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Original Research Article

Knowledge and stated practice of contraception among adult married males in Bishnupur-II block, South 24 Parganas, West Bengal

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ABSTRACT

Background: Contraception is pivotal in reproductive health and family planning, yet knowledge gaps persist among married males, impacting public health outcomes. This study aimed to evaluate contraceptive knowledge and practices and identify determinants among 127 married males in Bishnupur-II block, South 24 Parganas.
Methods: This community-based cross-sectional study utilised simple random sampling. Data were collected via house-to-house visits using a semi-structured questionnaire and analysed with SPSS version 21.0.
Results: Participants exhibited significant knowledge gaps, notably among those with lower education levels. Age, religion, education, and comfort in discussing contraception with partners emerged as associated factors. Participants comfortable discussing contraception showed higher knowledge and practice odds.
Conclusions: Addressing knowledge gaps and enhancing contraceptive practices necessitate multifaceted interventions emphasising education, partner communication, counselling, and targeted initiatives. Implementation of these recommendations is expected to bolster reproductive health outcomes and community well-being.

Keywords: Eastern India, Family planning, Gender role, Perception, Practice, Rural area

INTRODUCTION

The global population today stands at over 6 billion, one-sixth of which is in India. Uncontrolled population growth is recognized as the single most important impediment to national development. Even though India was the first country in the world to implement a national population control programme in 1952, the country is still struggling to contain the baby boom. A lot of effort and resources have gone into the National Family Welfare Programme, but the returns are not commensurate with the inputs. The programme has targeted eligible couples in its efforts to control the population.[1]

South 24 Parganas is a district located in the Indian state of West Bengal with a population of approximately 8.2 million. Despite being an essential aspect of family planning, contraception is often seen as a taboo topic in India, particularly among males. However, male involvement in family planning is crucial in the successful implementation of contraception practices. The use of contraception is an essential aspect of family planning and plays a significant role in preventing unwanted

pregnancies, reducing maternal mortality rates, and controlling the population. The NFHS 5 factsheets provide information about the use of male contraception in India. According to the data, the use of male contraception in India remains low, with only 9.8% of currently married men reporting the use of any method of contraception. The most commonly used method of male contraception in India is condoms, with 9.5% of currently married men reporting use of condoms. The use of other methods of male contraception, such as vasectomy is very low i.e. 0.3%.[1] In care of West Bengal the figure is 7% for condoms and even low for male sterilization (0.1%).[2] In the NFHS-5 District fact sheet of South 24 parganas only 5.4% of males are using condoms and 0.1% have undergone sterilization.[3]

The use of male contraception varies by age, education, and wealth. Men who are older, more educated, and wealthier are more likely to use male contraception than younger, less educated, and poorer men. In the realm of reproductive health, contraception plays a pivotal role in empowering individuals and couples to make informed decisions about family planning. While the focus on contraception has primarily centred on women, recognizing the importance of male involvement is crucial for the success of family planning initiatives.[4-6]

The dynamics of reproductive health have evolved significantly over the years, witnessing a paradigm shift from predominantly female-oriented contraception methods to a more inclusive and equitable approach involving both partners. Traditionally, women have been shouldering the responsibility of contraception, ranging from hormonal methods such as oral contraceptives to intrauterine devices (IUDs) and barrier methods like condoms. However, male involvement in contraception can contribute to shared decision-making, enhancing communication and understanding between partners and reducing the burden on women.[4-6]

Despite the growing recognition of male involvement in contraception, limited research has been conducted to assess the knowledge, and practices of married males in this domain. Understanding the perspectives of men regarding contraception is crucial for designing effective programs, interventions, and policies that cater to the needs and preferences of both partners, ultimately leading to improved reproductive health outcomes. With this backdrop, the current study aimed to assess knowledge and stated practices of contraception among married males in a block of West Bengal and to find out the determinants of the same.

METHODS

A community-based cross-sectional study was conducted from February- July 2023 among the adult married male population who were the permanent resident (residing for at least 1 year) of Bishnupur-II block of south 24 Parganas, West Bengal. Those who were mentally disabled or did not give consent were excluded from the study. The study had been approved by Institutional Ethics Committee of Institute of Health and Family Welfare, Government of West Bengal. Informed written consent had been obtained from every study participant before the interview.

The sample size for this study was calculated using Cochran's formula: $n=Z_{\alpha}pq/d^2$, where p was the prevalence of use of male contraception, q is the complement of p. Since the prevalence of male contraception was 5.5%, assuming a confidence interval of 95% and absolute precision of 10%(d), and the sample size was calculated 97.[3] Considering a refusal rate of 10%, the minimum sample size required was estimated to be 108.

