Contraceptive Behaviour of Tribal Eligible Couples in Bankura district of West Bengal

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Abstract:
Objectives: To assess the contraceptive behaviour of eligible couples of tribal population in Taldangra block, Bankura, West Bengal, to find out the socio demographic factors influencing their contraceptive behaviour and to explore the reasons for non-usage of contraceptive methods.
Material and methods: Across sectional community based study was conducted in Taldangra block (consisting 45 tribal hamlets) in Bankura district of West Bengal. The calculated sample size was 280, considering the couple protection rate of West Bengal as 60%. All currently married women in the age group of 15 to 45 years were interviewed with the help of pre-designed, pretested structured schedule by house to house survey. Relation between contraceptive use and increasing parity was tested using X^2 for trend.
Results: Contraceptive Prevalence Rate was 40.07%. Among the current users 41.59% had tubectomy. An increasing trend in contraceptive use was seen with increasing parity in the study population. Contraceptive usage was maximum among educated couples, women in their thirties (age 30-35) and women with two or three living children.
Conclusion promoting the levels of education of the tribal women would postpone their age of marriage and further facilitate attainment of an adequate and sustainable family size.

Keywords: contraceptive behaviour; tribal; eligible couples; sociodemographic factors

1. Introduction

Family planning is a global concern. The world population is now at over 6 billion and which is growing rapidly. Despite strenuous efforts by the government, the reports of a rise in contraceptive practices have not been matched by a similar decrease in population. If current trends continue, one billion will be added to the world population every 13 or 14 years. With only 2.4% of world's land area, India is supporting about 16.87 percent of the world population[1].

India was the first country in the world to formulate the National Family Planning Programme in the year 1952 with the objective of reducing the birth rate of the extent necessary to stabilize the population at a level consistent with requirement of National Economy[2]. Government of India has been following a non-coercive approach in promoting family planning methods ever since the launch of Reproductive and Child Health (RCH) Program. Of late, the language of gender equality, equity, women's empowerment, choice, client satisfaction and quality of services has been brought into discussions in this arena. But several issues still continue to daunt the programme and many goals remain under-achieved. The extent of acceptance of contraceptive method still varies within and between societies and also among different castes and religion groups. The factors responsible for such varied picture operate at the individual, family and community levels with their roots in the socioeconomic and with low literacy and poor economic and living condition. The tribal population known as 'Scheduled Tribes' by constitution of India are one of the lowest and traditionally poorest castes of the

Hindu caste system.The total tribal population of West Bengal is 44,06,794(5.50% of the total population). There are six districts in the state where more than 10% of their total population is tribal; .Bankura is one of those six districts with a tribal population of 3,30,783(10.36% of total population) (Census 2001).In Bankura district, the major Schedule tribes are Santhals, Bhumij, Kora and Oraon.

Since past researches[3,4]have proved that the fertility behaviour changes with different socio-economic, cultural, attitudinal and behavioural settings, the family planning programme should have group specific and area specific interventions. According to the National Family Health Survey (2005-06)[5], schedule tribes in India have very high total fertility rate (3.12) than other social groups &National Health Policy of India prioritises Scheduled Tribe population as special needs group for extending the health care services. Unfortunately, there have been very few studies carried out among tribals&little data exist on the nature and predictors of contraceptive use and unmet need within these underserved communities. With this background, the present study was conducted among the tribal eligible couples of Bankura district of West Bengal with the following objectives:

- To assess the contraceptive behaviour of eligible couples of tribal population in Taldangra block, Bankura, West Bengal.
- To find out the socio demographic factors influencing the contraceptive behaviour of the study population.
- To explore the reasons for non-usage ofcontraceptive methods by the study population.

