

Biological and Social Determinants of Women Health among Hill Korwas of Jashpur District, Chhattisgarh

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ABSTRACT

The present study has been carried out with the aim of ascertaining the community health status of Hill Korwa women along with demographic analysis. For this study 202 currently married women has been randomly selected and interviewed from Bagicha and Manora Tribal Development Blocks of Jashpur district of Chhattisgarh state. Demographic data, anthropometry, hemoglobin, blood pressure, are taken in account. Data concluded that Korwa women can be classified under normal range of Body Mass Index. Normal hemoglobin level was found only among 6.44 percent Korwa women. Female literacy rate was found to be 4.95 percent only. Perinatal Mortality and Maternal mortality for the Hill Korwas were estimated to be 123.76/1000 birth and 14/1000 Live birth respectively. Jashpur is hilly district of state and it is increasingly being difficult to undertake welfare and development programmes. Placement of health services, low literacy rate leads to lack of awareness about access to health and poor transport and communication facilities has adversely affected the population of Hill Korwa women.

Key Words: Hill Korwas, Jashpur, Chhattisgarh, Tribal, Tribes, Women Health.

INTRODUCTION

The tribes do not show any special preference for boys over the girls. The girls receive as much attention as the boys do in their childhood and infancy. As an economic participant in the society as well as the home maker a girl is trained in various chores from an early age. She helps her mother in domestic work, brings fuel from the forest and water from the well (Mahapatro and Kumar 2009). She is expected to look after her younger siblings when her mother is busy in her work. A girl from her early childhood is conditioned by the society to share the responsibilities of

her mother. A woman begins a new life when she is married. Her role and status becomes important on being a wife and the prospective mother of the children. Women's demographic and health – seeking behavior is associated with several characteristics, including their age, marital status, childbearing and health (Sengupta et al 2020). In addition, women's status and autonomy are critical in promoting change in reproductive attitude and behavior especially in patriarchal societies (Basu 1996, Kashatriya and Kapoor 2003). Various biological and demographic factors are directly influencing the population structure of simple societies and small ethnic groups. Women are bio socially key to any society and they constitute complex reproductive physiology than the male. In the Constitution of India, total 575 tribal groups have been notified as **Scheduled** Tribe out of which total 75 ethnic groups have been identified as Particularly Vulnerable Tribal Groups (PVTG) on the basis of declining or stagnant population, low literacy and pre- agriculture technology.

Hill Korwa a sub group of Korwa tribe was identified as PVTG during the fifth five year plans. The history of this tribe reveals that they moved westward into the old Khudia Jamidari (present Sanna and Bagicha revenue circles) of Jashpur district and their total population is 27107 (Census 2011). They are residing in Bagicha and Manora Tribal Development Blocks of Jashpur District. They are distributed in Sarguja, Jashpur and Korba districts of Chhattisgarh. Their population in the two blocks is 8972 and 441 respectively. (Hill Korwa Development Agency Jashpur: Report 2001).

Russel and Hiralal (1916) stated the Korwa as a Kolarian tribe of the Chhotanagpur plateau. They have two territorial groups. The inhabitants of the hilly area are called Paharia or Hill Korwa and those of the plains, Diharia Korwa. Dalton ET believed that the Korwa dialect is most closely related to Asuri resembles Mundari and Santhali.

MATERIALS AND METHODS

Present study has been carried out with the aim of ascertaining the community health status of Hill Korwas Women. For this study 202 currently married women were randomly selected and interviewed from Bagicha and Manora tribal development blocks of Jashpur district in the state of Chhattisgarh. Data pertaining to biological and social parameters of Hill Korwas women i.e. height, weight, blood pressure, haemoglobin level using standard techniques was collected. Age

at menarche, age at marriage and age at first conception, parity, pregnancy complications, addiction, literacy rate etc. have been taken into account. Self-reported data of health history and natural history of health and diseases have been documented. Field work was conducted for one year to cover the three seasons to collect information of seasonal health data. Total 50 villages were covered from entire inhabiting area out of a total of 84 villages occupied by Hill Korwas in Jashpur district. Although villages are on Hills and very scattered. Participatory observation and group discussions have been made to verify the quality of data.

RESULTS AND DISCUSSION

Dalton (1872) stated that the "Korwa women have a good built but they appear ground down by hard work. They do all the work in the house as well as in the fields. The average women do not put on much ornament, a pair of bangles, a pair of angutha (ring on toe) on the toes are all that Korwa women wear. Tattooing is practiced and every women tattoos her arms, especially upper arm, which is always kept exposed. Hill Korwa women put on Sari 5 yards long, which serves also to cover waist-upwards" (Cited from Shrivastava 1993 and Sharma. 2006).