Bishnupur-II block consisted of 26 sub-centres; out of which 50% sub-centres were selected by simple random sampling. Then line listing of married males was prepared with the help of peripheral field workers and an eligible couple registered. The required samples were selected from this line list by simple random sampling. If any study participant did not give consent, then the next person in the line list was approached.

Data were collected using a semi-structured questionnaire that includes questions related to demographic information, socioeconomic status, level of education, Knowledge of contraception, practice of contraception etc. The questionnaire was first prepared in English. Then it was translated into Bengali by a linguistic expert keeping semantic equivalence. Thereafter, to check the translation, it was retranslated into English by two independent researchers who were unaware of the first English version. The face validity of each item was checked from previous research in the presence of public health experts. They also decided the content validity of each domain. Reliability was checked by the test-retest method. Pretesting followed by pilot testing was done to eliminate any ambiguity, or duplicity.

Microsoft (MS) Excel 2019 and SPSS 20.0 software were used as the tools for data analysis in this study. Using MS Excel, the percentage and frequency graphs were generated using descriptive statistics. Additionally, SPSS software was used to carry out the inferential statistical analyses. All the tests were two-tailed with p-value <0.05 being considered significant throughout the analyses. Bivariate followed by multi-variate analyses had been performed to find out the determinants of knowledge and practices.

RESULTS

Regarding socio-demographic characteristics as shown in Table 1, the majority of study participants belonged to the age group of 28-38 years (56.7%) with a mean age of 34 years (7.07), Hindu by religion (72.4%), general by caste (59.8%), lower-middle socio-economic class (42.5%) and joint family (52%). Most of them were educated above a higher secondary level (51.9%), and businessmen by

profession (37.8%). The majority of the participants (90.6%) were sexually active and only 9.5% had multiple partners.

Table 1: Distribution of study participants according to socio-demographic characteristics (n=127).

Variables	Frequency (N)	Percentage
Age group (in completed years)		
18-28	13	10.2
28-38	72	56.7
38-48	41	32.3
48-58	1	0.8
Religion		
Hindu	92	72.4
Islam	31	24.4
Christian	4	3.1
Caste		
General	76	59.8
SC	34	26.8
ST	2	1.6
OBC	15	11.8
Education		
Illiterate	3	2.4
Just literate	3	2.4
Primary	6	4.7
Elementary	19	15.0
Secondary	30	23.6
Higher secondary	36	28.3
Graduate and above	30	23.6
Occupation		
Daily labour	26	20.5
Business	48	37.8
Govt. service	14	11.0
Private service	32	25.2
Others	7	5.5
Social class (modified BG scale 2022)		
Upper class (>8220)	4	3.1
Upper middle class (4110-8219)	25	19.7
Middle class (2465-4109)	43	33.9
Lower middle class (1230-2464)	54	42.5
Lower class (<1230)	1	0.8
Type of family		
Nuclear	62	48
Joint	65	52

Regarding knowledge about contraception (Table 2), more than half of the study participants had ever heard about contraception (53.5%); friend and family being the most common source of knowledge (41.1%). The majority (76.4%) of them were not counselled at all about contraception during their lifetime; while those who were counselled, most of them received counselling from ASHA (43.3%) and OCPs and condoms were the methods of contraception most commonly identified by them.

Table 2: Distribution of study participants according to knowledge regarding contraception (n=127).

Items	Frequency	Percentage
Ever heard (n=127)		
Yes	68	53.5
No	59	46.5
Source of knowledge (n=68)		
Friends and family	28	41.1
Health sector	16	23.6
TV and online platform	24	35.3
Name of methods heard (n=68)*		
Condoms	40	58.8
OCP	44	67.7
IUCD/Injection	19	27.9
Withdrawal	22	37.9
Ever counselled (n=127)		
Yes	30	23.6
No	97	76.4
Counselled by (n=30)		
Doctor	11	36.7
ANM/Nurse	6	20.0
ASHA	13	43.3

*Multiple responses by participants

Table 3: Distribution of study participants according to practice regarding contraception (n=127).

Items	Frequency	Percentage
Current uses (n=127)		
Yes	64	50.4
No	63	49.6
Decision maker (n=127)		
Self	62	48.8
Wife	12	9.4
Both	49	38.6
Others	4	3.1
Prefer user (n=127)		
Self	46	36.2
Wife	72	56.7
Both	9	7.1
Prefer method (n=127)		
Condoms	25	19.6
OCP	19	14.9
IUCD	3	02.3
Withdrawal	16	12.6
Not willing to disclose	64	50.6

Regarding practice as represented in Table 3, more than half (50.4%) were current users of contraception and the majority liked to decide the method of contraception by themselves only (48.8%) and to use the method by their spouse (56.7%); though most of them (50.6%) were not willing to disclose the preferred method. Less than half of

the study participants (42%) reported that they could freely discuss contraception with their partner, while 55% did not want to comment on it. Also, only 46% of the participants admitted that they had ever conversation about this topic with their partners, while 53% did not even comment on it.