2. Method and Materials

The present cross sectional community based study was conducted in Taldangra block in Bankura district of West Bengal during January to June 2009.Taldangra community development block with an area of 349.70 km2, located at 23°01′N 87°07′E, is the field practice area of Bankura Medical College &Hospital. It has 9 gram panchayats and 342 villages. According to Census 2001, Taldangra block had a total population of 128,748 and a scheduled tribe population of 18,279 which is 13.86% of the total population. The calculated sample size was 280, considering the couple protection rate of West Bengal as 60% with allowable error 10% at 95% confidence limit. After discussion with the BPHN and other health workers during the block level monthly monitoring meeting, 45 tribal hamlets were identified in Taldangra block. Thus, average population of one tribal hamlet was calculated as 406 and approximate number of eligible couple in each hamlet is 70.So, four hamlets were selected randomly from the list of 45 tribal hamlets. During data collection all currently married women in the age group of 15 to 45 years were interviewed with the help of pre-designed, pretested structured schedule by house to house survey. Repeat visit was done for the women who were absent during the first visit of survey. The study variables were age of women, their age at marriage and age at first pregnancy, type of family,literacy and occupation of the couple, per-capita monthly income of the family, current contraceptive practice and history of parity wise contraceptive practice by the couples.

Inclusion criteria: Physically and mentally fit tribal eligible couples who gave consent to participate in the study.

Eligible Couple- Currently married couples with wives aged between 15 to 45 years[1].The term Contraceptive Prevalence Rate (CPR) was taken to mean the percentage of eligible couples who used any family planning method, modern or traditional[1].

Eligible women were asked to provide written informed consent for study participation.

Permission of the ethical committee of Bankura Medical College was taken beforehand.

Statistical analysis was done by using SPSS 19 version.

3. Results

Parity	Current contraceptive method used							
	Condom	OCP	IUCD	Tubectomy	Vasectomy	Other traditional method	Not used any method	Total
0	3	2	0	0	0	1	9	15
1	8	10	0	0	0	2	64	84
2	2	24	2	13	0	4	54	99
3	0	3	0	27	0	1	25	56
4	0	2	0	4	0	1	6	13
5	0	0	0	3	0	1	8	12
6	0	0	0	0	0	0	1	1
7	0	0	0	0	0	0	2	2
Total	**13**	**41**	**2**	**47**	**Nil**	**10**	**169**	**282**

Table I. Distribution of current contraceptive users in relation with parity (n=282)
Contraceptive Prevalence Rate (CPR) = 40.07%

Table I& fig 1 shows that the temporary methods were initially more popular than the permanent methods of contraception. Among the nullipara and primipara, condoms and OCP were the most popular. However OCP remained a popular choice even for those with a higher parity. Traditional methods were also used by some whereas IUCD seemed to be least preferred. Among the permanent methods none went for vasectomy while tubectomy was best accepted after parity 2 & 3. Overall the percentage of non users (59.92%) is much higher than the contraceptive users (40.07%).
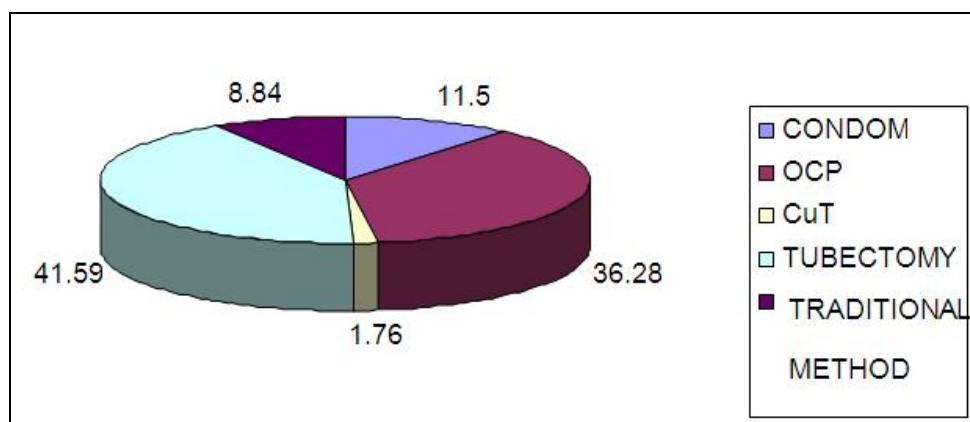
Fig1. Contraceptive use pattern of current users (n=113)

