

Unmet Need For Contraception: A Study Among Tribal Women In A District Of West Bengal

Sudipta Das¹, Aparajita Dasgupta², Malay Kumar Das¹, Amitava Kumar¹, Dhiraj Biswas¹

¹M.D. Community Medicine PGT, ²Prof. and Head;
Dept. of P.S.M, AIIH & PH, Kolkata.

Corresponding Author: Sudipta Das

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ABSTRACT

Introduction: India is the 2nd most populous country of the world with till high fertility rate which hamper socioeconomic development of the country. For this purpose addressing unmet need especially of marginalized population is very important. The present study aims to determine the prevalence and determinants of unmet need of family planning in tribal population of Purulia district of West Bengal.

Methodology: Community based cross-sectional study was conducted in Balarampur block, Purulia district of West Bengal, among 140 tribal married women of reproductive age group. Unmet need for family planning included the proportion of currently-married women who did not want any more children or wanted more children after two years or later and were not using any methods of family planning at the time of study. Information related to contraceptive practice, unmet need and the relevant covariates was obtained through a pretested predesigned structured schedule.

Results: 32.1% participants (and their partners) used any of the contraceptive methods. Prevalence of unmet need was 50.7%. Lack of awareness was found to be most important cause of unmet need. Regarding socio-demographic determinants of unmet need of family planning, number of living child had significant effect in bivariate analysis (OR=3.47) and also when adjusted with other variables (AOR=3.26). Education of participants had also significant effect (OR:2.42).

Conclusion: Present study revealed very high prevalence of unmet need of family planning among tribal population which was mainly due to lack of awareness. So immediate intervention measures including IEC and BCC activities have to be implemented.

Key Words: Contraception, Unmet need, Spacing method, Limiting method.

INTRODUCTION

At present size India's population is second to that of China. According to UN projections India's population will reach 1.53 billion by the year 2050, and will be the highest population in the world.^[1] This rise in population has effect on socio-economic development. It causes lowering of the quality of life, degradation our environment

and our already overloaded resources are put in further strain. The national fertility rate is still high enough to cause long-term population growth. The United Nations estimated that world population grew at an annual rate of 1.23% during 2001-2010 whereas India's population grew at 1.64% per annum during 2001-2011.^[2]

The success of any family planning programme must ultimately be judged by its ability to meet all the family planning needs of the population, as well as the need for specific methods, whether they are for spacing or limiting. The Concept “unmet need” describes the condition of fecund women of reproductive age who do not want to have a child soon or ever but are not using contraception.^[3] Women with unmet need includes all fecund women who are married or living in union - and thus presumed to be sexually active - who are not using any method of contraception and who either do not want to have any more children (unmet need for limiting births) or want to postpone their next birth for at least two years (unmet need for spacing births).^[4] Throughout the world an estimated 150 million women’s are having this unmet need.^[5] The common reasons for this are lack of knowledge, economical problem, fear of side effects, religious cause, uncooperative husband and limited supply and high cost. For evaluation of national family planning programs, unmet need can be valuable indicator because it shows how well they are achieving the key mission of meeting the population’s felt need for family planning. Ultimate goal family planning programme is to reduce the unmet need of family planning and for this exploring the determinants of unmet need is required.

Among the social groups in India, the tribes are the most socioeconomically-deprived groups, with low literacy and poor economic and living conditions.^[6] Tribal population in India constitutes 8.2% of the total population of the country.^[7] According to the National Family Health Survey (2005-2006), scheduled tribes in India have very high total fertility rate (3.12) than other social groups.^[8] In fact, there is a marginal increase in the total fertility rate which was 3.09 in the earlier round of the survey (1998-1999) and has gone unnoticed. Moreover, the tribes have a very low

contraceptive usage and high unmet need for family planning than the other groups.^[8]

Although there have been a burgeoning literature on various aspects of population, fertility, and family planning, there have been very few studies carried out among tribal population. In this background the present study aims to determine the prevalence of unmet need of family planning and also its determinants in tribal population of Purulia district of West Bengal.

Objectives

1. To find out the prevalence of unmet need of family planning in a tribal population of Purulia district of West Bengal.
2. To elicit the causes of unmet need of family planning in study population.
3. To determine socio demographic, economic factors of study population and their relationship (if any) with unmet need of family planning.

