

## **Reproductive Life of the Bhatra Women of Bastar, Chhattisgarh**

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**Abstract:** *The present study embraces the reproductive performance among the Austric-speaking proto Astraloid tribe of Bhatras of Bastar district in Chhattisgarh of central India, which is based on the reproductive history of 359 ever married women. Efforts have been made to determine fertility reproductive index and fertility of women completed reproductive age along with their mean age at menarche, mean age at marriage and age at first child birth among the Bhatra tribe and also to examine reproductive status of Bhatra women with compare to other tribal women of India. The present study indicate that the proportion of surviving children, abortion and still born is higher than others, While the reproductive wastage is the highest at 7<sup>th</sup> birth order (14.28%). The proportion of reproductive wastage is found to be 8.46 percent as compared to 91.53% of surviving children among Bhatra tribe. However the average number of children born per mother is observed to be 3.06 which is higher than pahira of Bihar and Andamanese. The net reproductive index (1.22) is observed to be higher than Bhoksa, pahira, Kond, Gadaba and Andamanese where as the average no. of children born per mother of completed fertility is 3.78 higher than Gadaba of Bastar only.*

**Keywords:** *Reproductive life Bhatra tribe fertility net reproductive index*

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### **1. INTRODUCTION**

Bastar is well known for tribal population situated between 17° 46' and 20° 34' North latitude and 18° 15' and 82° 15' East longitude. The total tribal population of Bastar district is 866488 comprising 66.30% of total tribal population of Bastar (Census, 2001). The Bhatra is one of the major tribal group of Bastar district which constituted about 2.80% of the total tribal population of Chhattisgarh. Bhatra economy is based on traditional cultivation and money earned by labour in which Bhatra women engaged for livelihood of their family members and they have always to busy on their household management.

Reproductive live includes the age of women etatering age at marriage to age of menopause. Reproductive life is affected by age at menarche, age at marriage age at first child birth and other socio-biological factors of women, where as reproductive performance may be defined by fertility of women. A French Demographer Henry (1953) stated that Natural fertility of Human population that makes no deliberate effect to limit births. The Bhatra population mostly live in multi-villages and showed socio-economic relation with other tribal groups like Muria, Gadaba, Dhurwa and backward population like Teli, Mahara, Sundi etc. The proportion of Bhatra tribe in reproductive age group (15-49 Year) is estimated 46.82% where as the proportion of women is this age groups is relatively higher (47.28%) as compared to men (46.36%). According to census 2001, the proportion of literate Bhatra women is 23.55%, while the present samples includes 33.85% literate and about 42% (41.98%) labourer women. On the basis of demographic parameter of the tribal Bhatra women may be classified as socio-economically backward class.

The family is considered as the reproductive nuclear of the domestic group (Fortes, 1969); However edogamy is a factor, which influence the reproductive behaviour of population. Child birth is biological phenomenon, which is affected by reproductive age group of couples, social structure, social customs and also economic status of the population. Fathalla (1992) and cook (1993) have stated that reproduction is the condition in which the reproductive process is accomplished in a state of complete physical mental and social well being and is not merely the absence of reproductive disease or disorder. Age structure is the biological attributes, which affects the marital composition, birth rate and death rate. In present study an attempt has been

made to examine reproductive life of Bhatra women along with their biological attributes and also to determine the reproductive status of Bhatra women compared to other tribal women of India.

## 2. MATERIAL AND METHODS

The data for the present study were collected from various tribal villages of Bastar district by using pre-tested structured interview schedule. A total of 359 households of Bhatra tribe were collected by interviewing ever married women, who were alive at the time of investigation. A demographic and household data on age structure, sex composition, age of marriage, age at first conception, age at first birth, order of pregnancy, abortion, stillbirth, present age and family structure were collected by following standard methods.

