

SHORT ARTICLE

Awareness, Knowledge and Practices of Contraceptive Methods among Married Males of Slums of Phulwarisharif block of Patna District, Bihar

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Abstract

Background: Even though India was the first country to launch family planning programme, population growth rate of India is still higher. Males are often the dominant decision makers of the family. Many studies regarding contraception has been done on females but the same is lacking on males. **Aims & Objectives:** The aim was to assess the level of awareness and practices about the contraceptive methods and factors associated with awareness and use among the married males in slums of Phulwarisharif block of Patna. **Material & Methods:** A cross-sectional study was conducted among 212 married males aged 18 to 60 years over a period of 3 months in slums of Phulwarisharif, Patna. Data were collected by interview of study subjects using predesigned and pretested questionnaire. Descriptive statistics and chi-square test were applied using SPSS software. **Results:** Among 212 married males 91.5 % have heard of at least one contraceptive method, while only 42.45% have ever used any contraceptive method. The major source of knowledge among 194 aware participants were friends and family members (78.9%). Age, duration of marriage, number of children and position in the family were associated with level of awareness. **Conclusion:** Despite of high awareness about contraceptives low utilization and limited knowledge was observed among the married male participants.

Keywords

Contraception; Married Male; Slums; Awareness; Practice

Introduction

Although globally, India was the first country to launch family planning (FP) programme in 1951, (1) yet is the second most populous country of the world. In India, Bihar has the second highest population with a decadal growth rate of 25% and a high total fertility rate (TFR). (2) Several studies have

been conducted concerning contraceptive use in low- and middle-income countries. (1,3) A study conducted in North India (4) found that the knowledge and use of contraceptives among rural adolescents were low compared to the urban and slum counterparts. Moreover, the study revealed age and education of participants as significant determinants of awareness of contraception.

Researches conducted using National Family Health Surveys (NFHS) data (1992-2006) in Bihar showed that women's age, religion, standard of living, education, etc. were significant determinants of contraceptive practices. (2)

Slum dwellers are one of the most socially and economically deprived groups with low level of education and awareness. Slums play a significant role in population growth. Furthermore, study among males is important as they are often the prime decision maker regarding FP practices in the family. (5) Studies have shown male's cooperation and awareness about modern contraceptive methods were associated with the female's intent to use contraception. (6,7,8) There is paucity of information about the level of knowledge, awareness and practices regarding FP methods among the slum dwellers in Patna.

Aims & Objectives

To assess the extent of awareness, knowledge and practices about contraceptive methods and the factors associated with awareness and use.

Material & Methods

Study design, duration and area: This study was a descriptive, cross-sectional study, conducted within 3 months period in 2017, in three slums of Phulwarisharif block nearby to All India Institute of Medical Sciences, Patna. According to local government health office data the total population of the slum under study was 3472.

Study population: The study subjects were married males aged 18-60 years and living in slum areas for at least one year. Males with more than one wife were also included in the study. Unmarried males, and those refuse to give consent for interview were excluded.

Sample size: Sample size was calculated assuming the anticipated proportion of awareness level among urban slums (9) as 88% at 95% level of confidence and 5% of allowable relative error. The final sample size was 210. In total this study included 212 subjects.

Sampling: Total 212 eligible males living in the identified slum areas were selected purposively as per convenience.

Data collection: A semi-structured questionnaire was prepared and pretested on 10 subjects satisfying the inclusion criteria in a slum other than the study area. Eligible men living in the identified slum areas were visited at their house and were interviewed.

Informed consent was taken from the study subjects before starting the interview. The subjects were asked about socio-demographic (age, religion, education, occupation, income etc.) details followed by specific questions on contraception awareness and use. If the selected subject has refused to complete the interview, he was excluded from the study and replaced by another subject until the desired sample size was achieved.

Ethical clearance: The ethical clearance was obtained from Institutional Ethics Committee of AIIMS, Patna. Written informed consent was taken from the participants before the interview. The confidentiality and anonymity of the participants and their willingness to quit the interview at any point were preserved.

