

A STUDY OF ANTENATAL SERVICES IN RURAL AREA OF DISTRICT BATHINDA OF PUNJAB

By

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SUMMARY

A survey regarding the antenatal services in rural area of District Bathinda of Punjab State was carried out in its 6 villages, selected on stratified random sampling basis. In a total population of 6310,137 (2.17%) pregnant mothers were found. Examination and detailed history of 124 mothers was done. 6.45% of the mothers received Iron and folic acid tablets and 89.52% had not received any of the two doses of Tetanus toxoid. 90.48% of the total mothers did not receive any antenatal care. Only 2 mothers and that too from higher caste received antenatal care from Medical Officer and only 3 mothers out of under privileged society received the same from a Govt. institution. Only one eligible mother was receiving supplementary nutrition from the Anganwadi and only 6 (4.84%) mothers were imparted nutrition and Health Education.

Introduction

The primary aim of antenatal care, is to achieve at the end of pregnancy, a healthy mother and a healthy baby. Ideally this care should begin, soon after conception and continue throughout pregnancy. The quality of care is more important than the quantity. But it is difficult to assess the quality and therefore assessment of quantity is resorted to in most of the cases. Philip *et al* (1970) in a study at Trivandrum found that among the mothers who gave birth to premature babies, 26.6% had 3 or more than 3 antenatal checkups 58.8% less than 3 ante-

natal checkups and the rest 14.6% no antenatal checkup, as based on the standards set by W.H.O. Expert committee (1952) on maternity care. They concluded that antenatal care is directly related to birth weight of babies. Harrison (1979) in a study of 12,000 deliveries, in Nigeria, found that maternal mortality was reduced fifteen fold, perinatal mortality was six times less and the incidence of low birth weight was reduced three fold in mothers who received antenatal care as compared to those who did not.

Material and Methods

The present study was conducted in Budhlada Block of district Bathinda of Punjab State in Dec., 1986. This block

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was selected by the Central Technical Committee under I.C.D.S. scheme for the purpose of survey. From all the villages of the block, 6 Anganwadies were selected in 6 different villages, on stratified random sampling basis. The block was divided into 3 geographical sectors. Two lists of Anganwadi villages were prepared, one having a health sub centre and the other without any sub centre. From these two lists one village each was selected, in three different geographical areas, on random sampling basis. The survey was carried out by house to house visit by the authors. Information was collected on pretested proformas by interviewing the head of the family or other senior member of the family, by examining the pregnant mother and recording the detailed history. The results were then analysed and statistically tested.

Observations and Discussion

Out of total population of 6310, in 6

villages, 137 (2.17%) were found to be pregnant mothers during survey and out of this 13 could not be contacted. The examination and detailed history could only be taken in 124 mothers as shown in Table I.

The I.C.D.S. information document (1983) states that there should be 2400 expectant women in 1 lac population and accordingly the number should have been 151. The reasons for under reporting might be due to peculiar socio-cultural milieu of rural sector.

In first trimester of pregnancy none received Iron and Folic acid tablets, in 2nd trimester only one mother received while in 3rd trimester 7 mothers (13.72%) received the same, thus 93.55% of the total mothers did not receive iron and folic acid tablets.

Table III shows that coverage of Tetanus toxoid immunization was also very poor in the pregnant mothers. In the first trimester 93.33%, in 2nd trimester 96.56%

TABLE I
No. of Pregnant Women in Selected Villages

Name of Village	Population	Inter-viewed	Not inter-viewed	Total	Pregnancy rate %ge
Hasanpur	1018	20	2	22	2.16
Jalwera	999	20	2	22	2.20
Gurney Kalan	1020	22	3	25	2.45
Kishangarh	1329	28	2	30	2.26
Piplian	840	15	2	17	2.02
Bareh	1104	19	2	21	1.90
Total	6310	124	13	137	2.17

TABLE II
Distribution of Pregnant Women by Trimester of Pregnancy and Receipt of Iron and Folic Acid Tablets

Trimester pregnancy	Received	Not received	Total No. of pregnant women
First trimester	—	15 (1100%)	15
Second trimester	1 (1.72%)	57. (98.28%)	58
Third trimester	7 (13.72%)	44 (86.28%)	51
Total	8 (6.45%)	116 (99.55%)	124

TABLE III
Distribution of Pregnant Women by Trimester of Pregnancy and Receipt of Tetanus Toxoid Vaccination

Trimester of Pregnancy	No. of pregnant women receiving T.T. vaccination				Total No. of pregnant women
	Not received	Received			
		1st dose	2nd dose	Any of the two doses	
First trimester	14 (93.33%)	1	—	1 (6.67%)	15
Second „	56 (96.56%)	2	—	2 (3.44%)	58
Third „	41 (90.39%)	1	9	10 (19.61%)	51
Total	111 (89.52%)	4	9	13 (10.48%)	124

P < 0.05

and in 3rd trimester 80.39% of pregnant mothers did not have tetanus toxoid vaccination. Thus 89.52% of mothers were unprotected, while 13 mothers (10.48%) received one or both of the two doses of tetanus toxoid vaccination. It is expected that 109 women who were in 2nd (58) and 3rd (81) trimesters, should have been immunized. The all India figures as reported in Health information of India 1986, show that the tetanus toxoid achievement is 72.45% while the figures in present study who received 2 doses of t-tanus toxoid came to be 7.25%.