According to census 2001 the literacy rate among the Bhatra tribe is 38.05%. Most of the tribal women were found to be illiterate. The correct age had to be assessed with reference to outstanding events remembered like birth before or after a festival that comes in a particular month as per Hindu calendar. The data were collected from those married women, who have given a birth child at least once and had not undergone family planning during 2009-10. The fertility is evaluated according to their family history.

## 3. RESULTS AND DISCUSSION

Age at menarche affects fertility. The mean age at menarche for married Bhatra women is found to be 12.83±0.068 years. The age of menarche ranges from 11 to 14 year. Most of the Bhatra women experienced first menstruation at the age of 13 years (68.73%) and their average live birth is found to be 2.83, where the least frequency 6.67% is recorded first menstruation at the age of 11 years and indicate lowest number of average live birth (2.53). The present finding increased with indicates that fertility increasing of menarcheal age.

In 1938 Raymond pearl investigated menarchal age in 142 countries and pointed out that the onset of first menstruation period occurred generally when girl was between 13 to 17 years. Recent researches however indicate that the age at menarche associated with environmental changes, genetical factors and nutritional standards. Dandeker, 1956 reported that the average menarcheal age in rural India is 13.80 years and about 83% rural women experienced menopause before reaching the age of 50 years.

The female age at marriage determine the formation and dissolution of marital unions and affect the societal fertility. Agrawal has pointed out that in all Indian women get married after the age of 19, there would be a 30 percent reduction in the birth rate by 1991-92. In present study the age of effective marriage ranges from 11 to 27 years. The highest frequency of marriage occurs between 16-18 year (68.25%) followed by 11 to 15 years (21.73%) and 22 to 24 years (14.21%). The mean age at marriage obtained from 359 women is 17.18 ± 0.91 years for all ages while Garg et.al, 1981 observed a mean age at marriage of 17.68 years among the Garo women of Assam. However Dev, 1975 observed mean age at marriage of 16.45 years among Kond of Orissa. A remarkable difference in mean age at marriage was noticed between the Garo and the Bhatra tribe, while among other tribal group mean age at marriage differ slightly from Bhatra tribe.

The mean age at first child birth among the Bhatra women of all ages is found to be 18.83 ± 0.99 years, while among literate women the mean age is found to be 18.95 years and as per nuclear family it is observed to be 19.15 years. The interval between marriage and first child birth is observed to be 1.65 years among the Bhatra tribe of Bastar, while Garo tribe of Assam indicates 21.27±0.32 years (Das and Saikia, 1999) Kond indicates 19.20 years and Nair women shows 20.7 years. The Bhatra women indicate lower value of mean age of first child birth than other tribal groups.

Table 1. indicates the preference history of some of the tribal population. The Proportion of living children is found to be much more higher among Bhatra tribe (84.43%) than other tribal proportion, while the population of dead children is (7/07) lower than other tribes. The probability of still birth is 0.0483 and abortion is 0.0364 among Bhatra tribes, which is found to be higher than other tribal group except Kota tribe (Basu, 1967).

The proportion of reproductive wastage is found to be 8.46% among Bhatra women, which is much more than other tribal groups. The abortion/miscarriage account 43.00% of all wastage,

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which is found to be lower than other tribal groups. However the abortion/miscarriage account 87.50% in Garasa tribes (Sarkas, 1978).

**Table 1.** *Pregnancies History of Bhatra women along with some tribal women of India*

Tribes	No. of Mother	Living Children		Dead Children		Still born		Abortion		All Pregnancies	Source
		No.	%	No.	%	No.	%	No.	%		
Bhoksa	111	383	74.66	121	23.59	2	0.39	7	1.36	513	Garg et al.; 1981
Kota	250	538	49.4	477	43.8	22	2.02	52	4.77	1089	Basu; 1967
Dorla	235	633	80.53	153	19.46	-	-	-	-	786	Rakshit; 1972
Dhurwa	240	738	77.36	216	22.64	-	-	-	-	959	Rakshit; 1972
Bhil	188	540	70.22	202	26.27	3	0.39	10	1.3	769	Sarkas; 1978
Garasa	267	787	76.48	211	20.51	3	0.29	21	2.04	1029	Sarkas; 1978
Bhatra	359	927	84.43	78	7.10	53	4.83	40	3.64	1098	Present Study

Table 2. exhibits the distribution of reproductive performance among Bhatra women by parity. The highest reproductive wastage is recorded in the first birth order (10.37%) followed by third birth order (10.09%) and lowest in 5<sup>th</sup> birth order (4.54%) with some exception in 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> birth order, which show a quite high reproductive wastage. Perhaps late conception attributed to high risk to wards the older age.