Parity wise timing	Condom	Abstinence	OCP	Homeopathic medicine	Cu-T	Tubectomy	Safe period	Contraceptive users	Contraceptive non users	Total in this group
Between marriage and 1st pregnancy	5 (1.77)	1(0.35)	8(2.83)	-	-	-	-	14	268	282
Between 1st & 2nd pregnancy	14 (5.24)	1(0.37)	39 (14.6)	1(0.37)	-	1(0.37)	-	56	211	267
Between 2nd & 3rd pregnancy	1(0.54)	-	15 (8.19)	-	2 (1.09)	10(5.44)	-	28	155	183
Between 3rd & 4th pregnancy	1(1.19)	-	4(4.76)	-	-	28 (33.33)	-	33	51	84

Table II. Relation between increasing parity and Contraceptive use of the study population
Chi square for trend = 64.1 (p < .0001 at degree of freedom = 2) highly significant

Table II An increasing trend in contraceptive use was seen with increasing parity in the study population. Between marriage and 1st pregnancy contraceptive use was very less which increased in between 1st and 2nd pregnancy but still lesser than one fourth of the total belonging to this group. However between the 2nd and 3rd pregnancy and similarly between 3rd and 4th pregnancy the contraceptive use even decreased. Tubectomy acceptance rate however increased after 2nd & 3rd pregnancy. So it is evident that tribals were a little cautious about spacing between the 1st and 2nd pregnancy than the other phases.

Socio-demographic factors	Contraceptive use		Total (%)	X^2 (df)	P value
	Yes (%)	NO (%			
Current age of wife (years)					
< 18	1 (25.0)	3 (75.0)	4 (100.0)	23.04 (3)	<0.001 S
18-23	11 (16.0)	58 (84.0)	69 (100.0)		
24-29	35 (39.8)	53 (60.2)	88 (100.0)		
30-35	44 (55.0)	36 (45.0)	80 (100.0)		
≥36	22 (53.6)	19(46.4)	41 (100.0)		
Age of wife at marriage (years)					
<18 years	58(37.7)	96 (62.3)	154(100.0)	0.819 (1)	>0.05 NS
≥18 years	55 (43.0)	73 (57.0)	128(100.0)		

Age of wife at first pregnancy (years)					
<20	28(44.4)	35(55.6)	63(100.0)	75.06 (1)	<0.001 S
20-30	80(76.2)	25(23.8)	105(100.0)		
>30	4(50.0)	4(50.0)	8(100.0)		
Literacy status of wife					
Illiterate	35(26.5)	97(73.5)	132(100.0)	18.98 (1)	<0.001 S
Literate	78(52.0)	72(48.0)	150(100.0)		
Literacy status of Husband					
Illiterate	29(29.6)	69(70.4)	98(100.0)	6.87 (1)	<0.01 S
Literate	84(45.7)	100(54.3)	184(100.0)		
Occupation of wife					
Work outside	17(28.8)	42(71.2)	59(100.0)	3.93 (1)	<0.05 S
Home-maker	96(43.0)	127(57.0)	223(100.0)		
Occupation of Husband					
Un-Skilled worker	75(35.5)	136(64.5)	211(100.0)	10.34 (2)	<0.01 S
Skilled worker	15(53.6)	13(46.4)	28(100.0)		
Business	14(45.2)	17(54.8)	31(100.0)		
Service	9(75.0)	3(25.0)	12(100.0)		
Type of Family					
Nuclear	31(53.4)	27(46.6)	58(100.0)	15.88 (1)	<0.001 S
Joint	82(36.6)	192(63.4)	224(100.0)		
Socio-economic Status (B.G.Prasad's Scale)					
I	10(52.6)	9(47.4)	19(100.0)	12.77 (3)	<0.001 S
II	14(53.8)	12(46.2)	26(100.0)		
III	52(48.6)	55(51.4)	107(100.0)		
IV	25(32.1)	53(67.9)	78(100.0)		
V	12(23.1)	40(76.9)	52(100.0)		
Number of living Children					
0	7(38.9)	11(61.1)	18(100.0)	20.68 (3)	<0.001 S
1	21(24.1)	66(75.9)	87(100.0)		
2	48(48.9)	50(51.1)	98(100.0)		
3	32(55.2)	26(44.8)	58(100.0)		
≥4	5(23.8)	16(76.2)	21(100.0)		