Statistical Analysis: Data were checked for completeness and entered in Microsoft Excel and checked for completeness and correctness. The result was presented in form of tables and graphs. The categorical variables were expressed in frequency and percentage and quantitative variables as mean (\pm standard deviation). Association of awareness and use of contraceptives with socio-demographic factors were analyzed by applying chi-square and fisher's exact test. The analysis was done in IBM SPSS Statistics for Windows, Version 22.0, license version (Armonk, NY: IBM Corp.).

Results

Out of 212 married males of age 18 – 60 years, mean age of the participants was 33.3 (\pm 9.3) years. (Table 1) showed the socio-demographic characteristics of the participants. Most of the participants (64.1%) were married before the age of 21 years and 24.1% were married for less than or equal to 5 years. Majority of participants 127(59.9%) were illiterate, 142 (67%) were unskilled labourer while only 6.1% men had clerical job. Majority of participants (95.8%) were Hindu. More than half of the participants were from joint family and had more than two children. Only 8% of participants belonged to upper middle class and 19.3% in middle class.

Out of 212 participants 194 (91.5%) were aware of at least one contraceptive method, but only 57.5% knew the method of using it. Besides, only 16.5% of participants had knowledge of side effects about the method. Among individual contraceptives methods highest level of awareness was observed for the terminal methods (83.5%), followed by male condom (75.9%), 50.0% had knowledge about oral

contraceptive pills (OCP), 19.8% about Intra-uterine devices. Least awareness was observed for emergency contraceptive devices (10.4%) while 9.9% were aware of other family planning method.

Among the aware participants, 78.9% gather knowledge from friends and family members, 21.6% from mass media, 17.5% came to know from health workers, 8.8% by visiting doctors while 7.7% had knowledge from awareness campaigns and educational materials.

The most prevalent reason for not using contraception was misconception about contraception (24.6%) and lack of complete knowledge about method of use (24.6%), while 15.6% did not use due to incomplete family size and 18% felt not necessary to practice contraception, 5.7% each did not use because of religious belief and fear of side effects, 4.9% due to lack of money and one person due to shame.

Relationship between level of awareness and socio-demographic factors were shown in (Table 2). Among the socio-demographic factors, age ($p=0.000$), years of marriage ($p=0.008$), position of the participant in the family ($p=0.027$) and number of children ($p=0.026$) were found to be significantly associated with the level awareness. Whereas, no association was found between religion, occupation, education, socioeconomic class, age at marriage, type of family and level of awareness.

Out of total participants only 90 (42.5%) had used at least one method of contraception in their lifetime. Among the participants using contraceptive methods, 26.7% were using it for spacing purpose while 73.3% were using for limiting the pregnancy. Among those using contraception, 32.2% were using barrier method (condom), whereas 2.2% of the participants wives were using intra-uterine devices (IUD) and 8.9% was using combined oral pills (OCP). Moreover, most of the participants (66.7%) had used female terminal method of contraception as family planning method, while none of them had used male terminal method.

On bivariate analysis, age of participants ($p=0.047$), occupation ($p=0.014$), type of family ($p=0.035$), and number of children ($p=0.000$) were significantly associated with the use of contraceptive methods. (Table 3) Whereas, no association found between contraceptive use with religion, education, age at marriage, socioeconomic class, and duration of marriage.

Discussion

The study shows that high number of slum men (91.5%) had heard at least one of the contraceptive methods. On contrary to the current findings, a study conducted in Nigeria by Apkamu et. al. found that 98.1 % of the people were aware of the contraceptive method which was higher than the present study. This could be explained by the poor literacy of participants in our study compared to study done in Nigeria. (7). Another study in rural areas in Maharashtra by D. Balaiah et.al. showed that 91% of men were aware of at least five contraceptive methods (10) which contrasted with this study where only 4.7% participants were aware of at least five contraceptive methods.

