

Research Article

## Family planning practices among married males in North Bengal

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### Abstract

**Background:** In a male dominated society women bear the brunt and carry the burden of reproductive ill health which can be prevented to a certain extent by active participation of men. It necessitated more research work to study men's reproductive health and family planning practices encompassing both rural and urban male with a community based approach. There was a dearth of studies in West Bengal and particularly in North-East on this matter.

**Objectives:** To find out the prevalence of different contraceptive methods among the married males whose wife is in reproductive age group and to determine associated socio-demographic factors.

**Methods:** A cross-sectional study was carried out in rural and urban areas of Siliguri Sub-division of northern West Bengal for one year. Multi staged sampling was followed. A total of 298 married males were interviewed by house to house visit with help of a pretested, predesigned, semi-structured schedule encompassing socio-demographic profile and family planning and based on Demographic Health Survey Questionnaire.

**Results:** Majority of the study subjects were semi-professional. Majorities were Hindu and belonged to general caste. 68.8% were currently using any forms of contraception with OCP being the most popular. Absolute majority among both the urban and rural subjects felt both husband and wife should decide jointly on number of future children.

**Conclusion:** Quite high percentages of males were adopting family planning. No significant urban- rural difference existed regarding current practice of family planning. Although, significant difference existed regarding socio demographic profile.

**Keywords:** OCP- Oral Contraceptive Pills, Family Planning, Contraceptive Methods

**Key Message:** Married males were currently practicing family planning.

### 1. Introduction

Importance of incorporating men in family planning lies on –equity in gender relations and responsible sexual behavior that highly stresses the need for men's active involvement in family planning.<sup>1</sup> In a male dominated society, skewed male: female sex ratio, increasing number of women with sexually transmitted infections (STIs)/HIV despite being in monogamous relationships, ever increasing unintended pregnancies and induced abortions including unsafe abortions, high maternal and infant mortality, suggest that women bear the brunt and carry the burden of reproductive ill health which can be prevented to a certain extent by active participation of men.<sup>1</sup>

In India, men play a dominant and many a times decisive role in allowing women's access to reproductive health.<sup>1</sup> Data from NFHS-3 showed that men's perspective about family planning may influence their partner's eventual adoption of contraceptive method.<sup>1</sup> Use of contraceptive methods involves men's direct cooperation – condoms, vasectomy, withdrawal and periodic abstinence – amounts to about one – third of all contraceptive use among married couple.<sup>1</sup> The contraceptive use pattern in India has undergone major changes in the last 30 years as vasectomy which was once a popular method now contributes less than 1 percent of the total sterilization cases every year.<sup>2</sup>

International Conference on Population and Development (ICPD) held in Cairo on 1994 had timely and righteously put across the importance of the participation of men in family planning and reproductive health in terms of gender equality and fulfilling various reproductive responsibilities.<sup>1</sup> On 1995, Fourth World Conference on Women, held in Beijing, China, emphasized that it would be necessary for women to work together in partnership with men.<sup>1</sup> The ICPD agenda was endorsed by making the RCH program making it gender sensitive.<sup>1</sup> One goal of the National Population Policy was to achieve – Increased Participation of Men in Planned Parenthood.<sup>5</sup>

On this background it can be said that more research work is needed to study men's reproductive health and family planning practices as a priority in this scenario. A community based approach encompassing both rural and urban male is essential to get into the depth of the matter. In our country, particularly in West Bengal and North-East, there is still a dearth of studies regarding this matter. Taking all these matter into consideration this study was contemplated in rural and urban areas of Siliguri Sub-division to find out the prevalence of different contraceptive methods among the married males whose wife is in reproductive age group and to determine associated socio-demographic factors.

### 2. Materials & Methods

The community based cross-sectional study was carried out for a period of one year starting from June 2010 in Siliguri subdivision of Darjeeling district, West Bengal. The Siliguri subdivision is situated at the base of the Himalaya Mountains. It is the commercial nerve center of North Bengal. People from other parts of India are coming to the city in search of livelihood.<sup>2</sup>

The total population of Siliguri subdivision was 818581 (male-429124, female-389457). The urban population residing at Siliguri Municipal Corporation was 284602 (male-151895, female-132707). The total rural population of Siliguri subdivision residing in 4 blocks was

533979 (male-277229, female-256750).<sup>1</sup>Siliguri subdivision has 4 Community Development Blocks: Matigara, Naxalbari, Phansidewa and Khoribari.

