

Antenatal Care among Tribals: A Study of Chhattisgarh and Jharkhand

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ABSTRACT The study examines the influence of socio-economic and demographic variables (age, social class, religion, marital duration, surviving children etc.) on the utilization of Antenatal care (ANC) services from public or other health professionals among tribals and non-tribals. It also examines the effect of availability and accessibility of Reproductive and Child Health (RCH) services on utilization of ANC services. The data from District Level Household Survey under Reproductive and Child Health Project (DLHS-RCH-II) has been used for analysis. This survey collected data from 8860 currently-married rural women of Chhattisgarh and 10,569 currently-married rural women of Jharkhand during 2002-04. The discussion clearly reveals that in each socio-economic and demographic parameter, the tribal women are lagging behind others in both the states. Distance to the nearest public health facility is not a satisfactory predictor for utilization of public health services because distance to the nearest public health facility does not indicate the relative accessibility of that health facility when there are a number of alternative places to go for the same services. Accessibility is a matter not only of distance but also of the quality of services provided.

INTRODUCTION

The Indian tribes are believed to be the primitive settlers in India. They are usually called as 'adivasis', implying original inhabitants. The constitution of India has documented these tribal groups as Scheduled Tribes (STs). The tribal populations are generally isolated and underdeveloped. Their main problems are poverty, indebtedness, illiteracy, exploitation and unemployment. They constitute approximately 8.2 percent of India's more than one billion population and remain largely a neglected group.

The present study is based on two states having a considerable tribal population- Chhattisgarh and Jharkhand. Chhattisgarh was delineated out of Madhya Pradesh and it came into existence on 1st November, 2000 as the 26th state of the Indian union. The state holds eighth position among all the States and Union Territories (UTs) in term of the proportion of ST population to the total population. Jharkhand, formerly a part of Bihar state, was formed on November 15th, 2000, as the 28th state of the Indian union. Among all states and UTs, Jharkhand holds 6th and 10th ranks in terms of the ST population and the percentage share of the ST population to the total population respectively. The Scheduled Tribes are primarily rural as 91.7 percent of them reside in villages.

Maiti et al. (2005) have found that the whole tribal community is deficient in adequate food intake. As a result, tribal mothers have high rates of anemia and girl children receive less than the desired nutritional intake. Various other studies suggested that there are other factors responsible for the poor health of tribal women like poverty, poor hygiene, lack of access to health facilities and social, cultural barriers to health care facilities etc. Vulnerability to specific diseases like sickle cell anemia, G-6 PD deficiency, malaria, tuberculosis, etc. is the other factor. Further, tribal woman's reproductive health is in a deplorable state as compared to the general population.

In Chhattisgarh, approximately 22 percent ST women reported symptoms of reproductive tract infection and 16 percent reported of having problems related to menstruation (IIPS 2004a) whereas in Jharkhand, around 43 percent of tribal women have reproductive health problems, 41 percent of them have a BMI of less than 18.5 kg/m² which indicates a prevalence of chronic nutritional deficiency and around 75 percent tribal women have anemia (IIPS 2004b). A study by Singh et al. (1993) show that as compared to other castes, the neo-natal mortality among scheduled tribes is high and only two percent of the deliveries of scheduled tribes are attended by auxiliary nurse midwives (ANMs) or trained dais.

In general, the health status of the tribal population in India is very poor, deficient in sanitary conditions and personal hygiene (Basu 1994). Despite emphasis on strengthening local health care provisions, concern remains regarding the levels of utilization of health services provided in tribal regions. The scheduled tribes in particular, being relatively at the lowest level of economic development, have not been able to take advantages of various facilities. Mondal (1997) found that problem of underutilization is embodied in the socio-economic and cultural background of the care-seekers. Not only are they basically unaware of the services available but also there are no motivating forces to help or guide them to use maternal care services. Singh (2005) found that the majority of women don't have any knowledge of available reproductive health services and have not utilized those health services available to them. Maiti et al. (2005) also concluded that around 72 percent of tribal mothers did not have any antenatal care (ANC), did not consider having a check-up necessary or customary. The causes for poor utilization may lie in the socio-economic background, cultural setting and attitudes. Bhatia and Cleland (1995) found that economic status and religion of mothers are significant predictors for the use of maternal health services.