Among the aware participants only 62.9% knew the way of using it and 18.0% of them were aware of side effects. This wide difference showed that most of the people had limited knowledge about the contraceptive method. This might be because the most important source of knowledge for the participants were friends and family members who had little knowledge about contraception.

Among individual contraceptives, terminal method and condom were known to majority which was reverse in Coastal India where 91% of participants knew about condoms and 56.4% of terminal methods. This difference can be attributed to the better literacy rate in the southern India. (11) The probable reason for the lower awareness and use of oral pills, intra-uterine devices might be due to widespread awareness campaign and easy accessibility of terminal methods. (12) The major source of knowledge in our study were friends and family members (72.16%) while the least important source was awareness campaigns (2.8%). This contrasted with a study done in Sikkim (13). Also, amongst aware participants, majority 75.8% were unaware that government provides several contraceptive methods free of charge, highlighting the lack of contact of the slum men members with the existing family planning programme. This might be due to less interactions between frontline health workers like ASHA and male slum dwellers probably due to reticence nature because of gender difference. Hence, involvement of male counselors in family planning services might enhance the awareness and acceptance of FP methods among men. (14,15)

Less than half of participants in this study had used contraceptive, of them majority used surgical method. This could be due to the preferential attitude of health workers and participants towards surgical method for financial gain which is provided by the government (16) or due to the poor awareness generation regarding spacing methods. (17) The most frequent reason of not using contraception in the study were misconception (24.6%) and lack of complete knowledge about use of contraception (24.6%) followed by felt not necessary (18%) and incomplete family size (15.6%) which is comparable to study in Togo (15) but contrasting to a study done in Ethiopia where the most frequent reason of not using contraception was the need of child (18).

In the current study, association were found between age, years of marriage, position in the family and number of children with level of awareness. Young and middle age, number of children, occupation and family type were found to be associated with contraceptive use among the participants. The maximum percentage of aware people was in 18-29 years age group, and the awareness level was decreasing with increasing age. Similar association between age and knowledge of contraceptive use was found in Ethiopia done by Tizta Tilahun et.al. (18) Similar association was observed in a study in Karnataka about knowledge and practice of condom use. (19) This could be due to progressive improvement and increase in the number of government programmes over the years. Moreover, in recent times focus of mass media in promotion of awareness through mobile, internet, television serve as an improved strategy. (20) This could be a reason for increasing awareness and use of FP methods among the younger adults, as young men have more access to mass media.

The association of duration of marriage and awareness level might be due to that the health workers and government policies are mainly targeting the newly married couples. Moreover, most of the participants who were aware and used contraception had more than two children. This highlights a trend of increasing awareness with increasing number of children. This could be because of increasing exposure to the health system during deliveries, hence more chances of awareness.

The percentage of participants using contraceptive methods in our study was associated with occupation. The socio-economic factors including

education, socio-economic class in the community serves vital role in determining contraceptive use, which was evident in a study where sterilization was favoured by poorest people, disadvantaged community like slums, comparable to our study. (21) Our study couldn't find an association between socioeconomic class and awareness/use of contraception. This was consistent with the finding of a study done in Ethiopia (18) which shows that there is no association between income and proportion of contraceptive use. On contrary, other studies from India revealed that socio-economic factors play important part in use of contraception, particularly for terminal methods. (21)

Conclusion

It was concluded from the study that although the level of awareness among the males of slum in Phulwarisharif, Patna was high, practicing knowledge was limited. The percentage of contraceptive use was also very low as compared to the awareness level. Awareness was associated with age, years of marriage, position of the responder in the family and number of children while use of contraception was associated with occupation, age, number of children, and type of family.

Recommendation

Involvement of male counselors could enhance acceptance of family planning services among men community members. It is also recommended to increase awareness generation regarding existing government FP policies through campaigns, mass media involvement among the slum dwellers.

Limitation of the study

This study was conducted in a small number of participants and the sample size was less to accurately find the associations of different socio demographic variables with awareness or use. Moreover, purposive sampling was done in the study. Also, the study did not attempt to assess the attitude and perception of the men participants towards the contraceptives which could have influence on awareness and use.