The study was carried out among married males whose wife was in the reproductive age group (15-49 years) and who were residing permanently in Siliguri subdivision and currently practicing a monogamous relationship. Those who were not permanent resident or visiting, severely mentally retarded, physically debilitated and unwilling to give consent were excluded.

Sampling was done with the help of EPI-INFO version 3.5.1. According to census, total population of Siliguri subdivision was 818581 (male-429124, female-389457). Urban and rural populations were 284602 and 533979 respectively.<sup>8</sup> Again, 25.4% of women belonged to the reproductive age group.<sup>3</sup> Hence, taking this into consideration females belonging to reproductive age group in Siliguri subdivision came out to be 283135. Again, according to NFHS-3, 74.8% of women in reproductive age were married.<sup>4</sup> Noting this as an index and using the software Epi-info Version 3.5.1. and putting Expected (frequency) percentage of study subjects=74.8%, worst possible estimate=69.8% and confidence Interval =95%, the sample size turned out to be 289. Assuming a 10% *non response*, the Final Sample Size was 318. We already knew the ratio for the urban to rural population would be 1:1.87 Thus the urban and rural sample size came out to be 110 & 208 respectively.

Multi stage sampling was followed and as Siliguri subdivision had 2 parts – urban and rural, these 2 groups were considered separately as 2 groups or strata. As for the urban part, there were 33 wards present in the urban part of the Siliguri subdivision; out of these ward number 23 were chosen randomly. A list of names and house address of eligible couples were prepared from local IPP-VIII Extension Project network covering the entire Siliguri Municipal Corporation. From the list containing the name of such households for the urban part of study sample and requisite subjects (110) were chosen using systematic random sampling.

For the rural part, two out of four blocks i.e., Matigara and Phansidewa were selected. To ensure representativeness, from each block 50% Gram Panchayats were selected randomly; i.e. from “Matigara”:”Matigara-I,” Matigara-II” from “Phansidewa”: “Chathat” and “JalasNijamtara” Gram Panchayats were selected. From each Gram Panchayats 2 villages were selected. Therefore, finally it turned out a list of total of 8 villages were randomly chosen from 4 GPs.

A pretested, predesigned, semi-structured schedule, consisting of two parts i.e., socio-demographic profile and family planning was used. There were also consent forms. With the help and framework of DHS (Demographic Health Survey)<sup>3</sup> Men’s Questionnaire, a semi-structured schedule was designed, pretested, and modified as per the local need. Married males were interviewed by house to house visit.

Permission was obtained from the appropriate authorities to conduct the study. Sensitization and rapport with the councilor of the urban ward of Siliguri Municipal Corporation and also with the Gram Panchayat Pradhan, Panchayat Members, local leaders and health care workers (like IPP-VIII workers, ANMs, ASHAs) were established. For the urban area project director of IPP-VIII extension was approached to conduct the study in the ward 23. For the rural areas Block Medical Officer of Health and Block Primary Health Nurse of the four Blocks were approached individually and permission obtained and cooperation were also ensured. Afterwards the local supervisor and ANMs were also approached. The local IIP-VIII and ASHA workers were also taken into confidence. House to house visit was done and efforts were made to establish rapport with the subjects or their spouse who was available at that time and their availability of time was also enquired. The motto and purpose of visit was made to understand. Before commencements of interview the confidentiality of the subjects were ensured and informed consent was obtained. Three visits were reserved for each individual to minimize non response. Even after failing so, next house-address listed with eligible couple was opted for. The study was finally conducted among 298 married males (20 non responders). The schedule was dully filled up.

All data were codified and put into a database (Excel 2003). Data were analyzed for test of significance (Pearson’s Chi-square and Fisher’s exact) using SPSS 11.5 software package.

