PERCEPTIONS OF COUPLES ABOUT CONTRACEPTION IN EASTERN INDIA

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Abstract. This community-based, cross-sectional study was conducted in sampled villages and municipal wards of Paschim Medinipur District of West Bengal, India among 2,000 respondents, 3/4 were from rural and 1/4 from urban areas, to determine perceptions of couples about contraception. Decision-making about fertility and contraception was mostly made by the husband. Forty-four point three percent of rural and 77.6% of urban women preferred a birth spacing of ≥3 years. The ideal interval between marriage and first pregnancy was considered to be ≥3 years in nearly two thirds of women. With increasing literacy level among women, the ideal birth interval between pregnancies also increased. Eighty-nine point four percent of women had correct knowledge of family planning. Only 49.4% of women knew about the Copper-T contraceptive device.

Keywords: perception, eligible couples, contraception

INTRODUCTION

The population of India surpassed one billion people in 2000 and is projected to reach 1.53 billion by 2050 (Government of India, 2007), making it the most populous country in the world by then. There are 248 million women of reproductive age (15-49 years old) (Government of India, 2007). The Reproductive and Child Health (RCH) Program has been launched by the Government of India to promote responsible, planned parenthood with free choice and voluntary use of different methods of contraception. The National Population Policy of 2000 intends to achieve its medium term objective of bringing the Total Fertility Rate (TFR) down to replacement levels by 2010 in order to achieve the long-term goal of population stabilization by 2045 (Government of India, 2007). The Contraceptive Prevalence Rate (CPR) was 56.3 during 2005-2006 in India (Government of India, 2007). Knowledge about Intra-uterine devices (IUD) has declined from 73% during the National Family Health Survey2 (NFHS-2) to 68% during NFHS-3 (Government of India, 2008). The Indian government introduced the Copper-T 380A in 2002 to India (Government of India, 2007).

Two thirds of French women used some form of contraception in 1994 but both male and female sterilization remain

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rare (Toulemon and Leridon, 1998). The use of different contraceptive methods was studied in 5 western European countries, along with knowledge of fertility, motives for choice and perceptions held by women (Riphagen and Lehert, 1989). The process of decision-making was analyzed in a knowledge, attitudes and practice (KAP) survey in a Mexican community and a wide gap between women's fertility desires and their actual fertility was observed (Schedlin and Hollerbach, 1988). A study of the perceptions and practices of adolescent sexuality and fertility in Kenya showed the majority of subjects had a poor knowledge of this subject (Ajayi *et al*, 1991). Studies in the Philippines (Casterline *et al*, 1997) and Zambia (Biddlecom and Fapohunda, 1998) showed perceptions of couples were important for the fulfillment of desired family planning objectives. The current study was done to elicit perceptions of couples about contraceptive methods in a district of West Bengal, India.

MATERIALS AND METHODS

This community based cross-sectional study was conducted among sampled villages and municipal wards of Paschim Medinipur District, West Bengal, India during April and September 2009. A multistage stratified random sampling technique was used. Paschim Medinipur District was randomly chosen from 19 districts West Bengal State. Out of 29 blocks in the district, 3 were selected randomly: Chandrakona II in Ghatal Subdivision, Keshpur in Sadar Subdivision, and Nayagram in Jhargram Subdivision. In each block, 2 sub-centers were selected using a simple random sampling method, and in each sub-center 2 villages were selected by a random sampling technique. In the urban agglomerates, Kharagpur and Medinipur municipalities were chosen, and in each municipality, 2 wards were selected by a simple random sampling technique. Thus, we selected 12 villages and 4 urban wards, with a rural:urban ratio of 3:1.

Since the average CPR of West Bengal is 46% (Government of India, 2008), and the maximum allowable error is 5%, the minimum sample size was 1,879. Therefore, the sample size used in this study was 2,000. From each village/ward 125 couples were selected to obtain a total sample size of 2,000.

The data were collected using a predesigned, pretested questions, interviewing the female partner of all couples in a house-to-house survey using standard random techniques. Faculty members of the Community Medicine Department of various medical colleges were involved in the survey.

The study variables were age, age at marriage, age at first conception, parity, birth interval, occupation, literacy level, socioeconomic condition, knowledge about contraceptives, current use of contraception and ever use of contraception. Data analysis was done using the software Epi Info and manually calculating *Z* test differences. The term couple was taken to mean all currently married couples in whom the female partner was of reproductive age (15-44 years).

The term Contraceptive Prevalence Rate (CPR) was taken to mean the percentage of eligible couples who used any family planning method, modern or traditional.

RESULTS

Women aged 18-23 years constituted 22.6%, 24-29 years constituted 31.5%,

Table 1
Details regarding studied couples.

Age of female in years	Rural			Urban[a]		Total	
	Hindu	Muslim	Others	Hindu	Muslim	No.	%
<18	12	3	0	7	1	23	1.2
18-23	302	42	2	89	17	452	22.6
24-29	418	33	1	137	41	630	31.5
30-35	349	37	5	101	34	526	26.3
≥36	271	25	0	54	19	369	18.5
Total	1,352	140	8	388	112	2,000	100

[a]Among urban females, none were of other religion so this column was not included

Table 2
Decision makers for studied couples in family planning.