MATERIALS AND METHODS

STUDY SETTINGS:

Study was conducted in a tribal rural community of Purulia district of West Bengal.

TIME LINE:

The study was conducted for 2 months starting from December 2014 to January 2015.

STUDY POPULATION:

All currently married tribal women of reproductive age group (15-45 yr) residing at study area.

EXCLUSION CRITERIA:

unwilling individuals

STUDY VARIABLES:

A. Dependent variables:

1. Use of any method of contraception: A dichotomous variable (0=non-user, 1=user) was created on the basis of using different methods of contraception (male sterilization, female sterilization, pill, IUD, condom, and injectable contraceptive

and also traditional methods). Those women not using any of these methods were considered non-users of contraception whereas any women using any of these methods were considered as current users.

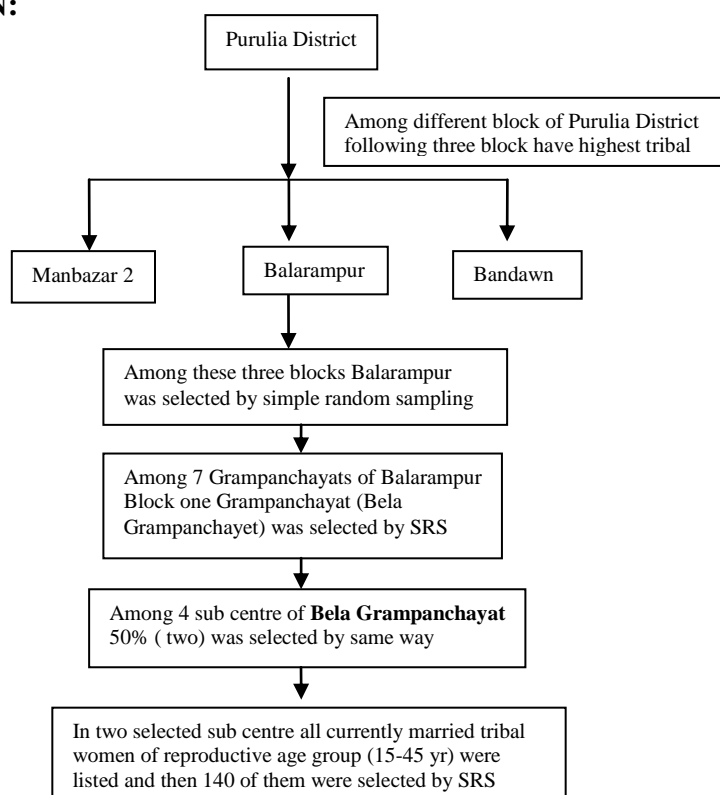
2. Unmet need for family planning: Unmet need for family planning included the proportion of currently-married women who did not want any more children or wanted more children after two years or later and were currently not using any permanent or temporary methods of family planning. The women who were not sure about whether and when to have the next child were also included in unmet need for family planning. Infecund women (women with postmenopausal amenorrhoea or hysterectomy) were excluded from unmet need. In case of pregnant women unmet need was

considered if present pregnancy was unwanted or mistimed as per history. Unmet need was further categorized into ‘unmet need for spacing’ and ‘unmet need for limiting’ on the basis of unmet need for temporary and permanent method of contraceptive respectively.

B. Independent variable:

1. Socio-demographic, economic and Biological factors: (Age, Religion, Race, Type of family, Total family member, Education, Occupation, Per capita income of family, Age of marriage, Age of 1st child birth, Gravida, Number of Abortion, Number of still birth, Number of living child).
2. Knowledge regarding different modern contraceptive method.
3. Cause of not using contraceptive (Unmet need).

SAMPLING DESIGN:



Thus Multistage Random Sampling was done.

SAMPLE SIZE:

In a recent study [9] it was found that prevalence of unmet need of family planning in tribal married women of reproductive age group was 44% in rural population in India. Now considering this prevalence with 10% absolute allowable error sample size became 94 after applying the formula

$$\text{Sample size} = 1.96^2 pq/L^2$$

(p=prevalence, q=1-p & L=allowable error, 10%)

Since it was a multistage random study, design effect was taken 1.5; so size came to 140.

