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# **Research Article**

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# Family planning: its practice and determinants among eligible couples in an urban slum of Tripura

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#### **ABSTRACT**

**Background:** Contraceptive use in India is poor so this study was designed to detect the prevalence of contraceptive use and its determinants among eligible couples in an urban slum of Tripura.

**Methods:** Community based cross-sectional study, conducted in the urban field practice area of Agartala Government Medical College during 15<sup>th</sup> June 2010 to 14<sup>th</sup> August 2010 among 180 eligible couples chosen by systematic random sampling. Descriptive statistics and chi-square test were used.

**Results:** Majority were Hindu from nuclear families. 56.7% wives and 62.8% husbands studied up to secondary level. Prevalence of contraceptive use was 43.9% and 88.9% of the study couples were aware about family planning. Tubal ligation was the most adopted and condom was the least practiced method. Decision regarding family planning was mostly made by the husband and wife jointly. Public health facilities were the main source of family planning materials and most of the study couples opined family planning as essential. Commonest reason for not practicing family planning was the desire for a son and the rest were fear of adverse effects and some non-specific reasons. The affect of caste, religion, occupation, education etc. was insignificant in determining the practice of family planning.

**Conclusions:** Despite a high rate of desire to limit family size, less than half of the couples were currently using contraception. It was mostly due to desire for more male babies. Hence behaviour change communication for eliminating preference for male babies and measures favouring girl children may promote couple protection in this community.

**Keywords:** Family planning, Contraceptive, Urban slum

# INTRODUCTION

India was the first country in the world to start a National family planning program in 1952, with the objective of "reducing birth rate to the extent necessary to stabilize the population and at a level consistent with requirement of national economy". In spite of operating national family planning program since 1952, about 56% of the eligible couples are still unprotected against conception. Knowledge regarding family planning and positive attitude towards it determines the use of contraceptive in a society. Over 60% people have attitudes to restrict or

space births.<sup>2</sup> The rate of contraceptive use by eligible couples in India is 43.5% as opposed to 87% in Japan and China.<sup>3</sup> For the past several decades female sterilization has been the dominant method in the national program even though it is widely acknowledged that an overriding emphasis on single method is unlikely to achieve the desired demographic impact or meet clients' needs. Today even though increased facilities are being provided through family planning program to all sections of the society, there are other factors that play an important role in adopting it like knowledge, attitude, beliefs, values, misconceptions etc. During 1975, a WHO expert

committee has devised five methods to evaluate the success of Family Planning Programmes.<sup>4</sup> Women are the core of human dynamics and healthy females can uplift the socio-economic status of a country. So, awareness of eligible couples regarding the family welfare program is important. Limited information is available regarding the current status of contraceptive use in North Eastern States of India. Therefore the present study was undertaken with the objectives to determine the prevalence of contraceptive use among eligible couples, to assess their knowledge regarding contraception and also to study the effects of some probable determinants of contraceptive use in an urban slum of Tripura.

#### **METHODS**

A Community based cross-sectional study was conducted during 15th June 2010 to 14th August 2010 among 180 eligible couples residing in the urban field practice area of Agartala Government Medical College, consisting of seven hamlets namely: Biterban, Mullapara, Daspara, Hrishicolony, Madhyadip, East Bhati-Abhoynagar and West Bhati-Abhoynagar, with 2,259 families and a total population of 17,848. It is a slum area located at the North West side of Agartala city mainly inhabited by the people of lower socioeconomic status. At the central part of this area there is Urban Health Training Centre of Agartala Government Medical College, serving as the public health care facility for that area. It is a day care centre offering general OPD services and other services like DOTs, Anti Malaria Program, routine immunization and wide range of RCH services.

Minimum sample size requirement for this study was determined by using the formula,  $N = (t^2 \times p \times q) \div L^2$ , which came to be 195 eligible couples including additional 10% for non-response. (N = sample size. P = prevalence of any method of contraceptive use in Tripura. As per District Level Household and Facility Survey- III (DLHS-III), prevalence of any method of contraceptive use among eligible couples in Tripura was 68.5%; q = 1p; L = allowable error; 10% of 'P' was tolerated as allowable error in this study; standard value of 't' at 95% confidence = 1.96). Eligible couple register maintained in the Urban Health Training Centre of Agartala Government Medical College had an up-to-date record of 2576 eligible couples. From this sampling frame, 195 eligible couples were chosen by systematic random sampling technique. Either member of an eligible couple currently using any of the approved methods of contraception for birth control for a minimum of six consecutive months preceding to this study were considered as contraceptive users. Knowledge regarding contraception was assessed by asking following questions: whether the couples have heard the term "family planning", names of different methods of family planning, from where these materials can be obtained etc.

Being accompanied by the Medical Social Workers and the ANMs posted in the study area, home visits were paid to approach the selected eligible couples. Eligible couples were interviewed confidentially in presence of the ANM after obtaining informed written consent and the statements were recorded in a pretested interview schedule, which included the following questions regarding determinant factors of family planning like: occupation, literacy, income, type of family, length of married life, existing number of children and their sex, desire for further children, availability of family planning services, role of elders in the family etc. and the knowledge based questions like: Source of information regarding family planning, source of family planning materials, ideal timing of adoption and suitability, adverse events, contraindications, proper technique of using the methods etc. Statement of either single partner or both was considered as statement of the couple.