### 3. Results

**Table 1: Socio-demographic profile of the study population [N=298]**

		Urban N (%)	Rural N (%)	Total N (%)	p value
Educational attainment	No Formal Education	8(8.2)	38(19.0)	46(15.4)	0.03
	Primary(I-IV)	13(13.3)	38(19.0)	51(17.1)	
	Middle School(V- VIII)	27(27.6)	56(28.0)	83(27.9)	
	High School(IX-X)	3(3.1)	16(8.0)	19(6.4)	
	Higher Secondary(XI-XII)	32(32.7)	37(18.5)	69(23.2)	
	Graduate & Post grad	11(11.2)	13(6.5)	24(8.0)	
	Professional	4(4.1)	2(1.0)	6(2.0)	
	Total	98(100.0)	200(100.0)	298(100.0)	
Occupation	Unemployed	1(1.0)	3(1.5)	4(1.3)	0.003
	Unskilled	3(3.1)	36(18.0)	39(13.2)	
	Skilled	34(34.7)	57(28.5)	91(30.5)	
	Semi-professional	55(56.1)	100(50.0)	155(52.0)	
	Professional	5(5.1)	4(2.0)	9(3.0)	
	Total	98(100.0)	200(100.0)	298(100.0)	
Socio-economic Class	Class I	17(17.9)	24(12.0)	41(13.8)	0.01
	Class II	30(30.6)	42(21.0)	72(24.2)	
	Class III	37(37.8)	66(33.0)	103(34.6)	
	Class IV	10(10.2)	52(26.0)	62(20.8)	
	Class V	4(4.1)	16(8.0)	20(6.7)	
	Total	98(100.0)	200(100.0)	298(100.0)	
Religion	Hindu	90(91.8)	114(57.0)	204(68.5)	0.001 (Fisher’s Exact)
	Muslim	4(4.1)	62(31.0)	66(22.0)	
	Christian	0(0)	16(8.0)	16(5.5)	
	Others	4(4.1)	8(4.0)	12(4.0)	
	Total	98(100.0)	200(100.0)	298( )	
Caste	General	73(74.5)	107(53.5)	180(60.4)	0.03
	SC	13(13.3)	39(19.5)	52(17.4)	
	ST	6(6.1)	45(22.5)	51(17.1)	
	Others	6(6.1)	9(4.5)	15(5.0)	
	Total	98(100.0)	200(100.0)	298(100.0)	

The table 1 showed that 8.2% of the urban residents and 19.0% of rural residents didn't have any formal education. 13.3% of urban and 19.0% rural residents have completed primary school. 32.7% of urban study subjects and 18.5% of rural study subjects had Higher Secondary level of education. Whereas 4.1% of urban and 1.0% of rural residents have professional degrees. The mean age of the study population was 29.6 years (not shown in table). Majority of the study subjects were semi-professional which was 56.1% in urban areas and 50.0% in rural areas. As a whole a mere 1.3% were unemployed and only 3.0% were professional. Among the rural population 33.0% belonged to Class-III and 26.0% belonged to Class-IV. Among the urban population 37.8% belonged to Class-III and 30.6% in the Upper Class-II. Regarding religion, overall majority of the study population i.e., 68.5% were Hindu. In urban areas Hindu population was as high as 91.8% but in rural areas it was a modest 57.0%. Muslim population in urban areas was just 4.1% but in rural areas it was 31.0%. The Other religionists included tribes practicing their aboriginal faith as well as Buddhists and it was around 4.0% in both urban and rural areas. The majority (60.4%) belonged to general caste. General cast contributed 74.5% study subjects in urban areas and 53.5% in rural areas. The scheduled tribe population was 6.1% in urban areas and 22.5% in rural areas. Schedule caste population was 13.3% in urban areas and 19.5% in rural areas.

