Knowledge, Attitude and Level of Involvement of Married Males in Family Planning

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ABSTRACT

Background

There is an age-old notion that family planning is women's responsibility disregarding the fact that men have equal responsibility in fertility regulation. Although male involvement is getting more recognition, studies on men's role in family planning are very few in the number in this part of the world.

Objective

To assess the knowledge, attitude and level of male involvement in family planning and to find out the factors associated with male involvement by contraceptive usage.

Method

A community based cross-sectional study was done from May to July 2021 among 165 currently married male, who had at least one child, living in Singur district of West Bengal. Cluster sampling method was done to select study participants and data were collected by pre-designed pretested questionnaire. Descriptive statistics, multivariable logistic regression was applied and data were analysed applying SPSS software.

Result

Only 36.4% participants were directly involved in family planning either by using condom or by withdrawal method but 65.5% participants were indirectly involved in family planning through spousal communication either by approving contraceptive use to their spouse or by decision making regarding family planning. Moreover, barrier of contraceptives usage were side effect (27%) and fear of impotence (25.5%). Male involvement was significantly associated with participant's education [AOR (95% CI= 3.63 (1.45-9.05)], caste [AOR (95% CI= 7.06 (2.55-19.51)], number of living children [AOR (95%CI= 5.01(1.95-12.87)], desire for more child [AOR (95% CI=0.34 (.13-.87)] and attitude on family planning [AOR (95% CI= 3.55 (1.41-8.94)].

Conclusion

This study identified the prevailing gender norms in rural areas. Advocacy for male involvement in family planning by health personnel during counselling of eligible couples should help in increasing contraceptive coverage in the long run.

KEY WORDS

Contraception, Decision making, Family planning, Male involvement, Rural community, Spousal communication

INTRODUCTION

In reproductive health, family planning is an important component. According to National Family Health Survey (NFHS)-5(2019-2020) total fertility rate (TFR) is 2.0.1 Though the Contraceptive prevalence rate (CPR) increases from previous NFHS-4 data, there are still 9.4% of married women with unmet needs for family planning (NFHS-5).[1,2] There is an age-old notion that family planning is women's responsibility, though gradually there is growing awareness that reproductive health is the responsibility of the couple. Unfortunately, the real scenario deviates from that understanding. Modern contraceptive prevalence is 56.5% where 17.6% of that were contributed by male.[1] So, it is clear that in our country main contraceptive driving force is women.[1,3] So, a disproportionate burden of contraceptive use falls on Indian women.

Male involvement means not only the use of male contraceptives but also includes the men who encourage and support their spouse and peers to use family planning.[4] Most of the family planning program and surveys used to design and evaluate such program focuses on the female as primary contraceptive user and males have often been neglected, though it is evidenced that males have the desire for information and services, as well as men's positive response to existing programming.[5] It is also evidenced that male involvement can lead to contraceptive uptake by increasing spousal communication which helps to decide the appropriate method of choice.[6-8] Studies showed women who believed their spouses had a favorable attitude toward contraception, practiced family planning more successfully.[9] So, it is very important that more research work is needed to study males about their knowledge attitude on family planning.

Although male involvement is getting more recognition, studies on men's role in family planning are very few in the number in this part of the world. Especially in rural part of West Bengal, there is lack of evidences on this matter. Therefore, this study aimed to assess the knowledge, attitude and level of male involvement in family planning and to find out the factors associated with male involvement by contraceptive usage in the rural community of West Bengal.