National Population Policy-2000 (NPP) has identified that tribals are under-served in the coverage of reproductive and child health services and need special attention in terms of basic health services. Moreover, many studies reveal that there are lower percentages of tribal women who use health services provided by the government. Therefore, NPP-2000 also gives specific attention to the tribal communities and recommends special provision for health services among them in view of the fact that many tribal communities are dwindling in numbers. Health planners have been constantly emphasizing the need for improving maternal and child health services. In order to address the health status of women, the Government of India initiated several programmes such as the Family Welfare Programme, Child Survival and Safe Motherhood Programme, Reproductive and Child Health Services, etc. Both the National Health Policy and the National Population Policy emphasize the need to address health requirements of tribal communities. Hence, the broad objective of the study is to examine the utilization of ante natal care services by tribals in Chhattisgarh and Jharkhand.

DATA SOURCE AND METHODOLOGY

The data from District Level Household Survey under Reproductive and Child Health Project (DLHS-RCH II) has been used for analysis. This survey collected data from 8860 currently-married rural women of Chhattisgarh and 10,569 currently-married rural women of Jharkhand in the age group 15-44 years during 2002-04.

Dependent Variables

Utilization of any ANC services (Public, Others and Non-users)

Antenatal care (ANC) may be provided by public health professionals or other health professionals. For this analysis, the utilization of ANC (dependent variable) by women for last birth occurred to them during three years prior to survey has been categorized into-

1. Those women who received ANC from public health facility (government or municipal hospital, government dispensary, urban health center, rural hospital, primary health center, sub center, community health center);
2. Women who received ANC from other health facility (NGO/Trust hospital or clinic, private ISM hospital/clinic, traditional health healers (untrained), and others);
3. Those who did not receive any kind of ANC.

Multinomial logistic regression models are used to assess utilization of ANC services in which dependent variable is of multiple responses. The effect of socio-economic, demographic and health-related variables is examined on multiple response category variables. The basic assumption of multinomial logistic regression model that should be strictly fulfilled is that the categories of the response variable should be mutually exclusive and exhaustive i.e. a sample member must fall in one and only one of the categories. The above assumption is fulfilled in the analysis.

The following multinomial logistic regression model has been used in this study:

$$Z_1 = \text{Log} (P_1 / P_3) = a_1 + \sum b_{1j} * X_j$$

$$Z_2 = \text{Log} (P_2 / P_3) = a_2 + \sum b_{2j} * X_j$$

and

$$P_1 + P_2 + P_3 = 1$$

Where,

$a_i, i=1,2$: constants

b_{ij} $i=1,2; j=1,2,\dots,n$: multinomial regression coefficient.

P_1 : Estimated probability of using ANC services from public facilities by a currently married woman.

P_2 : Estimated probability of using ANC services from other sources by a currently married woman.

P_3 : Estimated probability of not using any ANC services by currently married women.

Here, P_3 is the reference category.

For the sake of simplicity in interpretation, multinomial logistic regression coefficients are converted into adjusted percentages. The procedure consists of following steps:

Step 1: By using regression coefficient and mean values of independent variables, the probability is computed as: $P_i = \exp(Z_i) / \{1 + \exp(Z_i)\}$, $i=1, 2$ and $P_3 = 1 - P_1 + P_2$

Where, Z is the estimated value of response variable for all categories of each variable.

Step 2: To obtain the percentage values, the probability P is multiplied by 100.

In this way, tables consisting unadjusted and adjusted percentages are generated.

RESULTS AND DISCUSSION

Chhattisgarh

Table 1 presents the percentage of women (who have given birth during the three years preceding the survey) who have received any antenatal check-ups, according to some selected background characteristics in Chhattisgarh. Analysis shows that utilization of ANC (at least one antenatal care) services among ST and non-ST women is quite high. The percentage of women who received antenatal check-up is comparatively higher among non-STs (81 percent) than STs (66 percent). Among STs, 38 percent women have received antenatal check-up from public health facility and 28 percent from other health facilities. The same for non-ST women is 47 percent and 33 percent respectively. Among STs, higher percentages of younger women receive antenatal check-ups at government health facilities than older women whereas among non-STs, women of all age groups receive ANC from government health facilities uniformly. As marital duration and number of surviving children increase, use of public health facility has declined for both the categories.