Anthropometric indices of maternal nutritional status exert a strong influence on the birth weight of the newborn. Park and Park (1997) reported that maternal height is associated with poor birth outcome, it is an attractive variable to incorporate into a risk scale particularly in populations with poor prenatal and perinatal care. In the present study, average height of Hill Korwa women was 145.9 cm, whereas 26.23 percent women were less than 143 cm of height, while only 18.31 percent were above 150 cm of height (Table 1). Maternal weight has consistently been reported to be associated with nutritional status and birthweight (Park and Park 1997). The average weight of Hill Korwa women was 41.71 kg. in the present study.

Body Mass Index (BMI) is a parameter independent of age and takes into consideration weight in relations to height and hence may be considered to have advantage over using either height or weight as an index of status of nutrition and body composition. The standard value as suggested by Weiner and Lourie (1981) for female is 19 - 24 Kg/M². In the present study, average BMI of female was 19.53 Kg./ M². Thus the female Korwa can be classified under normal range of BMI. ICMR NIN (2015) reported that fetal loss increases with increasing severity of hypertension. Among the Hill Korwa women during the last trimester of pregnancy, blood pressure can be

categorized in three groups, as low (44.06 percent), normal (40.10) and high (15.84) respectively. High blood pressure and if albumin found in urine sample leads to toxemia of pregnancy and during intra-natal period which may lead to still birth.

Severe anemia can lead to maternal morbidity, incidence of low birth weight and late fetal death (NNMB, ICMR Technical report year 2000). Among the Hill Korwa women hemoglobin level can be categorized in three groups: <7g/dl (6.44 percent), 8-11 g/dl (85.14%), > 11 g/dl (6.44%).

Data reveal that about 42 percent currently married women were in the active reproductive age, i.e. 20 - 34 years and the remaining were below 20 years of age (17.83 percent) whereas 5.44 percent were above 35 years. About 100 percent of the women started cohabiting with their husband (consummation of marriage) below the age of 18 years because age at marriage is below 16 years. Initiation of menstrual cycle is the indicator of puberty. Among the Hill Korwa women average age at menarche was 14.32 years. Among Hill Korwas of Chhattisgarh, most of the women were found to be illiterate (95.04 percent) and the rate of literacy was found to be 4.95 percent only. The first pregnancy may reveal underlying physical or genetic weakness in parents if any. Table 2 shows the percentage of Hill Korwa women with order of birth and order of pregnancy. Among Korwa women most of the mothers are unaware of the importance of birth spacing. Majority of the child births have taken place under 24 months (45.55 percent). Further it has been observed that 40.09 percent women had a birth interval between 24 to 47 months. Only 8.42 percent of childbirths occurred at an interval of 48 months and more. Hill Korwas make a small window size separate door for exit and entry of pregnant woman in their houses.

The present study shows that most of the pregnant women of Hill Korwas undertake hard and strenuous work till the terminal stage of pregnancy with insufficient food intake. 90.59 percent women consumed alcohol during normal days and during pregnancy. Among mothers who received antenatal care, only 17.82 percent had two doses of tetanus toxoid and 10.80 percent were given, Iron Folic Acid tablets. In India 43 percent of the deliveries are assisted by health professional, whereas only 2 percent of the deliveries were assisted by health professionals among the Hill Korwas. Complications during pregnancy may adversely affect both women's health and the outcome of pregnancy. 97.3 percent of women complained about various types of problems during pregnancy. Major complaints were swelling in hand, foot (18.82%), weakness (30%) hypertension (27.73%), night blindness (8.91%), etc., reproductive tract infections (2.97%). joint

pain (3.46%) and 3 cases of leprosy and cases of medically diagnosed tuberculosis were recorded during the field work. Out of 20% families 57.97 percent consisted of 4 to 6 family members. 13.36% varied between 1-3 numbers of family members and 28.71% consisted of above 6 members. The data reveals that an overwhelming majority of the families were unclean (70.3 percent). The percentage of families belonging to joint families were 29.70 percent.

Fertility and Mortality Indicators:

The fertility records of Hill Korwa women in various childbearing age groups indicates total fertility of 3.0 estimated from average parity. Fertility is highest in 18-20 years age group. General Fertility Rate (GFR) for the Hill Korwas was estimated to be 120.2 which is slightly higher than Indian National Population of 125.2 (SRS 1999). In the Hill Korwa, 58.17 women were currently married, 38.47% were unmarried and only 3.34% women come under widow. Crude Birth Rate (CBR) has been estimated to be 28.23 for Hill Korwas. The CBR is higher than the CBR of state of Chhattisgarh and Indian National Population. Infant Mortality Rate (IMR) is a very sensitive indicator of mortality indicating a prenatal, natal and postnatal care of mother and infants. Infant Mortality Rate has been estimated to be 70 for Indian National Population and 80 for Chhattisgarh in the year 2001. IMR for the Hill Korwas was estimated to be 166 which is very high as compared to both Indian National Population and Chhattisgarh. Perinatal mortality and maternal mortality for the Hill Korwas were estimated to be 123.76/1000 birth and 14/1000 pregnancies.