METHODS

A community-based cross-sectional study was carried out. Data collection was conducted from May to July 2021 in the field practice area of Rural Health Unit and Training Centre (RHUTC), Singur under All India Institute of Hygiene and Public Health, Kolkata which comprising of 64 villages. It was located in Singur block, with a distance of 50 km from state capital, Kolkata; well connected by train (on Howrah-Tarakeswar railway line) and road (besides Durgapur expressway). Study population was currently married males of the study area whose spouses were within the reproductive age group (15-49 years). All currently married males who had at least one child were included but whose wife had undergone hysterectomy or who were critically ill and who had not given written consent were excluded from this study

Sample size was calculated using standard formula n = Z^2 X P X (1-P)/L^2 as per WHO guideline. Considering the following assumptions: (P) proportion of male involvement in the exposed group = 53.8% (by selecting condom use as exposure variable) from a similar study.[10] Taking L = 10% So, sample size came (n) = 96. Considering a design effect of 1.5 for cluster sampling and taking 10% non-response rate then sample size came 160. But conveniently final sample size was taken 165.

A two-stage cluster random sampling was done to select study participants. In the study area, there were 64 villages with total population of 1,10,000. From these villages at first 15 clusters or 15 villages were selected by probability proportional to size (PPS) sampling method. The population information of each village was taken from the official registration at RHUTC, Singur. With the help of local maps and local people after going to the centre of the 1st village, at first, one direction was chosen randomly by rotating bottle head. Going in that direction one house was chosen. That was the first house to find male participant as per inclusion criteria. Next adjacent houses were visited until 11 participants were selected. When there was the end of the road, the next lane was taken to complete the sample size. The same procedure was repeated in the rest 14 clusters (fig. 1).

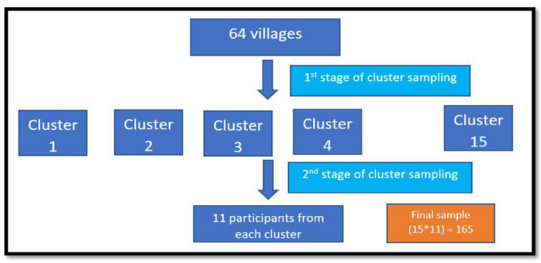

Figure 1. Sampling design showed selection of participants

Face to face interview of the participants were done with a pre-designed and interviewer administered questionnaire comprising of socio-demographic variables and questions on male involvement, knowledge regarding family planning and attitude on family planning.

Male involvement was assessed by direct involvement in family planning by contraceptive use (if the participant was using any method of contraception, then the person is said to be directly involved in family planning) and indirect involvement in family planning by spousal communication. To assess indirect involvement in family planning, we used a 10 items questionnaire which had two domains spousal communication by approval comprising four item

questions and Spousal communication by decision making comprising six item questions. Each question scored from 0 to 1. The total score of the questionnaire ranged from 0 to 10, Cut off score for indirect involvement ≥ 4 (50th percentile of total attained score).

Knowledge was assessed by 15 item questionnaires which incorporated four domains. They were family planning (3 items), contraceptive methods (5 items), beneficial effect (4 items), side effect (3 items). For each question one point was given for "right response" and zero points for "wrong" and "don't know" responses, so total scores range from 0 to 15. The cut-off score for good knowledge was ≥ 10. (50 percentile of total attained score). Pretesting was done among 20 participants from another setting (Cronbach alpha = 0.78).

Attitude assessment was done by 12 items questionnaire with three-point Likert scoring pattern ranging from 1 = "negative response" to 3= 'positive response". So total scores range from 12 to 36. Cut off value for "favourable" attitude was ≥ 29 (50 percentile of total attained score) (Cronbach alpha = 0.76).

Ethical clearance was obtained from the institutional ethics committee of the All-India Institute of Hygiene and Public Health, Kolkata. The study's purpose was described, and all participants gave their informed consent. The confidentiality and privacy of the participants were maintained throughout the study.

Data were analyzed by Microsoft excel 2019 and Statistical package for social sciences (Version 16). Univariate logistic regression and multivariable logistic regression were done. P < 0.05 was considered as statistically significant.