Literacy plays an important role in the utilization of ANC services among both the groups. As education of the mother increases, the percentage of women utilizing ANC services from public health facility also increases for both the groups. Similar trend can be seen among the women who have their spouse educated. With the increase in standard of living (SLI), ST women are utilizing public health facilities more as compared to other health facilities whereas non-ST women have shown a positive pattern between SLI and utilization of ANC from other health facilities.

Finally, it can be concluded that though most women are using ANC services from public places among ST and non-ST women, considerable number of women are going for ANC to other health facilities as well. It should also be taken into consideration that 34 percent of ST women are not availing ANC services as compared to 19 percent non-ST women.

Jharkhand

Table 2 reveals that utilization of ANC (at least one antenatal care) services among ST (35 percent) and non-ST women (45 percent) are low in Jharkhand. Around 18 percent ST women have received antenatal check-up from public health facility whereas most of the non-ST women (31 percent) have reported going to other health facility for ANC check-ups.

Among ST women in the age group 15-19, 20-34 and 35-44 around 13, 19 and 13 percent women have gone for any ANC services in public health facility. Women of both the categories (among ST and non-ST women) are going to other service providers rather than public health facilities across different age groups. There is an increase in the utilization of ANC services from public health facility if woman's age at consummation of marriage is above 18 years among ST and non-ST women. Increase in marital duration has decreased the utilization of services from public health facility for both groups of women. Among STs, women belonging to Hindu religion (16 percent) and non-Hindu women (24 percent) are going to public health facility for ANC whereas for non-STs it is only 15 and 10 percent respectively. With increase in the level of educational attainment among ST women, utilization of ANC services have increased from 14 to 34 percent. Similar trend can be seen among the women who have their spouse educated. However, the

Table 1: Percentage of rural women who received any antenatal check-up during pregnancy according to selected background characteristics, Chhattisgarh, DLHS-RCH-2 (2002-2004)

Background characteristics	Scheduled Tribes					Non-Scheduled Tribes				
	User					User				
	Non-user	Public	Other	Total	Total women	Non-user	Public	Other	Total	Total women
<i>Age-group</i>										
15-19	31.3	45.5	23.2	68.7	99	17.6	44.8	37.6	82.4	165
20-34	33.7	38.3	28.1	66.3	1354	18.5	47.9	33.6	81.5	2050
35-44	42.4	26.5	31.1	57.6	132	28.6	45.7	25.7	71.4	210
<i>Age at Consummation of Marriage</i>										
Below age 18	36.8	38.8	24.4	63.2	1046	20.8	48.9	30.4	79.2	1522
18 years and above	29.2	35.7	35.1	70.8	538	16.9	45.1	37.9	83.1	904
<i>Marital Duration</i>										
<5 years	28.9	40.1	31.1	71.1	322	14.2	43.6	42.2	85.8	569
5-9 years	30.2	42.3	27.5	69.8	579	16.2	50.8	33.0	83.8	857
10-14 years	37.2	35.0	27.8	62.8	403	21.9	50.8	27.3	78.1	579
15+ years	44.3	29.6	26.1	55.7	280	28.7	41.8	29.5	71.3	421
<i>Religion</i>										
Hindu	34.6	37.9	27.5	65.4	1542	19.4	47.4	33.1	80.6	2397
others	19.0	33.3	47.6	80.9	42	6.9	55.2	37.9	93.1	29
<i>Education (Years of Schooling)</i>										
Illiterate	39.7	35.6	24.7	60.3	1213	26	47.3	26.7	74.0	1367
0-5 ¹ years	20.2	45.5	34.3	79.8	178	15.4	48.3	36.3	84.6	416
6-10 years	10.3	47.7	41.9	89.7	155	8.2	50.0	41.8	91.8	558
11 years above	23.7	28.9	47.4	76.3	38	2.4	30.6	67.1	97.6	85
<i>Husband's Education</i>										
Illiterate	46.5	30.2	23.3	53.5	712	30.8	43.5	25.7	69.2	665
Literate	24.2	43.9	31.9	75.8	859	15.0	49.0	36.0	85.0	1755
<i>Standard of Living Index</i>										
Low	37.0	36.1	26.9	63.0	1427	22.8	47.8	29.3	77.2	1739
Medium	7.8	53.2	39.0	92.2	141	12.5	48.2	39.3	87.5	568
High	18.8	50.0	31.3	81.3	16	0.8	38.7	60.5	99.2	119
<i>Surviving Children</i>										
0-3	31.0	40.3	28.6	69.0	1150	16.5	48.3	35.2	83.5	1826
4-6	43.2	31.2	25.6	56.8	410	27.8	46.2	26.1	72.2	533
7 and above	34.8	26.1	39.1	65.2	23	30.3	36.4	33.3	69.7	66
<i>Child Loss</i>										
No	33.2	38.7	28.1	66.8	1181	17.2	49.1	33.7	82.8	1862
Yes	37.1	35.1	27.7	62.9	404	26.4	42.2	31.4	73.6	564
<i>Availability of Health Services² in the Village</i>										
No	33.6	40.9	25.5	66.4	592	16.6	47.1	36.3	83.4	879
Within 3 km	34.1	36.5	29.5	66.0	587	21.5	47.3	31.3	78.6	1024
Within village	35.5	35.0	29.6	64.6	406	19.7	48.6	31.7	80.3	523
<i>Total Percentage</i>	34.3	37.7	28.0	65.7	1585	19.3	47.5	33.2	80.7	2426