Relevance of the study

This study highlights that awareness generation about spacing methods of family planning should be focused by the local health authorities in order to enhance the promotion of family planning practices.

Authors Contribution

Conception and design of study: RS, DB, CMS: Generation of data: RS: Data Analysis & Interpretation: RS, DB, CMS: Manuscript writing: RS, DB, CMS: Providing intellectual inputs: RS, DB, CMS.

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References

1. Prateek S, Saurabh R. Contraceptive practices adopted by women attending an urban health centre. *African Health Sciences* 2012;12(4):416-421.
2. Kumar A, Singh A. Trends and determinants of unmet need for family planning in Bihar: Evidence from National Family Health Service. *Scientific Research* 2013; 3(2): 157 -163.
3. Adejoke B, Ayoola, Gail L, Zandee, Emily Johnson, Kendra Pennings. Contraceptive use among low income women living in medically underserved neighbourhoods. *Journal of Obstetrics, Gynaecologic & Neonatal Nursing* 2014; 43(4): 455-464.
4. Gupta M, Bhatnagar N, Bahugana P. Inequity in awareness and utilization of adolescent reproductive and sexual health services in union territory, Chandigarh, North India. *Indian J Public Health*. 2015 Jan-Mar;59(1):9-17. doi: 10.4103/0019-557X.152846. PubMed PMID: 25758725. [PubMed].
5. Islam MA, Padmadas SS, Smith PW. Men's approval of family planning in Bangladesh. *J Biosoc Sci*. 2006 Mar;38(2):247-59. doi: 10.1017/S0021932004007072. PubMed PMID: 16490157. [PubMed].
6. Ezeanolue EE, Iwelunmor J, Asaolu I, Obiefune MC, Ezeanolue CO, Osuji A et al. Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. *BMC public health* 2015 September; 15.
7. Apkamu U, Nwaopara AO et al. Awareness of contraceptive methods amongst married male population of Ekpoma, Nigeria. *Afr. J. Biomed. Res*. 2011; 14(2):131-5.
8. Jejeebhoy SJ, Santhya KG, Zavier AJ. Demand for contraception to delay first pregnancy among young married women in India. *Stud Fam Plann*. 2014 Jun;45(2):183-201. doi: 10.1111/j.1728-4465.2014.00384.x. PubMed PMID: 24931075. [PubMed].
9. Kapoor R, Kishore J, Gupta N. Awareness about contraceptive practices among youths in Delhi. *Health Popul Perspect Issues*. 2008;31(1):52-62.
10. Balaiah D, Ghule M, Naik DD, Parida RC, Hazari KT. Fertility attitude and family planning practices of men in a rural

community of Maharashtra. *Fertility Attitudes and Family Planning Practices* 2001; 47 (1): 56-67.