RESULTS

Mean age of the participants was 36.5 ± 5.9 years. Most of the participants (58.2%) were between the age group of 30-39 years. Mean age of the participants' spouse was 30.0 ± 6.0 years and most of them 75(45.5%) were 30 to 39 years old. Mean age of the participants and their spouses at the time of marriage was 26.2 ± 4.6 years and 19.7 ± 3.2 years respectively. Among the participants 44.8% of participants' age difference with their spouse was more than six years. The majority 147 (89.1%) of the participants were from the Hindu religion. Among the participants, 96 (58.2%) were from joint families. Most of the participants and spouses were from middle school educated. Most of the participants (35.7%) were manual labourers and the mean per capita income (PCI) of the participants was 2419 ± 2022 rupees. According to the Revised B.G. Prasad SES for January 2021, half of the participants were from Socioeconomic class 4 (50.3%) (Table 1).

Mean marriage duration of the participants was 10 ± 5 years and ranged from 2 to 28 years and 43.6% of participants' marriage duration was more than ten years.

Table 1. Distribution of the study participants according to Background characteristic (n=165)

Characteristics		N	(%)	Mean ± SD
Age of the participants at the time of interview	20-29 years	16	9.7	36.5±5.9
	30-39 years	96	58.2	
	40-49 years	53	32.1	
Age of spouse at the time of interview	15-19 years	4	2.4	30.0±6.0
	20-29 years	74	44.8	
	30-39 years	75	45.5	
	40-49 years	12	7.3	
Age of the participants at the time of marriage	<21 years	26	15.8	26.2±4.6
	21-25 years	48	29.1	
	26-30 years	65	39.4	
	>30 years	26	12.8	
Age of the spouse at the time of marriage	<18 years	44	26.7	19.7±3.2
	18-20 years	59	35.8	
	21-25 years	51	30.9	
	>25 years	11	6.7	
Religion	Hindu	147	89.1	
	Muslim	18	10.9	
Caste	SC	40	40.2	
	OBC	4	2.4	
	Others	121	73.3	
Family type	Joint	96	58.2	
	Nuclear	69	41.8	
Participant's education level	Illiterate	21	12.7	
	Primary	22	13.3	
	Middle school	58	35.2	
	Second-ary & high secondary	48	29.1	
	Graduate & post gradu-ate	16	9.7	
Education level of spouse	Illiterate	13	7.9	
	Primary	21	12.7	
	Middle school	59	35.8	
	Second-ary & high secondary	47	28.5	
	Graduate & post gradu-ate	25	15.2	
Occupation	Farmer	37	22.4	
	Labourer	59	35.7	
	Office work	10	6.1	
	Self em-ployed	54	32.7	
	Professional	5	3.0	

Socioeconomic class[11] (Revised B.G. Prasad SES for January 2021)	Class 1 (PCI ≥7889)	7	4.2
	Class 2 (PCI 3944-7888)	12	7.3
	Class 3 (PCI 2367-3943)	39	23.6
	Class 4 (PCI 1183-2366)	83	50.3
	Class 5 (PCI <1183)	24	14.5
Desire for more child	Yes	43	26.1
	No	122	73.9
No. of living children	Single child	100	60.6
	>1 child	65	39.4
Gender of 1st child	Male	106	64.2
	Female	59	35.8

39.4% of the participants had more than one child. Most of the participants (64.2%) had a first male child. The majority of the participants (73.9%) did not desire more children in the recent future (Table 1).

Among the total 165 participants, 36.4% participants were directly involved in family planning either by using a male condom or by withdrawal methods, but 65.5% participants were indirectly involved in family planning through spousal communication either by approving contraceptive use to their spouse or by decision making regarding family planning.

Among the participants 75.8% of them or their spouses were using any methods of contraceptives at the time of the study. Among them 32 (25.6%) participants were using condoms followed by 28 (22.4%) were using withdrawal methods, and two were using calendar method (Fig. 2. But none of the participants were using male sterilization as a family planning method. The reasons for not using vasectomy were spouse using contraceptives (47.3%) and fear of impotence (25.5%) but reason for not using a male condom was spouse using contraceptives (47.3%) and fear of side effect (27%) (Fig. 3).