**Table 2.** *Reproductive outcome with parity among Bhatra tribe of Bastar*

Parity	No. of pregnancies	Live Birth	Reproductive wastage			% of pregnancies	Death
			Still Birth	Abortion/miscarriage	Total		
1	347	311	19	17	36	10.37	34
2	302	280	13	9	22	7.28	17
3	218	196	13	9	22	10.09	11
4	127	121	05	01	06	4.72	08
5	70	67	02	01	03	4.28	07
6	22	21	01	-	01	4.54	-
7	07	06	-	01	01	14.28	01
8	03	01	-	01	01	33.33	-
9	02	01	-	01	01	50.00	-
Total	1098	1005	53	40	93	8.46	78

Distribution of average no. of children born in different tribal groups is shown in Table 3. The average no. of ever born children is found to be highest among Bhoksa tribe of Dehradun Uttarpradesh ( 4.56, Garg et. al; 1981) and lowest among North Andamanese of Andaman Island (2.36; Sarkar, 1953). However the Bhatra tribe of Bastar shows 3.06 as average number of ever born children per mother, which is close to Pehira of Bihar, Dorla of Bastar and Garo of Assam.

**Table 3.** *Distribution of children born per mother among all age groups of women among Bhatra tribe along with other tribal groups*

Tribes	Area	No. of mothers	Children ever born per mother	Source
Bhoksa	Dehradun (U.P.)	111	4.56	Garg et al. ; 1981
Maler	Bihar	69	4.3	Sarkar, ; 1944
North Andamanese	Andaman Island	25	2.36	Sarkar, ; 1953
South Andamanese	Andaman Island	32	2.81	Sarkar, ; 1953
Pahira	Bihar	101	3.01	Ray, ; 1954
Dorla	Bastar	231	3.36	Rakshit, ; 1972
Dhurwa	Bastar	296	3.86	Rakshit, ; 1972

Kond	Orissa	157	3.64	Devi, ; 1975
Bhil	Rajsthan	188	3.95	Sarkar, ; 1978
Garasia	Rajsthan	267	3.74	Sarkar, ; 1978
Garo	Assam	95	3.39	Das &Saikia ; 1999
Bhatra	Bastar	359	3.06	Present study

Table 4. indicate the distribution of net reproductive index among various tribal groups of India. The net reproductive index vary from 0.16 (South Andamanese, Sarkar, 1953) to 1.45 (Dhurawa; Rakshit, 1972). However the net reproductive index is observed to be 1.22 among the Bhatra tribe of Bastar. The net reproductive index (NRI) among the Bhatra tribe is close to Kond of Orissa (Devi, 1975) and Gadabas of Bastar (Verma, 2007).

**Table 4.** *Distribution of Net Reproductive Index (NRI) among tribal Population*

Tribals	Area	All ages	No. of mother daughter	NRI	Source
Bhoksa	Dehradun (U.P.)	111	113	1.02	Garg et. al, ; 1981
Maler	Bihar	69	85	1.123	Sarkar, ; 1944
North Andamanese	Andaman Island	-	-	0.36	Sarkar, ; 1953
South Andamanese	Andaman Island	-	-	0.16	Sarkar, ; 1953
Pahira	Bihar	94	93	0.98	Ray, ; 1954
Irula	Tamil Naidu	-	-	1.31	Basu, ; 1967
Dorla	Bastar	235	314	1.34	Rakshit, ; 1972
Dhurwa	Bastar	240	348	1.45	Rakshit, ; 1972
Kond	Orisa	-	-	1.19	Devi, ; 1975
Gadba	Bastar	248	298	1.20	Verma, ; 2007
Bhatra	Bastar	359	438	1.22	Present Sindy