Table III. Socio-demographic factors influencing contraceptive behaviour of the study population (n=282)
Mean age at marriage of husband: 23.81 ±8.6 years
Mean age at marriage of wife: 17.49 ±6.86 years

Table III shows that contraceptives usage was maximum among educated couples and in a nuclear family. Women in their thirties (age 30-35) were nearly three times more likely to report current contraceptive use than were their younger counterparts (age 18-25). In addition women who had first pregnancy at 20-30 years were more likely to have used contraceptives than under 20 and above 30 age groups. Occupation of husband had an expected positive influence on the contraceptive behaviour of the couples, more usage being reported among servicemen and skilled workers. Women with two or three living children were more likely to have used contraceptive than their counterparts with no or one child, whereas those with four or more children were least likely to do so. Surprisingly the occupation of the wife shows a negative impact on contraceptive behaviour with the homemakers reporting more usage than working women. However age of wife at marriage has no significant effect on the contraceptive behaviour of the eligible couples.
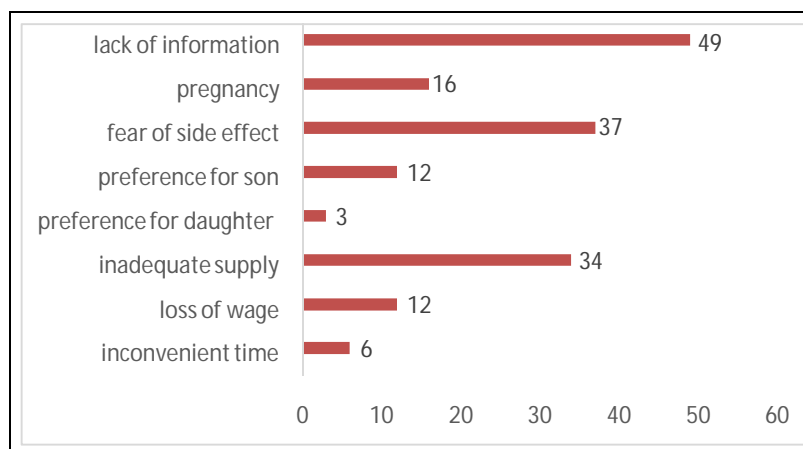
Fig.2: Distribution of eligible couples according to the reasons of non-usage of contraceptive (n=169)

Fig 2 shows that most common cause of non use was lack of information about the contraceptive methods (28.99%) followed by fear of side effects from the methods (21.89%), inadequate supply of the condoms and OCPs from the government health institutions (20.11%). Cultural influence of gender preference and economic factors like loss of wage and inconvenient timing for procurement of contraceptives also played a role.

4. Discussion

It is noticed (Table I) that the contraceptive prevalence rate (CPR) among the women interviewed was satisfactory (40.07%) considering their prevailing socio cultural situation. The observation that only 41% are actually using is an indication for the programme managers as there is scope for improving the acceptance rate.CPR in this study was similar in the study on *RachaKoyas*(41%)[6].The contraceptive prevalence rate for currently married women in India is 56 percent[5]; lowest use reported among women from the scheduled tribes (48percent)[5].In the present study about41.59 percent of the current users reported use of tubectomy followed by 36.28 percent oral pills users, 11.5 percent condom users and 8.84 percent using traditional methods. According to NFHS-3[5] female sterilization accounts for 66 percent of all contraceptive use, the most common spacing methods are condoms and the rhythm method, each used by 5 percent of currently married women. The use of birth spacing methods was found to be less (13 percent) among rural populations of West Godavari district of Andhra Pradesh[7] and the same is reported to be around 18-19 percent among *Bhotias* of Uttar Pradesh[8] .