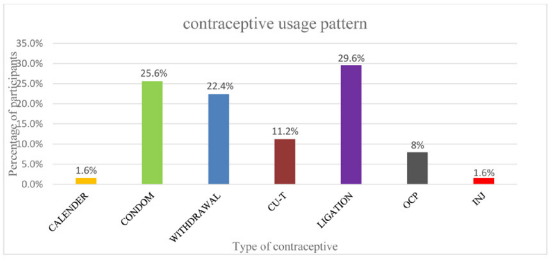

Figure 2. Distribution of the participants according to type contraceptives usage by them or their spouse(n=125)

But, in case of indirect involvement in family planning through spousal communication by support 59.4% of participants encouraged their spouse to use any female method of contraceptives (Table 2).

In case of indirect involvement in family planning through spousal communication by decision making we found

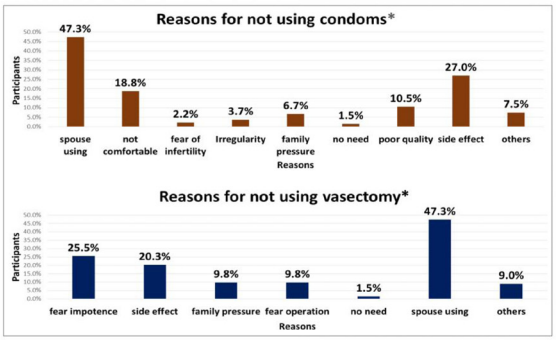

Figure 3. Distribution of participants according to reasons for not using contraceptives (n=133)

*Multiple responses
Others: not good, not like

Table 2. Distribution of participants according to indirect involvement in family planning through spousal communications by support (n=165)

Variables	Frequency	Percentage
1. Encourage spouse to use contraceptives		
Yes	98	59.4
No	67	40.6
2. Support spouse to use of contraceptives		
Yes	90	54.5
No	75	45.5
3. Discussion with spouse regarding family planning		
Yes	103	62.4
No	62	37.6
4. Approved spouse to use contraceptives		
Yes	63	38.1
No	102	61.9

decision regarding contraceptive use was taken by both husband and wife by 30.9% of participants but 54.5% of the participants himself took decision in this matter (Table 3).

Among the total 165 participants, only 92(55.8%) participants had good knowledge regarding family planning but all of them knew about male condoms (100%), and 133 (80.6%) participants knew about vasectomy as male sterilization. 158 (95.8%) of the participants knew at least one method of female contraceptives. Among 97.5% of them knew about oral contraceptive pills (OCP) followed by 52.5% knew ligation, 25.9% knew about CU-T, eleven participants knew about injectable contraceptive and only two participants knew about female condom.

Almost all of the participants knew that the ideal age of spouse having 1st child is more than 19 years and spacing between two children is more than 2 years. Most of the participants (68.5%) knew that natural methods are not reliable for family planning. The majority of the participants (92.7) knew that family planning is a method of preventing unwanted pregnancy but only 20.6% of the participants knew that condom prevents STI (Sexually transmitted infections). Sources of their knowledge were mainly

Table 3. Distribution of participants according to indirect involvement in family planning through spousal communications by decision making

Decision taker in family planning	Number (%)
1. Decision regarding time of having 1st child was taken by (N=165)	
Self	14(8.5)
Spouse	7(4.2)
Both	136(83.6)
Others	6(3.6)
2. Decision regarding desired family size was taken by(N=165)	
Self	44(26.7)
Spouse	4(2.4)
Both	111(67.3)
Others	6(3.6)
3. Decision regarding contraceptive use was taken by(N=165)	
Self	90(54.5)
Spouse	24(14.5)
Both	51(30.9)
4. Decision regarding type of contraceptive was taken by(N=125)	
Self	54(43.2)
Spouse	33(26.4)
Both	38(30.4)
5. Decision regarding timing of contraceptive use was taken by(N=125)	
Self	75(60)
Spouse	30(24)
Both	20(16)
6. Decision regarding duration of contraceptive use taken by(N=88)	
Self	50(56.8)
Spouse	19(21.6)
Both	19(21.6)

friends (80.6%) followed by TV (75.7%), doctors (17.5%), accredited social health activist (ASHA) (16.9%), internet (14.5%), radio (11.5%), poster (7.2%) and books (6%).