11. T R, B U, Mithra PP, Kumar, N., Holla, R., Raina, V et al. Married Men's Involvement in Family Planning – A Study from Coastal Southern India. *Journal of Clinical and Diagnostic Research: JCDR*. 2015; 9(4):LC04-LC07.
12. Yore J, Dasgupta A, Ghule M, Battala M, Nair S, Silverman J et al. CHARM, a gender equity and family planning intervention for men and couples in rural India: protocol for the cluster randomized controlled trial evaluation. *Reproductive Health* 2016;13(14).
13. Chankapa YD, Pal R, Tsering D. Male behavior toward reproductive responsibilities in sikkim. *Indian J Community Med*. 2010 Jan;35(1):40-5. doi: 10.4103/0970-0218.62552. PubMed PMID: 20606918; PubMed Central PMCID: PMC2888366. [PubMed].
14. Ministry of Health (MOH) (Togo). Action Plan for Repositioning Family Planning in Togo 2013-2017. Lome, Togo: MOH; 2013. Available from: <http://ec2-54-210-230-186.compute1.amazonaws.com/wpcontent/uploads/2014/12/Togo-National-Plan-for-Repositioning-Family-Planning-English.pdf>. (Accessed April 5, 2019).
15. Koffi Tekou B, Weidert Karen, Ouro Bitasse Eralakaza, Mensah Marthe Adjoko E, Emina Jacques, Mensah Sheila, et al. Engaging Men in Family Planning: Perspectives from Married Men in Lomé, Togo. *Global Health: Science and Practice*. 2018 Jun; 6 (2): 316-327.
16. Srinivasan K. Population policies and programmes since independence: a saga of great expectations and poor performance. *Demography India* 1998; 27(1): 1-22.
17. Zavier F, Padmadas SS (2000). Use of spacing method before sterilization among couples in Kerala, India. *International Family Planning Perspectives* 26(1): 29-35.
18. Tilahun T, Coene G, Luchters S, Kassahun W, Leye E, Temmerman M, Degomme O. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. *PLoS One*. 2013;8(4):e61335. doi: 10.1371/journal.pone.0061335. Print 2013. PubMed PMID: 23637815; PubMed Central PMCID: PMC3634055. [PubMed].
19. Chaudhary B K, Wantamutte A.S, Angolkar M, Sah JK. Knowledge, attitude, and practices of condom use among married men in urban slum area of Ramnagar, Karnataka. *IOSR-JHSS* Apr. 2015; 20(4): 106-9.
20. Zamawe C, Banda M, Dube A. The effect of mass media campaign on Men's participation in maternal health: a cross-sectional study in Malawi. *Reprod Health*. 2015 April; 12.
21. de Oliveira IT, Dias JG, Padmadas SS. Dominance of sterilization and alternative choices of contraception in India: an appraisal of the socioeconomic impact. *PLoS One*. 2014;9(1):e86654. doi: 10.1371/journal.pone.0086654. eCollection 2014. PubMed PMID: 24489759; PubMed Central PMCID: PMC3904921. [PubMed]

Tables

TABLE 1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS (N=212)

Variables	Frequency	Percentage
Age		
18-29	90	42.5
30-39	65	30.7

40-49	41	19.3
50-60	16	7.5
Religion		
Hindu	203	95.8
Muslim	9	4.2
Education		
Illiterate	127	59.9
Primary	34	16.0
Middle	5	2.4
High school	31	14.6
Intermediate and above	15	7.1
Occupation		
Semi-professional	1	0.5
Skilled	54	25.5
Semiskilled	1	0.5
Clerk	13	6.1
Unskilled labour	142	67.0
Unemployed	1	0.5
Socioeconomic class (Modified BG Prasad classification; 2017)		
Upper middle	17	8.0
Middle	41	19.3
Lower middle	124	58.5
Lower	30	14.2
Age of Marriage		
< 21 years	136	64.1
> 21years	76	35.9
Duration of Marriage		
< 5 years	51	24.1
> 5 years	161	75.9
No. of children		
Nil	23	10.8
< 2	63	29.7
> 2	126	59.5
Type of family		
Joint	112	52.8
nuclear	100	47.2

TABLE 2: ASSOCIATION OF SOCIO-DEMOGRAPHIC VARIABLES WITH AWARENESS OF CONTRACEPTIVES (N=212)

Characteristics	Awareness of contraceptives		χ ² /fisher test	p value
	Yes (%)	No (%)		
Age (years)				
18-29	88 (45.4%)	2 (11.1%)	24.31	0.000*
30-39	63 (32.5%)	2 (11.1%)		
40-49	33 (17.0%)	8 (44.4%)		
50-60	10 (5.2%)	6 (33.3%)		
Religion				
Hindu	186 (95.6)	17 (94.4)	0.08	0.557
Muslim	8 (4.1)	1 (5.6)		
Occupation				
Semi-professional	1 (0.5)	0 (0.0)	2.45	0.567
Skilled	51 (26.3)	3 (16.7)		
Semiskilled	1 (0.5)	0 (0.0)		