Decision maker	Rural		Urban		Total	
	No.	%	No.	%	No.	%
Self	81	5.4	19	3.8	100	5.0
Husband	597	36.5	68	13.6	615	30.8
Jointly with husband	723	48.2	382	76.4	1,105	55.2
Father- in- law	2	0.1	6	1.2	8	0.4
Mother-in-law	77	5.1	14	2.8	91	4.5
Others	7	0.5	2	0.4	9	0.5
No response	63	4.2	9	1.8	72	3.6
Total	1,500	100	500	100	2,000	100

30-35 years constituted 26.3%, and ≥36 years constituted 18.5%. Among rural women 90.1% were Hindus, 9.3% Muslims and the rest were other religions. Among urban females, 77.6% were Hindus and the rest were Muslims (Table 1).

The respondent was the principle family planning decision maker in 5.0% of the study population, the husband was the decision maker in 30.8%, and the decisions were made jointly between husband and wife in 55.2%. Other decision maker constituted 5.4% and no response was given in 3.6% (Table 2).

Among rural women, 835 (55.7%) preferred a spacing of <3 years, 665 (44.3%) preferred a spacing of ≥3 years. Among urban women 112 (22.4%) preferred a spacing of <3 years and 388 (77.6%) preferred a spacing of ≥3 years. These differences were statistically significant (Odds ratio 4.35; Cornfield 95% CI 3.42<OR<5.53; Relative risk 1.40; Taylor series 95% CI 1.33<RR <1.47; χ^2= 166.47; p=0.000) (Fig 1).

Regarding perceptions about the ideal interval between marriage and first conception/pregnancy among rural women, 471 (31.4%) felt it should be <3 years, 983 (65.5%) felt it should by ≥3 years, and 46 (3.1%) gave no response. Among urban

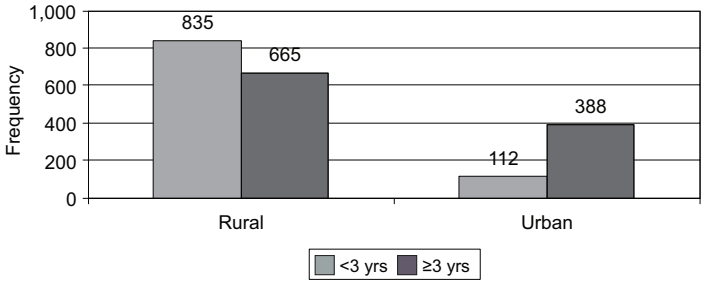

Fig 1–Perceived ideal spacing between subsequent pregnancies by residence.

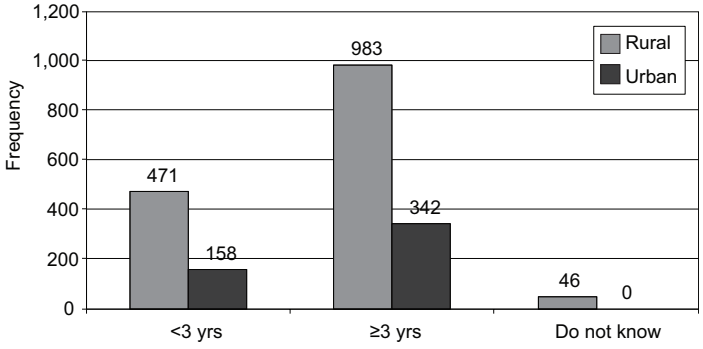

Fig 2–Perceived ideal interval between marriage and first pregnancy by residence.

females, 158 (31.6%) felt it should be <3 years and 342 (68.4%) felt it should be ≥3 years. Taking only positive responses, these differences were statistically significant (χ^2_{df2}= 15.80; p=0.000) (Fig 2).

Sixty-six point three percent of Hindu women, 74.6% of Muslim women and 75.0% of women of other religions accepted contraception methods. The difference in contraception acceptance between Hindu and Muslim women was statistically significant (Z=2.79, p<0.05).

Seven point four percent of respondents with a lower literacy level and 7.9% with a higher level regarded ≥3 years as the ideal interval between marriage and first pregnancy. This difference was not statistically significant (Z=0.42, p>0.05) (Fig 3). Moreover, 44.0% of women with a lower literacy level and 60.3% with a higher literacy level regarded the ideal interval between subsequent pregnancies to be ≥3 years. This difference was statistically significant (Z=7.38, p<0.05) (Fig 4).

Forty-seven percent of women preferred to receive their health care service through the government sector (1/3 of these women were illiterate), 37.7% preferred to receive their care from private registered care providers, 16.1% from unregistered providers and 4.2% did not answer (Table 3).

Eighty-nine point four percent of subjects had a correct knowledge of family planning methods and 49.4% had correct knowledge of the Copper T intrauterine device. Greater knowledge was associated with higher levels of literacy. Illiterate mothers had the widest gap in knowledge of FP methods (Table 4).