¹ Literate persons with no year of schooling are included

² Health Services includes Sub-Centre, PHC, CHC/RH, Government Dispensary, Government Hospital and ISM health facility.

Note: Total number may not add to N because of missing cases.

utilization of ANC from other health facilities is considerably high among non-STs.

Women are utilizing more other health facilities as compared to public health facility in both the groups (ST and non-ST) for all categories of SLI. It has increased from 16 percent to 67 percent among STs whereas among non-STs from 25 percent to 69 percent from low to high SLI respectively. As the number of living

children is increasing in both the groups, the percentages of ANC users have declined.

Finally, it can be concluded that most of the women are not using ANC services from public health facility (among women who are utilizing ANC services) in both the groups. The percentage of non-users is also quite high. For example, it is 65 and 55 percent among ST and non-ST women respectively.

Table 2: Percentage of rural women who received any antenatal check-up during pregnancy according to selected background characteristics, Jharkhand, DLHS-RCH-2 (2002-2004)

Background characteristics	Scheduled Tribes					Non- Scheduled Tribes				
	User					User				
	Non-user	Public	Other	Total	Total women	Non-user	Public	Other	Total	Total women
<i>Age-group</i>										
15-19	65.2	12.9	21.9	34.8	210	46.3	15.7	38.0	53.7	553
20-34	63.6	19.1	17.3	36.4	1421	54.6	14.5	30.9	45.4	2790
35-44	73.1	12.6	14.3	26.9	175	74.3	8.1	17.6	25.7	346
<i>Age at Consummation of Marriage</i>										
Below age 18	69.7	15.0	15.3	30.3	1162	58.8	12.7	28.4	41.2	2981
18 years and above	55.6	22.7	21.7	44.4	644	39.7	19.8	40.5	60.3	707
<i>Marital Duration</i>										
<5 years	56.7	20.3	23.0	43.3	413	36.1	18.6	45.3	63.9	811
5-9 years	60.7	19.7	19.5	39.3	563	50.9	15.0	34.1	49.1	1191
10-14 years	71.4	14.3	14.3	28.6	420	63.4	12.6	24.0	36.6	859
15+ years	71.3	16.1	12.7	28.7	411	71.5	9.9	18.6	28.5	827
<i>Religion</i>										
Hindu	66.4	16.7	17.0	33.6	1543	54.0	15.2	30.8	46.0	2901
others	54.7	24.2	21.1	45.3	265	59.7	9.9	30.4	40.3	786
<i>Education (Years of Schooling)</i>										
Illiterate	72.0	13.7	14.3	28.0	1467	65.8	12.7	21.5	34.2	2592
0-5* years	43.6	21.3	35.1	56.4	94	44.8	15.5	39.7	55.2	388
6-10 years	32.2	41.1	26.6	67.8	214	22.7	19.2	58.1	77.3	666
11years above	9.4	34.4	56.3	90.6	32	9.3	9.3	81.4	90.7	43
<i>Husband's Education</i>										
Illiterate	73.0	13.1	13.9	27.0	906	70.9	11.2	17.9	29.1	1434
Literate	56.0	22.6	21.5	44.0	895	45.1	16.1	38.8	54.9	2235
<i>Standard of Living Index</i>										
Low	65.9	17.8	16.4	34.1	1746	61.2	13.4	25.4	38.8	3046
Medium	31.5	18.5	50.0	68.5	54	29.9	16.5	53.6	70.1	539
High	33.3	0.0	66.7	66.7	6	10.8	20.6	68.6	89.2	102
<i>Surviving Children</i>										
0-3	60.1	19.2	20.7	39.9	1217	48.8	15.3	35.9	51.2	2631
4-6	73.8	14.8	11.5	26.2	522	70.8	11.0	18.2	29.2	938
7 and above	77.9	13.2	8.8	22.1	68	72.5	13.3	14.2	27.5	120
<i>Child Loss</i>										
No	62.3	19.2	18.5	37.7	1204	51.2	14.8	34.0	48.8	2703
Yes	69.6	14.8	15.6	30.4	602	66.0	12.2	21.8	34.0	985
<i>Availability of Health Services¹ in the Village</i>										
No	73.5	12.3	14.3	26.6	652	58.9	17.1	23.9	41.0	923
Within 3 km	59.5	19.5	21.0	40.5	844	55.3	12.7	32.0	44.7	1998
Within village	60.3	24.5	15.2	39.7	310	50.5	14.2	35.3	49.5	767
Total percentage	64.7	17.7	17.6	35.3	1806	55.2	14.1	30.7	44.8	3687

¹ Literate persons with no year of schooling are included

² Health Services includes Sub-Centre, PHC, CHC/RH, Government Dispensary, Government Hospital and ISM health facility

Note: Total number may not add to N because of missing cases.

Factors Determining ANC Services

Chhattisgarh

In Chhattisgarh, increase in the age and number of surviving children of ST women have declined utilization of ANC services from public health services (Table 3). It is because of the fact that women are going to other health services and it may be due to their inclination to consult the traditional health healers who have an impor-

tant place in the society. Age at consummation of marriage, marital duration and religion have not much effect on utilization of ANC services. In Chhattisgarh, problem during pregnancy and child loss have positive effect on utilization of ANC services among STs. With the increase in the proportion of ST population in the district, the utilization of ANC services has declined from 46 percent to 37 percent. It is because women are visiting more to other health services for ANC. With the increase in educational attainment of

Table 3: Multinomial logistic regression of rural women who received any antenatal check-up during pregnancy according to selected background characteristics, Chhattisgarh, DLHS-RCH-2 (2002-2004)