Table 4: Determinants of knowledge of contraception bivariate and multi-variate analysis (n=127).

Variables	Categories	Heard of contraception		Test of significance χ^2 Degree of freedom (df) P value	Odds Ratio (95% Confidence Interval)	Adjusted Odds Ratio (95% Confidence Interval)
		Yes N (%)	No N (%)			
Age (in completed years)	<29	19 (79.2)	5 (20.8)	7.811 df= 1 p= 0.005 (<0.05)	4.188 (1.453-12.067)	7.119 (1.482-34.208)
	>=29	49 (47.6)	54 (52.4)			
Religion	Hindu	58 (63.0)	34 (37.0)	12.112 df=1 p=.001	4.265 (1.829-9.946)	4.373 (1.040-18.383)
	Muslim	10 (28.6)	25 (71.4)			
Caste	General	48 (63.2)	28 (36.8)	7.033 df=1 p=.008	2.657 (1.280-5.515)	1.987 (0.654-6.039)
	Others	20 (39.2)	31 (60.8)			
Education	Secondary and above	65 (67.0)	32 (33.0)	29.939 df=1 p=.000	18.281 (5.156-64.815)	6.496 (1.341-31.456)
	Below secondary	3 (10.0)	27 (90.0)			
Ever counselled	Yes	25 (83.3)	5 (16.7)	14.013 df=1 p=.000	6.279 (2.218-17.772)	2.848 (0.526-15.410)
	No	43 (44.3)	54 (55.7)			
Ever counselled by	Doctor/Nurse	16 (94.1)	1 (5.9)	14.013 df=1 p=.000	17.846 (2.287-139.276)	12.703 (0.353-457.744)
	ASHA/None	52 (47.3)	58 (52.7)			
Decision making jointly	Yes	36 (73.5)	13 (26.5)	12.735 df=1 p=.000	3.981 (1.828-8.669)	1.081 (0.321-3.638)
	No	32 (41.0)	46 (59.0)			
Comfortable discussing with partner	Yes	57 (81.4)	13 (18.6)	48.755 df=1 p=.000	18.366 (7.515-44.738)	11.413 (3.734-34.880)
	No	11 (19.3)	46 (80.7)			

*Hosmer and Lemeshow Test P =0.891, Nagelkerke R Square =.654, p=0.000 means p < 0.001

Table 5: Determinants of the practice of contraception bivariate and multi-variate analysis (n=127).

Variables	Categories	Practices of contraception		Test of significance χ^2 Degree of freedom (df) P value	Odds Ratio (95% Confidence Interval)	Adjusted Odds Ratio (95% Confidence Interval)
		Yes N (%)	No N (%)			
Age (in completed years)	<29	18 (75.0)	6 (25.0)	7.167 df= 1 p= 0.007(<0.05)	3.717 (1.364-10.128)	1.960 (0.451-8.511)
	>=29	46 (44.7)	57 (55.3)			
Religion	Hindu	53 (57.6)	39 (42.5)	6.952 df=1 p=.008	2.965 (1.300-6.764)	.857 (0.188-3.899)
	Muslim	11 (31.4)	24 (68.6)			
Caste	General	44 (57.9)	32 (42.1)	4.260 df=1 p=.039	2.131 (1.034-4.394)	1.120 (0.332-3.777)
	Others	20 (39.2)	31 (60.8)			
Education	Secondary and above	61 (62.9)	27 (37.1)	25.637 df=1 p=.000	15.250 (4.317-53.866)	3.212 (1.063-16.266)
	Below secondary	3 (10.0)	27 (90.0)			
Ever counselled	Yes	24 (80.0)	6 (20.0)	13.772 df=1 p=.000	5.700 (2.136-15.213)	2.691(1.092-18.452)
	No	40 (41.2)	57 (58.8)			

Continued.