RESULTS

Mean age of participants was 28.86 (± 5.2). Maximum participants (59.3%)

belonged 25-34 year age group. 75.7% belonged to joint family, rest belonged to nuclear family. Mean PCI was 588.85 (± 313.6). 79.3% participants fell under Prasad socio-economic class V followed by 20% under class IV. 17.9% participants were illiterate and maximum participants belonged to middle education group (class V-VIII) (37.1%). 82.9% participants were home maker and 17.1% were laborer. Average age of marriage was 19.3 (± 1.4) and average age of 1st child birth was 21 (± 1.6). 6.4% participants had no living child, 74.3% had 1-2 living child and rest 19.3% had >2 living child. (Table 1)

Table 1: Socio-demographic and biological profile of Study Population: (n=140)

Variables		Number (%) / Mean (SD)
Age		28.86 (± 5.2)
Age Group	15-24	35 (25%)
	25-34	83 (59.3%)
	35-45	22 (15.7%)
Family Type	Nuclear	34 (24.3%)
	Joint	106 (75.7%)
Total Family Member		7 (± 2.3)
Per capita Income		588.85 (± 313.6)
B.G.Prasad scale	Social class III (PCI 1685-2807)	1 (0.7%)
	Social class IV (PCI 842-1684)	28 (20%)
	Social class V (PCI <842)	111 (79.3%)
Education	Illiterate	25 (17.9%)
	Can read only	6 (4.3%)
	Can read and write	21 (15%)
	Primary (I-IV)	12 (8.6%)
	Middle (V-VIII)	52 (37.1%)
	High School (IX-XII)	24 (17.1%)
	High School (IX-XII)	50 (35.8%)
	Graduate and above	3 (2.1%)
Occupation	Home Maker	116 (82.9%)
	Laborer	24 (17.1%)
	Independent occupation	9 (6.4%)
	Cultivator	36 (25.7%)
	Service	4 (2.9%)
	Business	21 (15%)
Age of marriage		19.3 (± 1.4)
Age of 1 st child birth		21 (± 1.6)
Living Child at present		1.91 (± 0.9)
Living Child at present	0	9 (6.4%)
	1-2	104 (74.3%)
	>2	27 (19.3%)
H/o abortion present		13 (9.3%)
H/o still birth present		8 (5.7%)

16.4% participants had no knowledge about any modern contraceptive method. Among rest 117 participants 92.3% were aware about female sterilization method, 88% were aware about oral pill, 82% were aware about IUD and 75.2% were aware about barrier method (male condom). But only 4.3% knew about male sterilization method and only 3.4% participants were

aware about emergency contraceptive method. No participants had ever heard about implant or injection contraceptive methods. Regarding source of knowledge about different contraceptive methods most participants got information from health personnel (53.9%) followed by neighbor and relative (31.7%).(Table 2)

Table 2: Knowledge of contraceptive methods among the Study Population: (n=140)

Knowledge of Contraceptives		Number (%)
No Knowledge		23 (16.4%)
Having Knowledge about contraceptive		117 (83.6%)
Knowledge of different contraceptive methods (n= 117)*	Sterilization male	6 (4.3%)
	Sterilization female	108 (92.3%)
	Barrier Method	88 (75.2%)
	IUD	96 (82%)
	Pill	103 (88%)
	Implant	00 (0%)
	Injection	00 (0%)
	EC	4(3.4%)
Main source of knowledge (n= 117)	Neighbour and relative	37 (31.7%)
	Health personnel	62 (52.9%)
	Mass media	18 (15.4%)

*Multiple response taken

Out of total 140 participants 67.9% had not used any type of contraceptive method during study. 22.1% had sterilized by tubectomy, 7.9% had taken oral contraceptive pill, 2.9% used barrier method and 2.1% used IUD.(Table 3)

Table3: Current contraceptive practice: (n=140)

Variable	Number (%)
None	95 (67.9%)
Sterilization female	31 (22.1%)
Barrier method (male condom)	03 (2.1%)
IUD	03 (2.1%)
Pill	04 (2.9%)
Traditional methods*	04 (2.9%)

*Traditional methods included abstinence, calendar method, coitus interruptus

57.9% participants wanted no more children. 25% were willing to have child ≥ 2 yr interval and rest 15% wanted child < 2 yr interval. 2.1% of participants were pregnant at the time of the study and all pregnancies were intended. Among the participants there was no post hysterectomy or postmenopausal women.