There was an increasing trend in the use of contraceptives among the tribal couples in the present study with increasing parity (Chi square for trend = 64.1; p < .0001 at degree of freedom = 2, highly significant) (Table II).It may be due to the prevailing social norm among the tribal community which marries off bride and groom at an earlier age at which they are not even aware of any contraceptive methods. According to NFHS 3 current use of contraception varies greatly with parity first increasing from 34 percent for women with one child to 74 percent for women with three children, and then declining to 63 percent for women with 4 or more children[5]. Similarly in a study among Nepalese women[9]contraceptive use was found to increase with parity. Women with one to three children were seven times more likely to report contraceptive use than their counterparts with no children underlining their motivation for family size limitation due to the high costs of rearing children, especially the expenses of education. It is interesting to note that among tribals, there had been a custom[10] which revealed that after having family planning operation i.e. sterilization, a woman could not participate in the functions or rituals to be performed in their houses in future, and if she had participated, then she would have died because she was considered to be impure. So tribals were avoiding the sterilization in the earlier phase. The situation however changes with increasing parity of a woman as their cultural norm states that if the number of married women were more than one in the family, then the elder one had an option to adopt the sterilization method. So the higher acceptance of sterilization and other contraceptive methods among the study population with their increasing parity can be explained.

Table III shows the socio-demographic factors influencing contraceptive behaviour of the study population. Increasing age and higher literacy status of wife prepared them for decision making in regards of family planning in a male dominated society. Women in the youngest and oldest age categories may be less likely to practice family planning because they perceive that they have a relatively low risk of pregnancy due to lower fecundity. However age of wife at marriage has no significant effect on the contraceptive behaviour of the eligible couples. On the other hand literacy status and occupation of husband had an expected positive influence on the contraceptive behaviour of the couples. Contraceptive use got even better with higher socioeconomic status which helped in improved the buying power and accessibility to contraceptive services. Das and Deka[13] have considered that the economic value ascribed to children enhances fertility among those who are economically poor. Similarly decision making was freer in a nuclear family where the influence of other elderly members was absent. In several studies on modernity and fertility[11], education is found to be the prime influencing factor, since education affects the attitudinal and behavioural patterns of the individuals. Gautam and Seth[12],in their study among rural Rajputs found out that raise in education provides knowledge &helps in improving acceptance of family control devices. There are other studies also in the similar lines taken up among tribal and rural populations[7,8,14].

On interviewing the current non user couples, it was found that two most common causes of non use was lack of information about the contraceptive methods (28.99%) & fear of side effects from the methods (21.89%). Unsystematic ways of motivation by health workers along with providing inadequate information to the targets about the choice of contraception may be an important contributing factor in this regard. Administrative difficulties may be responsible for inadequate supply of the contraceptives and inconvenient timing of distribution from the government health institutions which were the other important reasons for non usage. Similarly, in another report on contraceptive use in India, inadequate knowledge of contraceptive methods, and incomplete or erroneous information about where to obtain methods and how to use them are the main reasons for not accepting family planning in India[15].
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5. Conclusion
The tribals have come far away from their traditional beliefs and practices and started accepting the concept of limiting the family to their desired size by accepting modern contraceptive methods. Still the unmet need for contraception remains substantially high among the tribals. Decadal growth for the period 1991-2001 was 15.39% for Taldangra, against 13.79% in Bankura district and 17.84% in West Bengal (Census 2001).Though the Family Welfare Programme has experienced significant growth and modification over the past half century, there is clearly a need for improving programme implementation and directing programme focus to hitherto under-served population groups and poorly served areas. Considering the fact that majority of contraceptive users were sterilised, it can be concluded contraceptive choice is yet to become a reality in India. These issues can be addressed by educating the tribal couples about the need for family planning and the various methods available along with a little flexibility in distribution of the contraceptive devices.

The underlying cause of lesser acceptance of family planning methods among the under developed tribal community was that due to women's low socio-economic status, low empowerment, and prevailing autocratic family authority norms, men always imposed their decisions, such as sterilization on women. Promoting the levels of education of the tribal women would postpone their age of marriage and further facilitate attainment of an adequate and sustainable family size. Advocacy of contraceptive methods among the tribals may control fertility levels to an extent which will be commensurate to their socio-economic standards. There commendations are as follows:

- Socio-economic status of women, in general, should be increased by social policy taken at government level.
- Gender equality norms between male and female children should be developed from the beginning at birth at the family level in which they can practice egalitarian norms in marital relationship;
- Women approach in contraceptive uses should be systematically changed and men approach should be increased based on freedom of consumer choice.

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