravida. The relationship between the parity and gravidity status showed that mothers had higher gravidity than parity status indicating the loss of conception. The loss of conception up to III-rd gravida status was 14 (10.4%) out of 134 mothers. From IV to VIII gravida the same was 17 (20.9%) out of 81 cases. The loss of conception continuously increased as gravidity increased with maximum of 50% in VIIth gravida. Excluding 30 primiparae and primigravidae the average number of abortion per pregnant women was 0.15.

The study showed that of the 46 primigravidae majority that is 38 (82.6%) were in the age group of 21-30 years, 7 (15.2%) were below 20 years and only one case (2.2%) was an elderly primi. Most of the multigravidas were in the age group of 26-30 years and grand-multiples were in the age group of 31-40 years.

Table II shows that 105 (48.8%) mothers had normal haemoglobin (Hb 10 gm%) while 92 (42.8%) suffered from mild to moderate anaemia (Hb between 8-9 gm%). There were no cases of severe anaemia (Hb < 9 gm%). In 18 (8.4%) cases no haemoglobin report was available.

TABLE I  
*Parity and Gravidity Status of Mothers*

Parity Status	Gravida Status								Total
	1	2	3	4	5	6	7	8	
1	39	7	—	—	—	—	—	—	46
2	—	45	7	—	—	—	—	—	52
3	—	—	36	8	3	—	—	—	47
4	—	—	—	29	2	1	—	—	32
5	—	—	—	—	20	—	1	—	21
6	—	—	—	—	—	11	2	—	13
7	—	—	—	—	—	—	3	—	3
8	—	—	—	—	—	—	—	1	1
	39	52	43	37	25	12	6	1	215



TABLE II  
Expectant Mothers Haemoglobin Level

Haemoglobin	No. of Mothers	Percentage
8 gms.	Nil	—
8-99 gms.	92	42.8
10 gms.	105	48.8
Not known	18	8.4

TABLE III  
Pregnancy Outcome

Pregnancy Outcome	No. of Mothers	Percentage
F.T.N.D.	204	94.93
L.S.CS.	1	0.46
Breech	2	0.92
Twins	1	0.46
Forceps	1	0.46
Vacuum extraction	1	0.46
Abortion	2	0.92
Still birth	3	1.39
Total	215	100.00

It is seen from Table III that out of 215 expectant mothers 204 (94.93%) had full term normal delivery and 6 (2.79%) landed into complicated outcome like lower segment caesarean, breech, forceps, vacuum extraction, twins etc. Three cases (1.39%) had stillbirth and two (0.92%) had abortions.

Out of 212 births, 118 (55.66%) were males and 94 (44.34%) were females. The birth weight was normal in 160 (75.45%) cases while 52 (24.55%) babies had low birth weight. The average birth weight was 2661 gms. for males and 2567 gms for females. The average birth weight of the infants irrespective of the sex was 2619 gms.

#### Discussion

Having realised the great stress and strain that woman has to undergo during

her reproductive period, various types of maternal care services are provided to her through primary health centres. To what extent these services have reached the target population? What has been the impact of these services? The answers to those questions can be obtained by periodically reviewing the type of antenatal care services available and their impact on expectant mothers and such data would be the guidelines for further improvement.

The present study revealed the following.

1. Majority of the mothers (92.65%) who sought admission for delivery at Mandur Hospital were in the age group of 21-35 years. The percentage of high risk cases like teenager pregnancy or elderly primi was very small. Rameshchandra *et al* (1970) also observed the

préponderance of (82.2%) the mothers in the age group of 20.32.

2. The relationship between the parity and gravida status showed that mothers had higher gravida status than parity status indicating the loss of conception. In our study the loss of conception upto IIIrd gravida was 10.4% the loss of conception increased with the gravidity with a maximum of 50% in the VIIth gravida. Rameshchandra *et al* (1970) reported a loss of conception of 5.5% upto IIIrd gravida. The maximum loss in their study was 43.6% upto VIIth gravida.

3. Tetanus toxoid coverage of antenatal mothers was quite high (73.5%) and 10.7% of the cases did not receive any immunisation. Surinder Singh *et al* (1986) reported a coverage of 75.7% while Srinivas *et al* (1983) reported a coverage of as high as 83.4%.

4. Anaemia in pregnancy is an important nutritional and public Health problem. It is closely associated with serious complications during antenatal period and also a major cause for maternal mortality. Anaemia is a very important cause of low birth weight babies with high perinatal and infant mortality. In our study 48.8% of mothers had normal haemoglobin while 42.2% had mild to moderate anaemia. The cases of severe anaemia were absent. Gupta *et al* (1983) reported a prevalence of anaemia to be as high as 90.6% of which 7.6% had severe anaemia.

The probable reason for absence of

severe anaemia in our study is regular distribution of iron and folic acid tablets to the expectant mothers and their domiciliary follow up by MCH staff.

75.47% had normal birth weight (BW 2500 gms) while 24.53% had low birth weight (BW 2500 gms). The average birth weight was 2619 gms. Sholapurkar (1986) reported the incidence of low birth weight babies as 30.98%.

#### Conclusion

The extent of coverage and utilisation of antenatal care services by rural women of this area is very encouraging and the impact of this is reflecting by absence of any maternal death, absence of neonatal tetanus, low infant mortality (17.5%) and small number of low birth weight babies.

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