Distribution of average number of children born per mother among the women completed fertility is shown in Table 5. The average number of children born per mother is found to be 3.78 among the women who completed fertility and it is close to Khasi of Assam and Gadabas of Bastar. However the average number of ever born children per mother among women who completed fertility is found to be the highest among Irula of Tamil Nadu and lowest among the Gadaba tribe of Bastar.

**Table 5.** *Distribution of Children born per mother among the women of completed fertility*

Tribe	Area	No. of mother	Children ever born per mother	Source
Bhoksa	Dehradun (U.P.)	30	6.4	Garg et al. ; 1981
Santal	Bihar	10	6.1	Sarkar ; 1944
Maler	Bihar	10	5.8	Sarkar ; 1944
Kanlkkar	Kerala	31	4.74	Nage, ; 1954
Christian Khasi	Assam	42	4.1	Nage, ; 1965
Khasi	Assam	33	5.7	Nage, ; 1965
Irula	T.N.	37	6.55	Basu, ; 1967
Dorla	Bastar	43	4.86	Rakshit, ; 1972
Dhurwa	Bastar	54	5.17	Rakshit, ; 1972
Kond	Orissa	31	4.61	Devi, ; 1975
Gadaba	Bastar	39	3.67	Verma, ; 2007
Bhatra	bastar	27	3.78	Present Study

## Discussion

The Bhatra is one of the major tribal groups of Bastar districts. They follow the rules of patriarchal, patrilocal and monogamous family. The mean age of menarch for married Bhatra women is  $12.83 \pm 0.68$  years. The present study indicates that the fertility increases with the increase of menarcheal age. However the average age of marriage among the Bhatra women is found to be  $17.18 \pm 0.91$  years and indicate approximate 27.82 years reproductive life span and higher incidence of fertility. The mean age at first child birth among the Bhatra women of all ages is recorded  $18.83 \pm 0.99$  years and found to be lower than other reported tribal population.

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The Bhatra women are socio-economically backward and most of them are illiterate. The finding in the present study indicates that the proportion of living children are observed higher in Bhatra tribe than other reported tribal population, where as the same trend can be noticed in the probability of still born and abortion except Kota tribe. This situation is associated with the illiteracy of Bhatra women and it is also the causes of high reproductive wastage in the first birth order.

The average number of ever born children per mother among Bhatra tribe is (close to Peharia, of Bihar, Dorla of Bastar and Garo of Assam but lower than Bhoksa of Deharadun, Maler of Bihar), lower than almost all tribal population except North, South Andamanese of Andaman Island and Pahira of Bihar. However on the basis of this parameter Bhatra tribe may be close to Pehira, Dorla and Garo tribes. This findings suggested that there is positive correlation between illiteracy and reproductive wastage.

The net reproductive index is found to be higher among the Bhatra population than other reported tribal population except Dhurwa of Bastar, Dorla of Bastar and Irula of Tamil Nadu, which suggest that Bhatra tribe is growing comparatively more rapidly than other tribal population. However the magnitude of net reproductive index among Bhatra tribe found to very close to Gadaba tribe of Bastar and Kond of Orissa.

The average number of ever born children per mother among Bhatra women, who completed fertility is found to be lower than almost all tribal population except Gadaba tribe of Bastar and suggests that Bhatra tribe tend to have less children and prefer small family. The trend of low fertility and high reproductive wastage indicate the low socio-economic status of Bhatra tribe and their poor nutrition.