Among the total 165 participants, only 52.1% of the participants had favorable attitude on family planning, 21.8% of the participants had negative attitude that family planning is only women's responsibility and 61.8% of the participant had attitude that condom prevents sexual pleasure. More than half (53.3%) of the participants had negative attitude, that oral contraceptive should be avoided as it causes permanent infertility, 35.5% of the participants had negative attitude, that male sterilization should be avoided as it causes impotence.

For factors associated with male involvement in family planning by univariate and multivariable logistic regression (Table 4), in univariate logistic regression we found participants whose age difference with spouse was < 6 years were more involved in family planning. Participant whose education level was secondary and above were 4.22 odds of male involvement in family planning. The spouse

Table 4. Factors associated with male involvement in family planning: Logistic regression analysis (n=165)

Variables	n (%)	Male involvement	Unadjusted OR (95% CI)	Adjusted OR (95%CI)
Age difference				
< 6 years	91(55.2)	27(29.7)	.52 (.28-.99) **	-
≥ 6 years	74(44.8)	33(44.6)	1 (Ref)	-
Participant's education				
Secondary and above	46(27.9)	28(60.9)	4.22 (2.06-8.66)**	3.63(1.45-9.05)**
Below secondary	119(72.1)	32(26.9)	1 (Ref)	1 (Ref)
Family type				
Joint	96(58.2)	39(40.6)	1.56(.81-3.01)	-
Nuclear	69(41.8)	21(30.4)	1(Ref)	-
Religion				
Muslim	18(10.9)	7(38.9)	1.12 (.41-3.08)	-
Hindu	147(89.1)	53(36.1)	1 (Ref)	-
Caste				
SC and OBC	44(26.7)	23(52.3)	2.48(1.22-5.04)**	7.06(2.55-19.51)**
Others	121(73.3)	37(30.6)	1 (Ref)	1 (Ref)
SES				
Upper class#	19(11.5)	8(42.1)	1.17(.43-3.15)	-
Middle class#	39(23.6)	11(28.2)	.63(.28-1.40)	-
Lower class#	107(64.8)	41(38.3)	1 (Ref)	-
Marriage duration				
Below 10 years	93(56.4)	40(43.0)	1.96(1.01-3.79)**	-
Above 10 years	72(43.6)	20(27.8)	1 (Ref)	-
Number of living children				
Single child	100(60.6)	49(49.0)	4.71(2.21-10.06)**	5.01 (1.95-12.87)**
> 1 child	65(39.4)	11(16.9)	1 (Ref)	1 (Ref)
Desire for more child				
Yes	43(26.1)	29(67.4)	1 (Ref)	1 (Ref)
No	122(73.9)	31(25.4)	.16(.07-.35)**	.34(.13-.87)**
Knowledge				
Good	92(55.8)	44(47.8)	2.69(1.35-5.37)**	1.45(.57-3.63)
Poor	73(44.2)	16(21.9)	1 (Ref)	1 (Ref)
Attitude				
Favorable	86(52.1)	42(48.8)	3.23(1.64-6.35)**	3.55(1.41-8.94)**
Unfavorable	79(47.9)	18(22.8)	1 (Ref)	1 (Ref)