Background characteristics	Scheduled Tribes			Non- Scheduled Tribes		
	User			User		
	Public	Others	Non-users	Public	Others	Non-users
<i>Age of Women (in years)</i>						
15-19	45.1	16.2	38.7	48.0	47.3	4.8
20-34	37.2	24.6	38.2	49.5	45.4	5.0
35-44	36.1	26.9	37.0	59.9	35.0	5.1
<i>Consummation of Marriage</i>						
Less than 18 years	37.5	22.9	39.6	51.7	43.6	4.7
More than 18 years	37.8	26.7	35.5	48.0	46.3	5.6
<i>Marital Duration</i>						
Less than 5 years	34.4	25.4	40.2	46.7	47.8	5.5
5-9	41.5	22.6	36.0	53.9	41.4	4.7
10-14	37.9	25.4	36.7	54.5	40.5	5.0
15 years and above	33.2	24.1	42.7	42.6	52.4	4.9
<i>Religion</i>						
Hindu	37.5	24.1	38.3	50.2	44.7	5.1
Others	36.1	27.2	36.7	38.7	57.4	3.9
<i>Surviving CEB</i>						
0-3	38.9	24.6	36.5	50.0	45.4	4.6
4-6	34.1	22.1	43.8	51.8	41.5	6.7
7 and above	29.4	40.7	29.9	54.7	39.8	5.5
<i>Problem During Pregnancy</i>						
No	37.0	25.3	37.6	50.3	44.6	5.1
Yes	40.0	19.4	40.6	49.1	46.0	4.9
<i>Child Loss</i>						
No	37.0	24.5	38.5	51.7	43.6	4.6
Yes	39.5	23.3	37.3	45.9	47.7	6.5
<i>Education Facility</i>						
No	53.0	39.3	7.8	60.4	34.4	5.2
Yes	37.4	24.0	38.7	50.2	44.8	5.0
<i>Outreach Services</i>						
No	36.5	25.0	38.5	52.8	41.5	5.6
Yes	38.3	22.8	38.9	36.9	59.4	3.7
<i>Percent ST Population</i>						
0-25	46.5	17.5	35.9	0.0	0.0	0.0
25-50	32.8	36.8	30.4	0.0	0.0	0.0
50 -75	34.1	22.1	43.8	0.0	0.0	0.0
Above 75	36.8	44.4	18.8	0.0	0.0	0.0
<i>Education of Women</i>						
Illiteracy	36.7	23.2	40.1	52.3	40.5	7.2
0-5 years	43.3	30.0	26.7	48.4	47.1	4.5
6-10 years	48.6	34.5	16.9	49.0	48.3	2.7
11 and above	28.5	29.3	42.3	29.5	69.3	1.3
<i>ST Female Occupation</i>						
Less than 50 percent	37.8	27.0	35.2	0.0	0.0	0.0
More than 50 percent	37.1	20.5	42.4	0.0	0.0	0.0
<i>ST Female Literacy Percent</i>						
10-30 percent	46.5	19.7	33.8	0.0	0.0	0.0
30-40 percent	34.6	19.1	46.3	0.0	0.0	0.0
40 and above	19.9	44.7	35.4	0.0	0.0	0.0
<i>ST Male Literacy Percent</i>						
10-50 percent	29.1	31.2	39.7	0.0	0.0	0.0
50-60 percent	33.3	26.7	40.1	0.0	0.0	0.0
60 and above	49.3	16.7	34.0	0.0	0.0	0.0
<i>Household Education</i>						
No	39.2	21.8	39.0	49.5	45.5	5.0
Yes	35.5	27.4	37.1	50.9	44.1	5.0
<i>Husband Education</i>						