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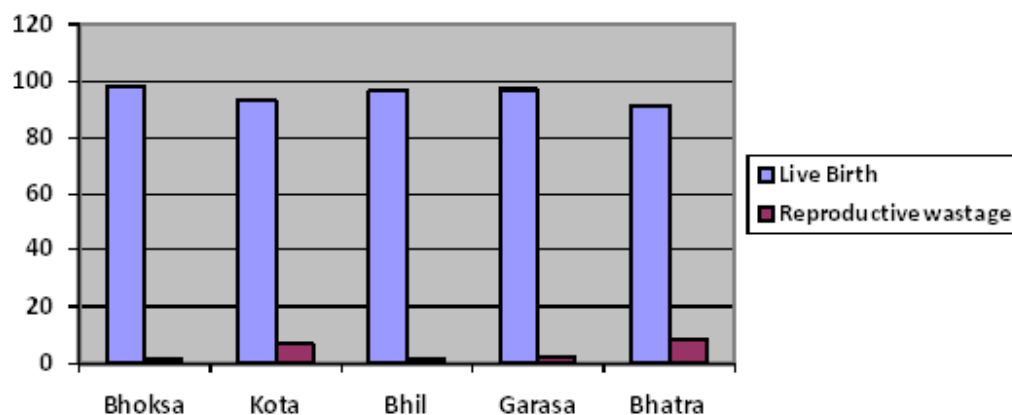


Fig 1. Distribution of live births and reproductive wastage among tribal groups

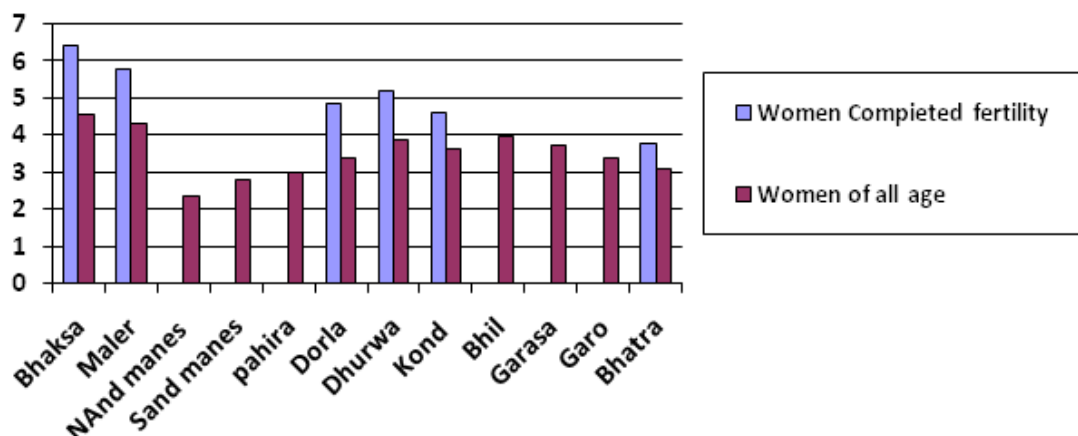


Fig 2. Distribution of Children born per Mother among tribal groups

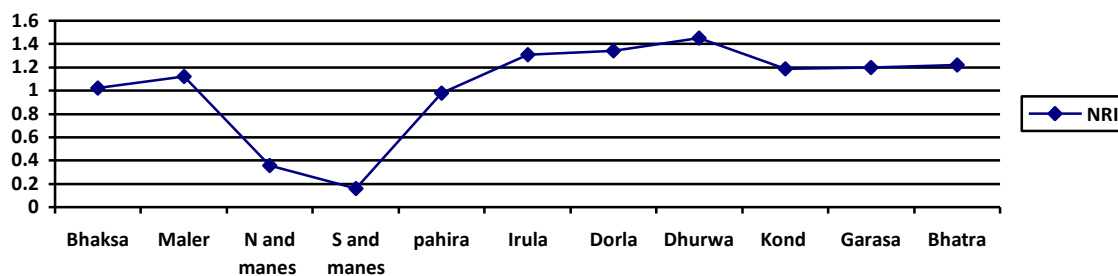


Fig 3. Distribution of NRI among tribal groups

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