**p value <0.05,
#upper class (class 1 and 2), middle class (class 3), lower class (class 4 and 5) of Revised B.G. Prasad SES for January 2021

whose education level was secondary and above were 2.0 odds of male involvement in family planning. Participants who had joint families were 1.56 odds of male involvement in family planning. Participants who were from SC and OBC cast were 2.48 odds of male involvement in family planning. Participants who were from upper socioeconomic class, were 1.23 odds of male involvement in family planning but which was not statistically significant. Participants whose marriage duration was less than ten years were 1.96 odds of male involvement in family planning. Participants who had a single child were 4.71 odds of male involvement in family planning. One unexpected finding was that participants who want more children were more involved in family planning. On further inquiry they told they did not want a child at this moment but a few years later. Participants who had good knowledge and who had favorable attitudes were 2.69 and 3.23 odds of male involvement in family planning. In multivariable analysis variables like participant's education level [AOR 3.63 (1.45-9.05)], caste [AOR 7.06 (2.55-19.51)], single child [AOR 5.01 (1.95-12.87)], desire for more children [AOR .34 (.13-.87)] and participant's attitude [AOR 3.55 (1.41-8.94)] were found to be significant predictors of male involvement in family planning [Table 4]. This model was a good fit as evident from the non-significant Hosmer-Lemeshow statistic (P = 0.63). All the independent variables together explained 45.1% variance of the dependent variable by using Nagelkerke R^2.

DISCUSSION

From this study it was found only 55.8% of the participants had good knowledge on family planning which was almost similar studies conducted in Nigeria by Adelekan et al. and in Northern Ethiopia by Wondim et al.[12,13] But, it is quite higher than the study conducted in Karnataka by Chaudhary et al., it may be due to awareness increased or it may be due to different operation definition used.[14] We found all the participants knew condoms as a family planning method, it was similar as study conducted by Adelekan et al. and almost similar as studies conducted by Sing et al. and Basu et al.[12,15,16] It was found in our study that 80.6% of participants heard about vasectomy which was almost similar to a study conducted in this setting by Dasgupta et al.[17] NFHS-4 (National Family Health Survey data also showed that 88.2% of participants from this district knew vasectomy. In our study 25.9% of participants knew about CU-T as female contraceptive which was almost similar to the study conducted by Rekha et al.[18] In our study 92.7% of participants told family planning is a method of preventing pregnancy, this finding was almost similar as we found in the study conducted by Adelekan et al.[12]

We found most common source of information about contraception was from friends (80.6%) followed by television (75.7%), health workers (34.4%), internet (14.5%). It was almost similar to the study conducted by Rekha et al.[18]

In our study, only 21% of participants had negative attitude that family planning was women's responsibility, this finding was almost similar to study conducted by Rekha et al.[18] Present study revealed 52.1% of the participants had favorable attitude towards family planning but it was quite higher than the study conducted by Chaudhary et al.[14] This difference may be due to different operational definition used.

The results of this study found that only 36.4% of men were involved on their own by using family planning methods. This was comparable to studies conducted by Chaudhary et al. and Dougherty et al.[14,19] But far lower than the study conducted by Rekha et al.[18] This difference in the findings could be because of the different literacy and socioeconomic status of participants of the research areas. If we see in our study only 25.6% of participants were using condoms. It was almost similar in studies conducted by Basu et al. and Nasir et al.[16,20] But it was quite small than the study conducted by Sing et al.[15] Though we found participant's knowledge on male contraceptives was adequate but none of them were using vasectomy. NFHS-4 data from this district also showed no participation by male in vasectomy. Reasons for not using male sterilisation was fear of impotence (25.5%) followed by fear of side effect (20.3%), family pressure (9.8%), fear of operation (9.8%) and reasons for not using a condom was mainly side effects (27%), followed by not being comfortable (18.8%), poor quality (10.5%). A study conducted by Sing et al. which showed main reasons for not using male contraceptives were side effects (27.8%), family pressure (18.9%) and not being comfortable (7.5%).[15] In present study, these proportions were less because spousal uses of female contraceptives were taken into account.