Clerk	13 (6.7)	0 (0.0)		
Unskilled	127 (65.5)	15 (83.3)		
Unemployed	1 (0.5)	0 (0.0)		
Education				
Illiterate	111 (57.2)	16 (88.9)	5.05	0.230
Primary	33 (17.0)	1 (5.6)		
Middle	5 (2.6)	0 (0.0)		
High school	30 (15.5)	1 (5.6)		
Intermediate and above	15 (7.7)	0 (0.0)		
Socioeconomic class (Modified BG Prasad classification; 2017)				
Upper middle	17 (8.8)	0 (0.0)	4.52	0.179
Middle	40 (20.6)	1 (5.6)		
Lower middle	111 (57.2)	13 (72.2)		
Lower	26 (13.4)	4 (22.2)		
Age at Marriage				
< 21 years	127 (65.5)	9 (50.0)	1.71	0.191
> 21years	67 (34.5)	9 (50.0)		
Duration of Marriage				
< 5 years	51 (26.3)	0 (0.0)	10.43	0.008*
> 5 years	143 (73.7)	18 (100.0)		
No. of children				
Nil	23 (11.9)	0 (0.0)	6.65	0.026*
< 2	61 (31.4)	2 (11.1)		
> 2	110 (56.7)	16 (88.9)		
Type of family				
Joint	103 (53.1)	9 (50.0)	0.06	0.811
Nuclear	91 (46.9)	9 (50.0)		
Position in the family				
Head of household	152 (78.4)	18 (100.0)	4.860	0.027*
Others	42 (21.6)	0 (0.0)		

Note: *indicates p<0.05

TABLE 3 ASSOCIATION OF SOCIO-DEMOGRAPHIC VARIABLES WITH USE OF CONTRACEPTIVE (N=194)

Characteristics	Use of contraceptives		χ ² /fisher test	p value
	Yes (%)	No (%)		
Age (years)				
18-29	33 (36.7)	55 (52.9)	7.869	0.047*
30-39	38 (42.27)	25 (24.0)		
40-49	15 (16.7))	18 (17.3)		
50-60	4 (4.4)	6 (5.8)		
Religion				
Hindu	88 (97.8)	98 (94.2)	1.535	0.289
Muslim	2 (2.2)	6 (5.8)		
Occupation				
Semi-professional	1 (1.1)	0 (0.0)	12.302	.008*
Skilled	25 (27.8)	26 (25.0)		
Semiskilled	1 (1.1)	0 (0.0)		
Clerk	11 (12.2)	2 (1.9)		
Unskilled	52 (57.8)	75 (72.1)		
Unemployed	0 (0)	1 (1.0)		
Education				
Illiterate	45 (50.0)	66 (63.5)	4.420	0.354

Primary	16 (15.4)	17(18.9)		
Middle	2 (2.2)	3 (2.9)		
High school	17 (18.9)	13 (12.5)		
Intermediate and above	9 (10.0)	6 (5.8)		
Socioeconomic class (Modified BG Prasad classification; 2017)				
Upper middle	5 (5.6)	12 (11.5)	3.564	0.310
Middle	17 (18.9)	23 (22.1)		
Lower middle	53 (58.9)	58 (55.8)		
Lower	15 (16.7)	11 (10.6)		
Age at Marriage				
< 21 years	55 (61.1)	72 (69.2)	1.407	0.289
> 21years	35 (38.9)	32 (30.8)		
Duration of Marriage				
< 5 years	18 (20.0)	33 (31.7)	3.426	0.073
> 5 years	72 (80.0)	71 (68.3)		
No. of children				
Nil	3 (3.3)	20 (19.2)	16.086	0.000
< 2	25 (27.8)	36 (34.6)		
> 2	62 (68.9)	48 (46.2)		
Type of family				
Joint	40 (44.4)	63 (60.6)	5.042	0.031
Nuclear	50 (55.6)	41 (39.4)		
Position in the family				
Head of household	72 (80.0)	80 (76.9)	0.269	0.727
others	18 (20.0)	24 (23.1)		

Note: *indicates $p < 0.05$