Variables	Categories	Practices of contraception		Test of significance χ^2 Degree of freedom (df) P value	Odds Ratio (95% Confidence Interval)	Adjusted Odds Ratio (95% Confidence Interval)
		Yes N (%)	No N (%)			
Ever counselled by	Doctor/Nurse	15 (88.2)	2 (11.8)	11.243 df=1 p=.000	9.337 (2.037-42.799)	.943 (0.076-11.756)
	Asha/None	49 (44.5)	61 (55.5)			
Decision making jointly	Yes	34 (69.4)	15 (30.6)	11.514 df=1 p=.001	3.627 (1.697-7.753)	.999 (0.288-3.462)
	No	30 (38.5)	48 (61.5)			
Comfortable discussing with partner	Yes	53 (75.7)	17 (24.3)	40.00 df=1 p=.000	13.037 (5.544-30.659)	2.849 (1.815-9.963)
	No	11 (19.3)	46 (80.7)			

*Hosmer and Lemeshow Test P =0.654, Nagelkerke R Square =0.672, p=0.000 means p < 0.001

Multivariate analyses (Tables 4 and 5) revealed that the participants who were aged less than 29 years, Hindu by religion, educated above secondary level, and comfortable discussing contraception with their partner had higher odds of knowing about contraception. Regarding determinants of practice, similar analyses revealed that those who were educated above secondary level, ever been counselled at least once in their lifetime, and were comfortable discussing the topic will their partner had higher odds of adopting contraception.

DISCUSSION

In this study, it was found that only 53.5% of the population had ever heard about contraception and 50.4% were current users. But in a study among men in UAE it was found that among the participants, 294 (84.5%) were aware of the existence of male contraceptive methods. However, it was observed that only a smaller proportion, 94 men (27%), were actively utilizing these methods.[7] In another study of Saudi Arab it was found that most of the participants, approximately 79%, were familiar with the concept of contraception. However, only 54% of the group reported using at least one form of contraception.[8] A study in Maharashtra, India found that 53.7% expressed positive attitudes towards their involvement in family planning. 66.2% of men emphasised the importance of enhancing the acceptance of male contraceptive methods by disseminating knowledge and information.[9]

The current study revealed that out of the total population of 127 individuals, only 23.6% had received counselling at least once in a lifetime. Among those who received counselling, doctors, nurses, and ANMs were the primary sources. Among the 68 individuals who had heard about contraceptive methods, most of them used oral contraceptive pills accounting for 67.7% of the population followed by condoms with 40 individuals, representing 58.8% of the total population followed by withdrawal method, In a study among men in UAE, it was found that among the users, 39 individuals (41.5%) relied on condoms, 30 (31.9%) practised coitus interrupts, 24 (25.5%) followed the rhythm method, and only one participant (1.1%) had undergone sterilization.[7] In another study of Iraq, it was found that a mere 12% of respondents reported having utilized condoms at some point.[10] A study reported a disparity in condom usage between men and women, with approximately 2.3% of men reporting higher usage compared to women; while regarding withdrawal and rhythm methods, men reported slightly higher usage by a small margin of 0.1%.[11] In another study in Andhra Pradesh, India it was found that among the various male contraceptive methods, the male condom emerged as the most commonly used (42.3%).[12] In a study in Kolkata, it was found that only 36.4% of the participants actively engaged in family planning, either by using condoms or practising withdrawal.[13]

It was also found from the study that most of the time, the use of contraceptives was decided by the male partner only (48.8%) and followed by jointly (38.6%) of the study population. Another study in West Bengal found that in the majority of the cases (69.6%), the decision regarding contraceptive use was taken jointly by the husband and wife. The overall prevalence of current contraceptive use among the study population was 33.9%.[14]

The study is one of its kind which tried to find out the determinants of knowledge and practice related to contraception among adult married males and to find out these factors advanced statistical methods like multivariate analyses were used. The study had focussed on a particular block chosen purposively, hence facing challenges of greater external validity. The practices found out were stated only, hence results might have been influenced by information bias. Even with these limitations, this study had projected a new way to address the never-solving issue of male partners' contribution towards contraception and its determinants.

CONCLUSION

The study on knowledge and stated practice of contraception among adult married males in Bishnupur-II block, South 24 Parganas, West Bengal has provided important insights into the current status and areas for improvement regarding contraceptive awareness and utilization.

The major findings of the study indicate a significant knowledge gap among the male population, particularly those with lower socioeconomic status. Education level was identified as a significant factor influencing both knowledge and practice of contraception, with higher education associated with greater awareness and utilization of contraceptive methods. Partner communication and comfort in discussing contraception were also found to be crucial in promoting informed decision-making. Additionally, the study highlighted the need for increased counselling services and emphasized the importance of involving healthcare providers in the dissemination of accurate information.

Based on the study's findings, it is recommended to develop targeted educational campaigns to address the knowledge gap among individuals with lower education levels. Promoting effective partner communication on contraception should be prioritized. Strengthening counselling services in healthcare settings and conducting longitudinal studies are also important. Future research should consider cultural and social factors and target vulnerable populations. In conclusion, addressing the knowledge gap and improving contraceptive practices require education, partner communication, counselling services, and targeted interventions.

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