Three couples denied participating in this study, one member of a couple was mentally unfit to make any valid statement, eight couples were residing in the study area for less than one year and three couples could not be contacted in spite of two successive visits. Thus 15 couples met exclusion criteria and finally 180 couples were enrolled in this study.

The Institutional Ethics Committee of Agartala Government Medical College has approved this study. Informed written consent was obtained from every participant. Information collected while conducting this study was not linked to the identity of any of the respondents and strict confidentiality was maintained. Data were entered in computer using SPSS 13 version. Descriptive statistics and chi-square tests were applied as per applicability.

#### RESULTS

Response rate was found to be 92.3%. The prevalence of contraceptive use among the study couples was found to be 43.9%. It was more prevalent among the rickshaw pullers. But it was least popular among those, who attained higher education like graduation or above. Tubal ligation was the most widely adopted method (53.16%) followed by oral contraceptive pills (44.30%) and condom was the least popular method (2.53%). All the religious groups mostly preferred oral contraceptive pills and condom was the least preferred one. Majority i.e. 80 (44.4%) couples had only one son, followed by 30 (16.7%), who had two, 9 (5.0%) had three and 2 (1.1%) had four sons, whereas 59 (32.8%) couples had no sons. Majority i.e. 78 (43.3%) couples had only one daughter, 19 (10.6%) had two, 6 (3.3%) had three and 1 (0.6%) had four daughters whereas 76 (42.2%) couples had no daughters. Majority i.e. 66 (36.7%) couples had only one child followed by 63 (35.0%), who had two children. 25 (13.9%) had three, 6 (3.3%) had four, 2 (1.1%) had five and another 2 (1.1%) had six children. 16 (8.9%) couples did not have any children. Majority (80.6%) of the study couples had no desire for having more children but 13.3% wanted to have more children and 6.1% could not say whether they want more children or not. 88.9% of the study couples have heard about family planning. Majority (93.8%) of the office working ladies have heard about family planning. Those, who have heard about family planning, majority of them, i.e. 58 (36.25%) knew oral contraceptive pill only, followed by 54 (33.75%), who knew OCP and tubal ligation both. OCP, condom and tubal ligation was known to 10 (6.25%) and only 7 (4.375%) of them knew about OCP, Condom and Cu-T. Majority i.e. 40 (50.63%) of the study couples obtained family planning materials from government health centres, followed by 34 (43.04%) couples, who procured it from medicine shops and only 5 (6.33%) procured it from private clinics. In

majority of the families (97.48%) the decision of family planning was made by the husband and wife jointly. Majority (69.4%) of the study couples said that they did not practice family planning prior to this session. Those who were practicing family planning once upon a time prior to this study, most of them (90.91%) were using oral contraceptive pills. Majority (97.8%) of the study couples considered family planning as an essential thing. Commonest reason for not practicing family planning was the desire for a son and the rests were fear of adverse effects and some non-specific reasons.

Table 1: Use of contraception by socio-demographic profile of the study couples.

	Groups	Number (%)	Contraception user number (%)	Non-user number (%)
Caste	SC	68 (37.8)	36 (52.94)	32 (47.06)
	ST	25 (13.9)	07 (28.0)	18 (72.0)
	OBC	31 (17.2)	16 (51.61)	15 (48.39)
	GEN	56 (31.1)	20 (35.71)	36 (64.29)
Religion	Hindu	167 (92.8)	74 (44.31)	93 (55.69)
	Muslim	9 (5.0)	04 (44.44)	05 (55.56)
	Christian	10.6)	01 (100.00)	00
	Others	3 (1.7)	0	03 (100.00)
Occupation of wife	Housewife	141 (78.3)	66 (46.80)	75 (53.20)
	Self employed	23 (12.8)	08 (34.78)	15 (65.22)
	Office-worker	16 (8.9)	05 (31.25)	11 (68.75)
Occupation of husband	Rickshaw puller	10 (5.6)	08 (80.0)	02 (20.0)
	Self employed	101 (56.1)	45 (44.55)	56 (55.45)
	Office-worker	64 (35.6)	25 (39.06)	39 (60.94)
	Daily labour	5 (2.8)	01 (20.0)	04 (80.0)
Literacy of wife	Illiterate	8 (4.4)	03 (37.5)	05 (62.5)
	Primary educated	50 (27.8)	28 (56.0)	22 (44.0)
	Secondary educated	102 (56.7)	43 (42.15)	59 (57.85)
	Graduate & above	20 (11.1)	05 (25.0)	15 (75.0)
Literacy of husband	Illiterate	2 (1.1)	01 (50.0)	01 (50.0)
	Primary educated	40 (22.2)	20 (50.0)	20 (50.0)
	Secondary educated	113 (62.8)	51 (45.13)	62 (54.87)
	Graduate & above	25 13.9)	07 (28.0)	18 (72.0)
Type of family	Nuclear	121 (67.2)	56 (46.28)	65 (53.72)
	Joint	59 (32.8)	23 (38.98)	36 (61.02)

Table 2: Practice of family planning by caste, type of family, occupation and literacy of the women.