No	30.7	23.6	45.7	49.5	43.7	6.8
Yes	36.0	27.4	36.6	47.5	47.7	4.8

Table 3: Contd...

Background characteristics	Scheduled Tribes			Non- Scheduled Tribes		
	User			User		
	Public	Others	Non-users	Public	Others	Non-users
<i>Standard of Living</i>						
Low	37.4	24.1	38.5	49.8	30.8	19.4
Medium	54.2	32.2	13.6	49.6	35.4	15.1
High	44.5	20.5	35.0	45.6	52.9	1.5
<i>Accessibility and Availability</i>						
Within village	36.7	24.0	39.4	52.6	42.0	5.3
0-3 km	37.3	23.8	38.9	51.2	43.1	5.8
Not available	38.6	24.6	36.8	47.2	48.8	4.0
<i>Connected to All Weather Road</i>						
No	36.8	22.7	40.6	49.7	44.1	6.3
Yes	39.7	21.6	38.7	57.2	37.5	5.3

women, the utilization has increased from 37 percent to 49 percent among STs but it has declined from 52 percent to 29 percent among non-STs. ST female literacy and work force participation at district level have inverse relationship in the utilization of ANC services. Husband's education and SLI have positive effect on the utilization of ANC from public health services. Increased availability and accessibility of services at village level have not increased the utilization among STs. Connectivity of road have positive effect on the utilization of ANC services among both the groups of women. Surviving children, problem during pregnancy, education of women, SLI and husband's education are some common factors affecting ST and non-ST women on their utilization of ANC services from public health centres.

Jharkhand

In Jharkhand, among STs, with the increase

in the age of the women the utilization of ANC services from public health facilities have decreased from 12 percent to 8 percent whereas among non-ST women, it has decreased from 14 percent to 10 percent (Table 4). Problems during pregnancy and child loss have negative effects on utilization of ANC services among ST and non-ST women. With the increase in education of women, the utilization has increased from 11 percent to 32 percent among ST. Availability and accessibility of services have increased the utilization among ST and non-ST women. Connectivity of road has positive affect on utilization of ANC services among STs.