In our study, 75.8% of the participants or their spouses were using any method of contraception during study period. This data was almost similar to NFHS-4 (2015-16) where the (Contraceptive Prevalence Rate) CPR of this district was 78%. Which was higher than the study conducted in Varanasi.[15] This higher contribution is due to contraceptives usage by their partners was taken into account. But it is much lower than the study conducted by Basu et al.[16]

Male participation was also measured in current study by spousal communication and approval. The result showed that through spousal communication and approval, more than half of men (65.5%) were engaged in family planning. This result may be due to participants' positive attitude to assist their spouses in family planning matter. Studies conducted by Wondum et al. and Butto et al. were showed almost similar findings.[13,21] Our study showed 59.4% of men encourage their spouse to use family planning and 54.5% of men support their spouse in family planning which were almost similar findings as study conducted by Wondum et al.[13] It was also seen in present study that 42.9% of men approved their spouse for contraceptive use which was almost similar to a study conducted by Kassa et al.[22]

Regarding decision making in family planning, it was found that 54.5% of participants themselves, 30.9% participants with spouse, and 14.5% of participant's wife had taken such decisions, these findings were almost similar as study conducted by Sing et al.[15] But it was discordant with the study conducted in Haryana by Walia et al.[23] This difference may be due to gender difference in study population.

Several important factors related to male involvement, emerged from this study which might help future interventions. In agreement with previous studies done in Kenya, North Ethiopia and Varanasi, the finding of this study showed that the higher educational status of men was positively associated with male involvement in family planning.[13,15,21] The possible explanation is that educated men will more likely to have good knowledge of family planning which help them to involve in family planning.

Male involvement was associated with the number of children, it's found that participants with smaller number of children was associated with more involvement in family planning. Though this finding matched with the studies conducted in Kenya and North Ethiopia, it's probable explanation may be as in cross-sectional study it is difficult to say factor or effect which come first, so we can say as participants were involved in family planning result as a small number of children.[13,21] small number of children was the proxy indicator of involvement in family planning.

Good knowledge of family planning was positively associated with male involvement in family planning as similar to a past study was conducted in North Ethiopia.[13] Men who had good knowledge on family planning viz, types of contraception, mode of action, side effects will avoid rumours related to family planning and participate in family planning utilization.

Next factor associated with male involvement was men's attitudes towards family planning. Men's favorable attitude towards family planning was a facilitator for male involvement in family planning in this study.

Another factor associated with male involvement was desire for more children. Men who want more children, likely to more involved in family planning. An explanation of this discordant finding lies in the sentence 'desire for more child'. Here participants meant to say that they want more children in future maybe after a few years but were using contraceptives at present.

The respondents belonging to SC and OBC categories were more likely involved in family planning, this finding was similar to the study conducted in Varanasi.[15]

This study focuses on knowledge, attitude, involvement, barriers to family planning which were personal and very sensitive issues. Some participant might not give all information properly, though assurance was given for confidentiality of all information given by them. Another limitation was small sample size.

CONCLUSION

We found low usage of male contraceptive as they had inadequate or adverse knowledge on specific male contraceptives, another reason was contraceptive usage by their spouse. Here comes the role of indirect male involvement. Male involvement in family planning is not only limited to contraceptive usage by males but also helping their spouse in different family planning matter as we observed in this study. So, though directly contraceptives usage by male was low but indirectly involvement in family planning was high which ultimately increases overall contraceptive usage in this setting. This Male involvement was associated with participants education, knowledge and their attitude. We also found decision taker in various family planning matter was male himself, so there was a prevailing gender norm at this area.

Recommendation

Family planning programmes should incorporate male's role as direct contraceptive user as well as in supporting aspect. Government and non-governmental organizations should have to come together and build knowledge and help to develop positive attitude on family planning. Advocacy for male involvement in family planning by health personnel during counselling of eligible couples should help in increasing contraceptive coverage in long run. More study needs to be done involving other stakeholders of family planning for their individuals' opinions besides males.

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