Jashpur is hilly district of state and it is increasingly being difficult to undertake welfare and development programs. Above indicators' data are surely not satisfactory for any Indian population. Placement of health services, lack of awareness about access to health and communication facilities has adversely affected the education, health, nutrition, mortality and fertility rates of Hill Korwas. Bagicha and Sanna are two revenue circle areas which come under the 5th scheduled area in the Constitution of India. Hill Korwas and Birhors are two Particularly Vulnerable tribal groups which occupy this area and claim their origin from the place. These are most vulnerable societies residing in central region of the Country and deserve better public services under the rules of State Government and Union Government of India

Table 1. Anthropometry and nutritional status of Hill Korwa women

Height of mother (cm.)	Actual No.	Percentage	Parameter	Actual No.	Percentage
Up to 142	53	26.23	Blood Pressure	89	44.06
143-150	112	55.45			
Above 150	37	18.31			
			Low	81	40.10
			Normal	32	15.84
			High		
Weight of Mother (kg.)			Haemoglobin g/dl		
<40	96	47.52	<7	13	6.44
41-50	100	49.50	8 - 11	172	85.14
Above 50	6	2.98	>11	13	6.44
			Not Taken	4	-
Sickle Cell Present	-	-	-	-	-
Absent	202	100	-	-	-

Table 2. Characteristics of the Hill Korwa women

Background Characteristics	Actual No.	Percentage	Background Characteristics	Actual No.	Percentage
Age at marriage			Order of Pregnancy		
10 - 12	33	16	1 st	35	17.32
13 - 15	136	67.33	2-3	66	32.68
16-18	30	14.36	4-6	71	35.14
19-21	03	1.48	7& above	30	14.86
22-24	-	-			
Age of Menarche			Order of Birth		
12-15	181	89.60	1st	34	16.34
15 Above	21	10.39	2-3	76	37.63
			4-6	75	37.12
			7& Above	17	8.41
Age of mother at first conception			Birth Interval (In Months)		
13-15	76	37.62	<24	92	45.55
16 - 18	107	52.97	24-47	81	40.09
19-21	14	6.93	48&48+	17	8.42
22-24	02	0.99			
24+	03	1.49			
Age of Mother at Index Child birth			Literacy		
Up to 19	42	20.79	Literate		
20-24	54	26.73	Illiterate		
25-29	63	31.18	Addiction to		
30 - 34	32	15.84	Alcohol	10	4.95
35-39	10	4.95	Gudakhu	192	95.04
40+	1	0.49	Tobacco	183	90.59
			Koshna/Smoking	119	58.91
			Nothing	03	1.48

Table 3. Percentage of reported complications during pregnancy by type of complication

S.N.	Complication	No. of women	Percentage
1.	Swelling in hand, foot	38	18.82
2.	Weakness/hypertension	56	27.73
3.	Vaginal Bleeding	13	6.43
4.	Temperature	23	11.38
5.	Absence of fetus movement in womb		31.48
6.	Night Blindness	18	8.91
7.	Any others	45	22.28
8.	Total number. of women reported complication	196	97.03
9.	With no complication	6	2.97
	Total	202	100%

Table 4. Marital Status of Hill Korwas

Marital Status	Sex and Age Group										Total
	Up to 15		16 -30		31-45		46-60		Above 60		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Unmarried	177	136	19	02	-	-	-	-	-	-	334
Married	05	10	92	120	115	95	34	24	05	05	505
Widow	-	-	-	03	-	04	-	08	-	05	20
Widower	-	-	02	-	01	-	03	-	-	-	06
Separated	-	-	-	02	-	-	-	01	-	-	03
Divorce	-	-	-	-	-	-	-	-	-	-	-
Total	182	146	113	127	116	99	37	33	05	10	868

Table 5. Fertility and Mortality Indicators among the Hill Korwas, Chhattisgarh and Indian National Population in the Year 2001-2002

Statistic	Hill Korwas (Primary Data)	Chhattisgarh SRS (1999)	India Census of India 2001
GFR	129.2	-	125.2
TFR	3.01	2.79*	3.2**
CBR	28.23	25.2	26.1**
CDR	11.9	-	8.7**
IMR	166	80.9*	70**
Sex Ratio	916	990*	933*

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