DISCUSSION

Men were involved in decision making regarding family planning in 86% of couples, while they were the sole decision makers in about 1/3 of the cases. The woman was the principle decision maker in only 5% cases. The CPR in our study was 67.4%, which is above the national average of 56.3% (during 2005-2006). In a study of 20-39 year old men in USA (William *et al*, 1996) 61% perceived there was gender equality in decision making, while 78% believed men and women share

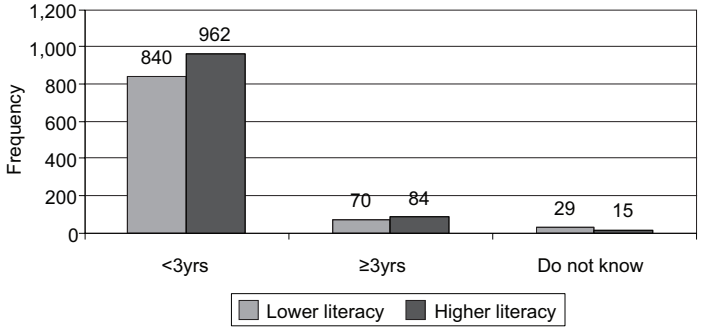

Fig 3–Perceived ideal interval between marriage and first pregnancy by literacy level.

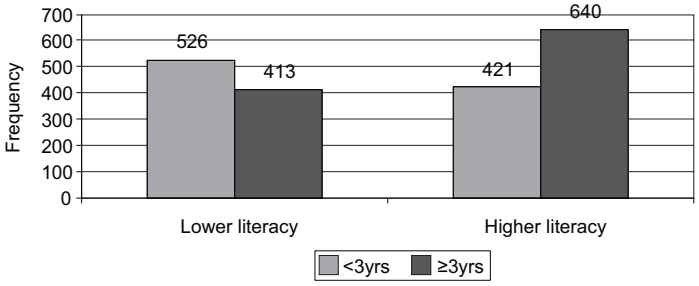

Fig 4–Perceived ideal interval between subsequent pregnancies by literacy level.

equal responsibility for decisions about contraception. Thirty percent of men said women have a greater role in a couple's decisions about sex, while 9% said men had a greater role.

Toulemon and Leridon (1998) found 2/3 of French women used some form of reversible contraception, and use of the oral contraceptive pill was on the rise, while intrauterine device insertions were on the decline, and sterilizations remained rare.

In our study 89.4% of repondants had a correct knowledge of family planning methods though knowledge of the Copper T was poor (49.4%). In a Kenyan study of more than 30,000 adolescents (12-19 years old) knowledge regarding reproductive health was poor. Fewer than 8% could correctly identify the fertile period in a woman's menstrual cycle. More than 50% were sexually active, having initiated intercourse aged 13-14 years on an average (Ajayi *et al*, 1991).

Forethought about the correct spacing between births and the ideal interval between marriage and first pregnancy were poor in our study; more so in rural areas and in women with low literacy levels. Higher literacy and accessibility to health care services have been shown to improve correct perceptions in several studies (Schedlin and Hollerbach, 1988). In the Philippines, factors related to discrepancies in preference behavior patterns were: strength of the woman's reproductive preferences, husband's fertility preferences and perceived detrimental side effects of contraception. Inaccessibility of services were shown to not be important. Services should be modified to enable them to overcome obstacles (Casterline *et al*, 1997).

Covert use of FP methods was studied in Kenya by Biddlecom and Fapohunda (1998). Covert use accounted for 6-20% of all contraceptive use and was more widespread if contraceptive use was low.

In a 1996 study from Pakistan, the principle obstacles toward contraception use were the woman's perception such behavior would conflict with her husband's fertility preferences and his attitude towards family planning, and her percep-

Table 3
Respondents choice of health care provider by literacy level.

Choice of health care provider	Literacy level of female respondent					Total	
	Illiterate	Just literate	Primary	Secondary	Graduate and above	No.	%
Government sector	317	147	180	275	21	940	47.0
Private registered	148	129	126	220	30	653	32.7
Private quack	81	73	59	55	5	323	16.1
No response	42	2	21	11	1	84	4.2
Total	588	351	436	568	57	2,000	100.0

Table 4
Knowledge of family planning methods by literacy level.

Literacy level	Correct knowledge about FP methods		Correct knowledge about Copper-T	
	No.	%	No.	%
Illiterate (*n*=588)	492	83.7	197	33.5
Just literate (*n*=351)	314	89.5	130	37.0
Primary (*n*=436)	395	90.6	221	50.7
Secondary (*n*=568)	532	93.7	393	69.2
Graduate and above (*n*=57)	55	96.5	47	82.5
Total	1,788	89.4	988	49.4

tion of the social and cultural unacceptability of contraception (Casterline *et al*, 2001).

In summary, literacy among women is an important determinant of knowledge regarding family planning methods, perception about the ideal interval between subsequent pregnancies and the interval between marriage and first pregnancy. Nearly half of subjects preferred to receive care from a government health care provider, but many others chose to receive care from licensed or unlicensed health care providers.

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