CONCLUSIONS

Pregnancy is considered as a normal and natural phenomenon by most tribal groups and no special care is given to ladies during pregnancy. Both conception and delivery are considered as

Table 4: Multinomial logistic regression of rural women who received any antenatal check-up during pregnancy according to selected background characteristics, Jharkhand, DLHS-RCH-2 (2002-2004)

Background characteristics	Scheduled Tribes			Non- Scheduled Tribes		
	User			User		
	Public	Others	Non-users	Public	Others	Non-users
<i>Age of Women (in years)</i>						
15-19	11.6	20.3	68.1	14.0	24.9	61.1
20-34	14.8	15.7	69.5	16.1	28.8	55.1
35-44	8.0	16.6	75.4	9.7	27.0	63.3
<i>Consummation of Marriage</i>						
Less than 18 years	13.1	15.4	71.6	13.0	28.8	58.2
More than 18 years	14.6	18.2	67.2	19.1	27.7	53.2
<i>Marital Duration</i>						
Less than 5 years	12.7	17.0	70.3	18.7	37.3	44.1
5-9	12.7	16.3	71.1	14.3	28.3	57.4
10-14	10.8	14.6	74.6	12.2	24.4	63.4
15 years and above	20.0	17.2	62.8	11.2	25.2	63.5

Table 4: Contd...

<i>Background characteristics</i>	<i>Scheduled Tribes</i>			<i>Non- Scheduled Tribes</i>		
	<i>User</i>			<i>User</i>		
	<i>Public</i>	<i>Others</i>	<i>Non-users</i>	<i>Public</i>	<i>Others</i>	<i>Non-users</i>
<i>Religion</i>						
Hindu	13.8	16.2	70.0	15.2	27.5	57.3
Others	13.5	16.8	69.6	13.4	31.6	55.0
<i>Surviving CEB</i>						
0-3	15.5	19.3	65.2	13.3	31.5	55.2
4-6	10.1	11.4	78.5	14.6	22.6	62.9
7 and above	14.9	8.5	76.6	15.4	21.5	63.1
<i>Problem During Pregnancy</i>						
No	13.0	14.4	72.6	13.6	25.1	61.3
Yes	13.0	20.3	66.7	12.7	35.5	51.9
<i>Child Loss</i>						
No	14.1	16.2	69.7	13.9	29.1	57.0
Yes	12.7	16.5	70.8	14.4	27.3	58.4
<i>Education Facility</i>						
No	19.7	21.9	58.4	11.3	25.3	63.4
Yes	12.7	15.4	71.9	14.4	29.1	56.5
<i>Outreach Services</i>						
No	14.1	16.0	69.9	14.0	28.5	57.5
Yes	12.8	21.4	65.8	13.3	32.1	54.6
<i>Percent ST Population</i>						
0-25	4.3	7.8	87.9	0.0	0.0	0.0
25-50	13.7	21.2	65.1	0.0	0.0	0.0
50 and above	26.9	18.4	54.7	0.0	0.0	0.0
<i>Education of Women</i>						
Illiteracy	11.1	13.8	75.2	13.1	23.3	63.6
0-5 years	15.8	32.4	51.9	14.5	33.0	52.6
6-10 years	32.4	23.2	44.5	16.0	47.5	36.5
11 and above	32.2	54.1	13.8	7.1	68.5	24.4
<i>ST Female Occupation</i>						
Less than 50 percent	19.9	19.4	60.8	0.0	0.0	0.0
More than 50 percent	9.8	13.9	76.3	0.0	0.0	0.0
<i>ST Female Literacy Percent</i>						
10-30 percent	8.7	6.3	85.0	0.0	0.0	0.0
30-40 percent	13.7	21.7	64.6	0.0	0.0	0.0
40 and above	17.2	18.1	64.7	0.0	0.0	0.0
<i>ST Male Literacy Percent</i>						
10-50 percent	15.1	32.6	52.4	0.0	0.0	0.0
50-60 percent	12.4	13.5	74.1	0.0	0.0	0.0
60 and above	13.7	13.4	72.9	0.0	0.0	0.0
<i>Household Education</i>						
No	13.9	16.2	69.9	14.0	26.7	59.3
Yes	13.2	16.5	70.3	14.0	30.4	55.6
<i>Husband Education</i>						
No	12.2	15.4	72.4	12.5	24.9	62.7
Yes	13.4	17.6	69.0	13.4	31.8	54.8
<i>Standard of Living</i>						
Low	14.7	15.5	69.8	13.4	26.3	60.3
Medium	14.2	39.3	46.5	15.5	39.7	44.9
High	0.0	65.8	34.3	21.9	46.1	32.0
<i>Accessibility and Availability</i>						
Within village	8.4	12.4	79.2	13.0	28.7	58.3
0-3 km	14.5	18.9	66.6	13.1	31.3	55.6
Not available	15.5	15.2	69.4	17.1	23.2	59.7
<i>Connected to All Weather Road</i>						
No	15.7	18.5	65.8	13.4	20.6	66.0
Yes	12.1	19.3	68.6	16.9	19.8	63.3