**Table 2: Distribution of study subjects according to the practice of family planning [N=298]**

	Urban N (%)	Rural N (%)	Total N (%)	p value
Past User	11(11.2%)	48(24.0%)	59(19.8%)	0.001
Currently Practicing	85(86.7%)	120(60.0%)	205(68.8%)	
Never used	2(2.0%)	32(16.0%)	34(11.4%)	
Total	98(100.0)	200(100.0%)	298(100.0%)	

Table 2 reflected quite high level of contraceptive use in urban areas was 85(86.7%) but comparatively lower 120 (60.0%) for rural areas. Overall a total 34 (11.4%) never opted for any methods whereas a mere 2(2%) in urban areas did so. But a whopping 32(16.0 %) never used any contraception in rural areas. The overall current use of contraceptive turned out to be 68.8%

**Table 3: Practice of Different Family Planning Methods Among Current Users (N=205)**

Family Planning Methods Practiced( Current Users)	Urban N (%)	Rural N (%)	Total N (%)	p value (Fisher's Exact)
Female Sterilization	26(30.6)	28(23.3)	54(26.3)	0.315
Vasectomy	0(0.0)	2(1.7)	2(1.0)	
OCP	30(35.3)	37(30.8)	67(32.7)	
IUD	0(0.0)	2(1.7)	2(1.0)	
Condom	16(18.8)	17(14.2)	33(16.1)	
Calendar	4(4.7)	13(10.8)	17(8.3)	
Withdrawal	9(10.6)	17(14.1)	26(12.7)	
LAM	0(0)	2(1.7)	2(1.0)	
Other	0(0)	2(1.7)	2(1.0)	
Total	85(100.0)	120(100.0)	205(100.0)	

The table 3 shows among the current users family planning methods with highest practice was of OCP both in rural and urban areas at 30.8% and 35.3% respectively. Among the practicing methods the lowest use was of LAM and other( traditional herbal contraceptives) which came out to be just 1.7% each at rural areas only. Use of Traditional method (rhythm, withdrawal, LAM & indigenous other herbal method) was 23.0%.

**Table 4: Distribution of Current Users According to Source/ Provision of Family Planning (N=160) \*[Excluding Current Users of Withdrawal -26, Calendar/ Rhythm -17, Lam -2 users]**

Source of Family Planning Services( Current Users)	Urban N (%)	Rural N (%)	Total N (%)	p value
Government Hospital	25(34.7)	25(28.4)	50(33.3)	0.257
Health Centre	4(5.5)	12(13.6)	15(10.0)	
Private Hospital	2(2.7)	4(2.3)	6(4.0)	
Pharmacy & Others	41(56.8)	47(53.4)	88(58.6)	
Total	72(100.0)	88(100.0)	150(100.0)	

Table 4 shows 34.7% among urban and 28.4% among rural respondents avail family planning services from government facilities and overall just one-third i.e., 33.3% males get such services from government facilities. Whereas a paltry 2.7% and 2.3% availed Family planning services from private hospitals. A whopping 56.8% and 53.8% availed family planning services from pharmacy and other resources. These exclude Current Users of natural family planning methods like withdrawal (26 user), calendar/rhythm (17 user) & LAM ( Lactation amenorrhea - 2 user) Methods.

**Table 5: Distribution of Current Users According to Role of Decision Making on Choice of Family Planning Methods (N=205)**

Decision Maker	Urban N (%)	Rural N (%)	Total N (%)	p value
Self	12(14.1)	28(23.3)	40(19.5)	0.024
Wife	4(4.7)	15(12.5)	19(9.3)	
Both	69(81.2)	77(64.2)	146(71.2)	
Total	85(100.0)	120(100.0)	205(100.0)	

Table 5 shows that 81.2% among the urban and 64.2% among the rural subjects felt both husband and wife should decide jointly on number of future children. Whereas 14.1 % among urban and 23.3% among rural respondents felt husband only should decide on this matter.

It was found that significant urban-rural differences were there regarding all the socio demographic factors as well as about the role of decision making. But no such difference existed among the current users regarding use of different FP methods.