Variables		Practicing family planning		
	Subgroups	Yes number (%)	No number (%)	Significance
Caste	SC	36 (52.9)	32 (47.1)	$\chi^2 = 7.096$ p = 0.069
	ST	7 (28.0)	18 (72.0)	
	OBC	16 (51.6)	15 (48.4)	
	GEN	20 (35.7)	36 (64.3)	
Type of family	Nuclear	56 (46.3)	65 (53.7)	$\chi^2 = 0.858$ p = 0.354
	Joint	23 (39.0)	36 (61.0)	
Occupation	Housewife	66 (46.8)	75 (53.2)	$\chi^2 = 2.300  p = 0.317$
	Self-employed	8 (34.8)	15 (65.2)	
	Office-worker	5 (31.3)	11 (68.8)	
Literacy	Illiterate	3 (37.5)	5 (62.5)	$\chi^2 = 2.300$ $p = 0.317$
	Primary educated	28 (56.0)	22 (44.0)	
	Secondary educated	43 (42.2)	59 (57.8)	
	Graduate & above	5 (25.0)	15 (75.0)	

Table 1 shows that majority (37.8%) of the study couples were from scheduled caste, 31.1% from general caste and only 13.9% were from scheduled tribe community. majority were Hindu and 67.2% were from nuclear families. 78.3% women were housewives and 56.1% men were self-employed. 62.8% men and 56.7% women studied up to secondary level.

Table 2 shows that caste, type of family, occupation, literacy of the wives etc. had no significant effect in determining family planning practices of the couples.

#### **DISCUSSION**

In this study the prevalence of contraceptive use was found to be 43.9%. Roumi Deb, 2010<sup>6</sup> found it to be 52.7% in Meghalaya, DC Jain, 2004<sup>7</sup> found it to be 31.2% among Gond in Madhya Pradesh, Ravendra K Sharma & Manju Rani, 2009<sup>8</sup> found it to be 54.6% in central India and District Level Household and Facility Survey-III detected prevalence of contraceptive use in Tripura as 68.5%.<sup>5</sup> Lower literacy level among the Gond may be the reason for low prevalence of contraceptive use among them. On the other hand the study population which comprised of rural and urban mix, permanent settlement and slum both and of better literacy level in the District Level Household and Facility Survey-III<sup>5</sup> showed a higher contraceptive prevalence rate in Tripura. In this study only 4.4% of the ladies were illiterate whereas S

Kartikeyan & RM Chaturvedi, 1995<sup>9</sup> found it to be 68.26%, S Sultana et al. 2007<sup>10</sup> found 26%, Oyedokun Amos O, 2007<sup>11</sup> found 15.7% and W Abraham et al. 2010<sup>12</sup> found it to be 14.9%. This may be due to poor literacy rate in Maharashtra, Bangladesh, Nigeria and Ethiopia respectively. In our study 37.5% illiterate ladies were practicing family planning whereas Roumi Deb,  $2010^6$  found it to be 20.7%. In this study 56% of the primary educated ladies were practicing family planning whereas Roumi Deb, 2010<sup>6</sup> found it to be 35.8%. In our study 25% graduate or higher educated ladies were practicing family planning but Roumi Deb, 2010<sup>6</sup> found it to be 3.9%. All these may be due to lower literacy status of the ladies in that study. In the present study tubal ligation (female sterilization) was adopted by 53.16% and OCP was used by 44.3% of the couples whereas Roumi Deb, 2010<sup>6</sup> found it to be 30.4% and 9% respectively. In the present study, 80.6% couples had no desire for further children. S Sultana et al, 2007<sup>10</sup> also found that most of the respondents had no desire for having more children. In the present study, 50.63% couples obtained family planning materials from the government health centers whereas R N Pande, 2002<sup>13</sup> found it to be 82%. Present study revealed that 88.9% couples have heard about family planning, whereas W Abraham et al, 2010<sup>12</sup> found it to be 96%. We have found that among the couples who have heard about family planning, 36.25% of them knew about OCP, whereas in Rajesh Reddy et al, 2003<sup>14</sup> it was 50%.

The study concludes that contraception prevalence in the study area is lower than the finding of DLHS-III for Tripura state. As the public health care delivery system was found to be the major source of obtaining family planning materials, it needs to be strengthened in terms of quality and accessibility. Desire for a son was identified as an important barrier to contraception and despite a high rate of desire to limit family size less than half of the couples were currently using contraception. Hence apart from improving the quality and accessibility of RCH services at primary level, better opportunities for girl children should also be created so that daughters are also equally preferred as sons. Social mobilization and behaviour change communication may be helpful to eliminate the prevailing conception, that 'male offspring are more dependable than female' so that more number of couples may like to adopt family planning practices and that too without apprehension. The present study has the limitation of generalizability to this slum population only. Hence further study involving the whole population of Tripura state is required to investigate these facts.

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