'gift of the god'. Pregnant women are not given any special care (including ANC) till the delivery takes place. No preparation is taken for delivery well in advance (Verma and Roy 1993). The discussion clearly brings out the differentials in the health care among tribals and non-tribal women in both the states. The findings reveal that in each socio-economic and demographic parameter, tribal women are lagging behind others in both the states. The substantial variation in utilization of maternal services may be due to striking differences in health-seeking behaviour of people across socio-economic groups on the demand side and access barriers on the supply side. The social, economic and cultural dimensions embedded within the social system may in turn determine the health-seeking behaviors.

The utilization of ANC services is low among ST women in Jharkhand as compared to Chhattisgarh. It can also be observed that ST women in Chhattisgarh avail ANC facilities more from public health centers whereas in Jharkhand, more women go to other health service providers. With the increase in the proportion of ST population in the district, the utilization of ANC services from public health facility also increases in Jharkhand but in Chhattisgarh it did not happen. It is argued that women's work is poverty induced in Chhattisgarh and Jharkhand and therefore likely to have negative impact on the use of their health care services as it involves opportunity and monetary costs. Rural women, in general, are more likely to utilize antenatal services than delivery-care services, presumably because some antenatal services are provided by health workers at home and accessibility is not a problem.

Distance to the nearest public health facility is not a satisfactory predictor for utilization of public health services because distance to the nearest public health facility does not indicate the relative accessibility of that health facility when there are a number of alternative places to go for the same services. Since accessibility is a matter not only of distance but also of the quality of services provided.

POLICY IMPLICATIONS

As the reproductive health programme is a source of strength to all other aspects of socio-economic development, effective measures have to be initiated to improve its performance in Chhattisgarh and Jharkhand. Therefore, there is a

necessity for formulating policies and programmes on realistic estimates and parameters and more meaningfully in a decentralized manner for effective promotion of the programme in all regions. Identification of regions and broad cultural groups within each region on the basis of their performance in health programme has to be initiated.

There is a need to apprise rural women about the importance of reproductive and child health services in both the states. This can be achieved by strengthening the existing outreach services and information education and communication (IEC) activities. Majority of women and their family members are unaware of the importance of maternal health care and efforts should be made to create awareness. Health interventions should be made taking into account the culture of tribal population. Women's education should be emphasized as educated women are better able to break away from traditions to utilize modern means of safeguarding their own health and that of their children (Caldwell J and Caldwell P 1988; Cleland 1990).

Enforcing the existing law that no girl shall be married before legally prescribed minimum age for marriage of a girl (which is 18 years) would itself curb a sizeable proportion of marriages of adolescent girls. Promoting the increase in age at marriage above 18 years through campaigns and movements would further improve the situation.

Increasing the credibility of the service personnel of various Reproductive Health Programmes and providing better amenities need to be undertaken to improve the existing situation.

In general, it can be concluded that the utilization of various RCH services is very low among tribal women in comparison to non-tribals. Improving the quality of care, providing the services within the village, education of women and socio-economic conditions will surely help in improving the health status of tribal population.

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