#### 4. Discussion

In the current study, 8.2% of the urban residents and 19.0% of the rural residents didn't have any formal education. Whereas 32.7% of urban study subjects and 18.5% of rural study subjects had Higher Secondary level of education. The present study also exhibited statistically significant difference in educational profile between those males who were currently practicing and those who were not practicing any family

planning methods [ $\chi^2$  for Fisher's Exact 9.050, p value 0.45]. A study carried out by population council in Agra showed 25.9% of the subjects had high school education, 18.2% were illiterate. 25.9% had education above high school level.<sup>3</sup> In a study done by P.G. Department Of Home Science, University of J& K, to find attitude of couples towards family planning, no illiterates were found among male subjects in Urban area but in rural areas there were 38% illiterates. Again, 23% among the urban males and 14% of their rural counterpart had attended high school.<sup>11</sup> Educational profile of the rural subjects in the present study had some similarities with this J&K study.

The present study shows that the mean age was 29.68 years. A study was conducted by Department of preventive and Social Medicine of JIPMER, Pondicherry among 50 men within 5 years of their marriage (2002). The mean age of the subjects there were 28.8 years.<sup>4</sup> In the Agra based study mean age of the respondents of 34.2 years (1997).<sup>10</sup> Finding of current study was somewhat similar to that of the Pondicherry.

In the present study, 1.3% of the total populations were unemployed. Whereas 56.1% the study subjects in urban areas and 52.0% the study subjects were semi professional in rural areas were semi professional. -3.0% of the total population was professional. There existed marked difference in employment status between those who currently adopted family planning and those who did not [ $\chi^2$  for linear trend: 13.14, p value: 0.001]. In the study done in Agra -2.9% among the males were unemployed, 46.8% were either semi professional and 1.5% was professional.<sup>10</sup>

In the current study, among the rural population 33.0% belonged Class-III and 26.0% belonged to Class-IV. Among the urban population 37.8% belonged to Class-III and 30.6% in the Class-II. A study conducted by Centre for Community Medicine, AIIMS, by Kapil Yadav *et al*, carried out at Haryana had found majority (56.5%) of the study population belonged to lower-middle class, followed by middle class (35.0%), lower class (4.5%), upper-middle class (3.5%) and upper class (0.5%).<sup>5</sup>

In the present study, overall majority of the study population (68.5%) were Hindu. In Urban area Hindu contributed 91.8% and in rural areas they contributed 57.0%. As a whole Muslim population was 22.0%. Muslim comprised 4.1% of Urban population and 31.0% of rural population. People belonging to "other" religion contributed 4.0% of the total population. They were mostly Buddhist or Tribal aborigines. This finding is quite appropriate for the rural India-Bangladesh border region of Siliguri Subdivision where many of the inhabitants had migrated from Bangladesh. A study done on male behavior towards reproductive responsibilities in neighboring Sikkim (2009) had shown that 70.31% were Hindus.<sup>3</sup>

The present study showed majority (60.4%) belonged to general caste; 74.5% in urban areas and 53.5% in rural areas. Schedule caste subjects contributed 13.3% in urban areas and 19.5% in rural areas. Scheduled tribes contributed 6.1% in urban areas and 22.5% in rural areas. Those belonging to other caste contributed 5.0% of the total population. The Sikkim based study had following findings: 31.38% belonged to Scheduled tribe & 48.16% belonged to other caste.<sup>14</sup>

In the current study overall majority (68.8%) were currently using any family planning methods. In urban areas it was 86.7% and in rural areas 60% with a disparity between the two. According to NFHS -3, current use of any method in West Bengal was 71.2%. In urban areas it was 75.5% and in rural areas it was 69.5%.<sup>4</sup> According to DLHS-3 in Darjeeling district use of any family planning method was 74.8%.<sup>5</sup> But in DLHS-2 use of any method was 67.0%.<sup>6</sup> In the study conducted in Sikkim, 82.0% were using any family planning method.<sup>15</sup> Finding in present study was somewhat similar to DLHS-2. So the findings in the present study for urban areas were quite higher for all these given data. But findings in rural areas were also below of both the NFHS-3 and DLHS-2 & 3 data. It might be due to recent rapid urbanization in Siliguri Corporation exhibiting gross disparity with the rural regions bordering Bangladesh.