Prevalence of unmet need of contraception was 50.7% (71 out of 140). Unmet need for limiting methods:32.9%. Unmet need for spacing methods:17.8%.

Lack of awareness regarding contraceptive methods (32.4%) was found to be the main cause of unmet need followed

by fear of side effect(25.4%). 18.3% of total unmet need occurred as women thought that family planning measures were not convenient to use. In 7% cases lack of access and in 5.6% cases disapproval of husband or other family member played causative role in unmet need.(Table 4)

Table 4. Cause of Unmet need of contraception: (n=71)

Variable	Number (%)
Lack of awareness	23 (32.4%)
Lack of access	05 (7%)
Inconvenient to use	13 (18.3%)
Fear of side effect	18 (25.4%)
Husband or other family member's disapproval	04 (5.6%)
Others	08 (11.3%)

As per effect of different socio-demographic factors were concerned education of participants had significant effect on unmet need [OR:2.42 (1.22-4.79)] but this significance was lost when adjusted with other variables (age, number of living

children, socioeconomic classes). Women having number of living children >2 had significantly more unmet need in bivariate analysis [OR: 3.47 (1.36-8.87)] and also when adjusted with other variable [AOR: 3.26 (1.07-9.96)].(Table 5)

Table 5: Effect of different socio-demographic and biological characteristics of participants on Unmet need of contraception: (n=71)

Variable		OR (95% CI)	AOR (95% CI)
Age (median age 28 yr)	≥ 28 yr	1.05 (0.54-2.05)	
	<28 yr	1	
Number of living children	>2	3.47 (1.36-8.87)*	3.26 (1.07-9.96)*
	≤ 2	1	
Education	Upto primary	2.42 (1.22-4.79)*	1.6 (0.76-3.5)
	Above primary	1	
BG Prasad Social class (Median PCI=500)	PCI<500	1.929 (0.97-3.8)	
	PCI≥500	1	
Type of Family	Joint	1.038 (0.48-2.249)	
	Nuclear	1	

(* P value <0.05)

DISCUSSION

The focus of the present study was on the contraceptive usage and unmet need of family planning in tribal population in Purulia district of West Bengal where fertility level was relatively high.

The knowledge about any modern contraceptive method was 83.6% which was less than most other studies. According to NFHS 3 report it was 99.1% among currently married women of rural area of West Bengal. [10] In a study conducted by Ranjan Kumar Prusty showed that prevalence of knowledge about any modern contraceptive method among married tribal women of reproductive age group was 96.5%. [11] Prevalence of knowledge was better for limiting method (female sterilization) than spacing method which was consistent with NFHS report [10] and study conducted by Ranjan Kumar Prusty. [11]

In present study 32.1% participants (and their partners) used any of the contraceptive methods. Among all methods sterilization female (tubectomy) was most prevalent (22.1%) followed by OCP and traditional method (2.9% each). According to NFHS 3 use of any contraceptive method

in tribal population West Bengal was high 59.3% but only 39% used any modern method of contraception. [12] Contraceptive prevalence among currently-married tribal women was 45% and 39% for any method and any modern method of contraception respectively in study conducted by Ranjan Kumar Prusty. [11]

Prevalence of unmet need for family planning method was also relatively more in present study (50.7%). Prevalence of unmet need for spacing methods and limiting methods were 17.9% and 32.9% respectively. According to NFHS 3 report prevalence of unmet need in tribals in West Bengal was 6.4% (unmet need for spacing method was 3.5% and limiting methods was 2.9%). [13] Unmet need for spacing and limiting methods in tribal married women of reproductive age group in India as shown by the study by Ranjan Kumar Prusty were 7.5% and 12.3% but in the same study these were much higher in tribal population in Jharkhand (13.2% and 24.8% respectively) which was very close to my study setting [11]. A study conducted in tribal area of Maharashtra also showed high prevalence of unmet need of family planning (40.1%). [9]