Table IV shows the distribution of pregnant mothers of different caste groups in relation to the receipt of ante-

natal care and from whom they were receiving it, 90.32% of the total mothers did not receive antenatal care at all. Only 2.38% of the higher caste mothers received antenatal care from the medical officers, while none received the same out of scheduled castes and backward community. About the same proportion of pregnant mothers i.e. 7.14%, 8% and 6.67% from higher caste, scheduled caste and backward community respectively received antenatal care from LHV/ANMs and Trained Dais. The results were significant. Vibha *et al* in 1982 observed that utilization of organised MCH services through Primary Health Centres is only minimal. W.H.O. has renewed emphasis on training

TABLE IV
Distribution of Pregnant Women by Caste Group and Source of Antenatal Care (Person)

Source of antenatal (person from whom received)	No. of pregnant women			Total
	Higher caste	Scheduled caste	Backward community	
M.O.	2 (2.38%)	—	—	2 (1.61%)
Village practitioner	—	—	1 (6.67%)	1 (0.81%)
L.H.V./A.N.M.	5 (5.95%)	1 (4%)	1 (6.67%)	7 (5.65%)
Trained Dai	1 (1.19%)	1 (4%)	—	2 (1.61%)
Sub total	8 (9.52%)	2 (8%)	2 (13.33%)	12 (9.68%)
Not received	76 (90.48%)	23 (92%)	13 (86.67%)	112 (90.32%)
Grand total	84	25	15	124

P < 0.05.

and utilization of traditional birth attendants for prenatal care.

Table V shows the distribution of pregnant mothers of different caste groups in relation to the receipt of antenatal care and from where they were receiving it. From the Higher caste group 3.57% and 1.19% received antenatal care from Govt. hospitals and Private hospitals respectively, while none received the same from these institutions out of scheduled castes and backward community. 3.57% of higher castes and about the same 4% from scheduled caste group received the antenatal care from the sub-centre, while 13.33% of mothers of backward community received the same from this institution. One mother each of higher caste and scheduled caste and none from backward community received

the antenatal care at home. However the results were statistically insignificant.

Table VI shows the distribution of pregnant mothers in relation of receipt of supplementary nutrition under I.C.D.S. scheme. Out of the eligible mothers which included the pregnant mothers of scheduled castes and backward community, only one received the supplementary nutrition and out of non eligible mothers, two received the same.

Table VII shows the distribution of pregnant mothers in relation to receipt of Nutrition education and Health education during pregnancy. Only 3 (4.11%) mothers in I and II trimester and 3 (5.88%) in III trimester of pregnancy received the Nutrition and Health education from the health personnel.

TABLE V
Distribution of Pregnant Women by Caste Group and Source of Antenatal Care (Place)

Source of Antenatal care (place at which received)	No. of pregnant women			Total
	Higher caste	Scheduled caste	Backward community	
Govt. hospital /PHC	3 (3.57%)	—	—	3 (2.42%)
Private hospital	1 (1.19%)	—	—	1 (0.81%)
S.H.C.	3 (3.57%)	1 (4%)	2 (13.33%)	6 (4.84%)
At home	1 (1.19%)	1 (4%)	—	2 (1.61%)
Sub total	8 (9.52%)	2 (8%)	2 (13.33%)	12 (9.68%)
Not received	76 (90.48%)	23 (92%)	13 (86.67%)	112 (90.112%)
Grand total	84	25	15	134

TABLE VI
Distribution of Pregnant Women by Receipt of Supplementary Nutrition

Eligibility	Supplementary Nutrition to pregnant women		
	Received	Not received	Total No. of pregnant women
Eligible	1 (4%)	24 (96%)	25 (20.16%)
Not eligible	2 (2.02%)	97 (97.98%)	99 (78.84%)
Total	3	121	124

TABLE VII

Distribution of Pregnant Women by Receipt of Nutrition Education and Health Education

Nutrition and Health Education	I & II Trimester	III Trimester	Total
Received	3 (4.11%)	3 (5.88%)	6 (4.84%)
Not received	70 (95.89%)	48 (94.12%)	118 (95.16%)
Total	73	51	124

Conclusions

The services for providing antenatal care to the pregnant mothers needs improvement. More emphasis should be laid on antenatal check up, tetanus toxoid immunization, nutrition and health education to pregnant mothers of under privileged class of scheduled castes and backward community.

References

1. Harrison, K. A.: "Better perinatal Health", Nigeria. *Lancet*, ii: 1229-32, 1979.
2. Health Information of India: Central

Bureau of Health intelligence. D.G.H.S., New Delhi, 1986.

3. Integrated child development services: Information document, August 1983, by central Technical Committee on Health and Nutrition, All India Institute of Medical Sciences, New Delhi, 1983.
4. Philip Molly: A study of premature births at S.A.T. Hospital, Trivandrum, *J. Obstet Gynec. India*, 31: 66, 1970.
5. Vibha: "Community based provision of Maternal care in a rural area of Varanasi." *Indian J. of Community Medicine*, Vol. 7, May-August 1982.
6. W.H.O.: "Expert Committee on Maternity care." First report, "A preliminary survey" W.H.O. Technical report series No. 51, 1952.