In the current study, 11.2% subjects in urban areas and 24.0% in rural areas were not using family planning at present, but had used it in the past. The total percentage of such user in the current study was 19.8%. According to the study done in Agra, 18.0% males were currently not practicing any family planning though in the past they had used it.<sup>10</sup>

The rate of vasectomy in present study was just 1.0%. In urban areas it was 0.0% and in rural areas it was 1.7%. According to NFHS-3 rate of vasectomy in West Bengal was 0.7%: 0.5% in urban areas and 0.8% in rural areas.<sup>4</sup> According to DLHS-3 rate of vasectomy in Darjeeling district was 1.1%.<sup>15</sup> In the study conducted in Sikkim, 4.87% had vasectomy.<sup>14</sup> Finding in this present study was closer to DLHS-3 data.

Use of condom was found to be 16.1% here with 18.8% in urban areas and 14.2% in rural areas using it. According to NFHS-3 condom use in West Bengal was 4.3%. In urban areas it was 8.7% and in rural areas it was 2.5%.<sup>4</sup> According to DLHS-3, in Darjeeling district condom use was 4.4%.<sup>15</sup> In the Sikkim based study, 16.27% were using condom.<sup>14</sup> So the findings in this study was way above these two but quite similar to that of the Sikkim.

In present study use of any traditional method (rhythm, withdrawal, LAM & indigenous other herbal method) was in total found out to be 23.0%. According to DLHS-3 in Darjeeling District it was 18.8%.<sup>15</sup> In DLHS-2 it was 22.6%.<sup>16</sup> Findings in our study were close to DLHS-2 data.

In present study, regarding other methods, used by their wives, highest practice was of OCP at 32.7%; 30.8% and 35.3% in rural and urban areas respectively. According to NFHS-3, in West Bengal, 11.7% were using it, with 10.7% in urban and 12.1% in rural areas.<sup>4</sup> According to DLHS-3 it was 11.5%<sup>15</sup> & 11.7%<sup>16</sup> respectively in Darjeeling District. The study conducted in Sikkim showed 43.41% of the female partners of the male respondents were using OCP.<sup>14</sup> Present study had findings closer to the study done in Sikkim.

In present study female sterilization was found to be 26.3% with 30.6% in Urban and 23.3% in rural areas. According to NFHS-3 it was 32.2% with 28.8% in Urban and 33.5% in rural areas of West Bengal.<sup>4</sup> IN DLHS-3 it was 34.6%<sup>15</sup> and 30.8%<sup>16</sup> in Darjeeling District. The study in Sikkim revealed among those female partners of the respondents 16.27% had undergone female sterilization.<sup>14</sup>

Here, majority among both the urban (56.8%) and rural (53.4%) subjects had availed family planning services from pharmacy, but it was entirely non terminal family planning services. From Govt. Hospital, 34.7% urban and 28.4% rural subjects availed family planning services (mostly terminal). The role of source to avail family planning arises to ascertain the barriers to the accessibility of family planning to the beneficiaries. Dabral (2004) opined that Govt. Hospitals and PHC were the major source in 4/5<sup>th</sup> of contraception users, while 1/5<sup>th</sup> of the users acquired contraceptives from private hospitals, private doctors, and drug stores. Govt. hospitals were the chief source for female sterilization. Drug houses were the cent percent source for acquisition of condoms.<sup>6</sup> Patro B K (2005) observed that services for permanent methods were availed from public sector hospitals. With exception of IUCD, temporary methods were mostly obtained from private health care providers.<sup>5</sup>

The present study revealed that 81.2% among the urban and 64.2% among the rural study subjects agreed on joint role of both husband and wives on decision making on choice of adoption of particular family planning method. But, 23.3% of rural male felt it was the husband himself only who should decide on this perspective. The study conducted by JIPMER revealed 18.0% of the males felt either of the couple should make the decision while 74.0% felt that the decision must be made by the both of the couple.<sup>13</sup> Finding of this study was similar to present study.

## 5. Conclusion

Though the present study shows quite high level of family planning practice among married males and no significant urban and rural difference regarding current practice of family planning methods, there were difference in education as well as employment status between those who were presently practicing family planning and those who were not. Policy makers should urgently shift attention to this in order to achieve population stabilization norms.

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