In current study, the main cause for not using contraception was lack of awareness (32.4%) followed by fear of side effects (25.4%). The study conducted in tribal area of Maharashtra revealed that main cause for not using contraception was fear of side effect (36.3%) followed by lack of awareness (24.4%)^[9]

As per socioeconomic determinants were concerned in present study, number of living child was found to have significant effect both in bivariate analysis and when adjusted with other covariates but education of participants had significant effect only in bivariate analysis. When adjusted with other covariates education of participants was not significantly associated. In the study conducted in tribal area of Maharashtra showed that age of participants, education, and number of living children had significant effect on unmet need of family planning.^[9]

Limitations

- As present study was cross-sectional in nature, the cause effect relationship cannot be established.
- Small sample size

CONCLUSION

For a second most populous country in the world, the usage of contraception is not only necessary but also indispensable to maintain a decent standard of living for its people. The Government of India in its new National Population Policy 2000 has set guideline for addressing unmet need for contraception as its immediate objective in order to bring down the total fertility rate down to replacement level by the year 2010 which is yet to achieve. The present study elicited very high prevalence of unmet need among tribal married women of reproductive age group and the main cause of that unmet need was ignorance. In this regard there is urgent need for intensive IEC and BCC activities for awareness generation

regarding merits and demerits of different contraceptive methods and also for removing false fear of side effect related to their use. Universal access to all modern contraceptive also have to be ensured so that informed choice of suitable contraceptive by the couple can be made possible. These intervention actions should be performed with special emphasis for marginalized population groups.

REFERENCES

1. Park K. Park's Textbook of Preventive & Social Medicine, 22 th Edition .M/S Banarasidas Bhanat Publishers, 1167, Prem Nagar, Jabalpur-482001 (India) 2009; 443p.
2. India. Ministry of Home Affairs. Provisional population totals paper 1 of 2011 India, series 1. New Delhi: Office of Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, 2011. 188 p.
3. Concepcion M B. Family Formation and Contraception in Selected Developing Countries: Policy Implications of WFS Findings' In Proceedings of the World Fertility Survey Conference, London, 1980 Voorburg, Netherlands, International Statistical Institute. 1980; 1: 197-284.
4. Westoff CF. The potential demand for family planning: A new measure of unmet need and estimates for five Latin American countries. *International Family Planning Perspectives*, 1988;14(2): 45-53.
5. UNFPA (2009). Contraceptives Save Lives Meeting the Needs for Family Planning.www.unfpa.org/safemotherhood_10th_January_2015. Availableat :http://www.unfpa.org/webdav/site/global/shared/safe_motherhood/docs/contraceptives_factsheet_en.pdf
6. Ranjan A. Studies in population of Madhya Pradesh. Bhopal: Shyam Institute, 2004. 338 p.

7. India. Ministry of Home Affairs. Size, growth rate and distribution of child population. *In: Provisional population totals paper 1 of 2011 India, series 1.* New Delhi: Office of Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, 2011:62-76.
8. International Institute for Population Sciences. National Family Health Survey (NFHS-3) 2005-06: India. Key findings. Mumbai: International Institute for Population Sciences, 2007. 24 p.
9. Patil Sapna S., Rashid Abdul K, Narayan KA, Unmet needs for contraception in married women in a tribal area of India, *Malaysian Journal of Public Health Medicine* 2010, Vol.10 (2): 44-51
10. International Institute for Population Sciences (IIPS) and Macro International. 2008. *National Family Health Survey (NFHS-3), India, 2005-06: West Bengal.* Mumbai: IIPS. 52p.
11. Prusty Ranjan Kumar, Use of Contraceptives and Unmet Need for Family Planning among Tribal Women in India and Selected Hilly States. *J Health Popul Nutr* 2014 Jun;32(2):342-355.
12. International Institute for Population Sciences (IIPS) and Macro International. 2008. *National Family Health Survey (NFHS-3), India, 2005-06: West Bengal.* Mumbai: IIPS. 54p.
13. International Institute for Population Sciences (IIPS) and Macro International. 2008. *National Family Health Survey (NFHS-3), India, 2005-06: West Bengal.* Mumbai: IIPS. 62p.

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