Research Article

How empowered are women to choose contraception?

Talapere Usha Kiran, Rajshree Dayanand Katke, Priyadarshini Mane, Priyadarshini Mane, Purva Ganesh Pimple

Department of Obstetrics and Gynaecology, Cama & Albless Hospital, JJ Group of Hospitals, Grant Government Medical College, Mumbai, Maharashtra, India.
Correspondence to: Rajshree Dayanand Katke, E-mail: drrajshrikatke@gmail.com

Received February 11, 2016. Accepted February 24, 2016

Abstract

Background: Current contraception rate is approximately 40% (2011) in India. This leaves more than 60% of the eligible couple not using any contraception. It might be owing to socioeconomic and cultural background. Targeting this group to find the reasons behind the refusal of contraception would help us to tailor further delivery of family planning services to work toward achieving the target replacement fertility rate of 2.1.

Objective: To assess the uptake of contraception and the influence of social, economic, and cultural factors on the contraceptive practices of our patients.

Materials and Methods: This was a prospective survey done at the Department of Obstetrics and Gynaecology of Cama & Albless Hospital, Mumbai, during the months of July/August 2015. Women (those with perinatal mortality or morbidity and maternal morbidity were excluded) who delivered at our hospital were asked about their preference of contraception. The social and economic background of these women was then recorded, as were their responses to contraceptive counseling. The reasons for those women not willing to undergo/undertake any form of contraception were also recorded and analyzed in our study.

Result: The contraceptive uptake rate was 77%, while 23% women refused any form of contraception. Among those who accepted, tubal ligation was the most popular permanent method, and combined contraceptive pills and barrier methods ranked next in the temporary methods. Although 95% of women in both groups were unemployed, decision-making regarding contraception use was significantly different in the two groups. Although only 20% of women were allowed to solely decide on the choice of contraception in both groups, the accepted group showed a higher chance of joint decision-making with the husband and less interference from any other member in the family. Two common reasons for refusal were religious grounds and did not feel the necessity of contraception. Of 11 cases of refusal based on religious grounds, 10 were Muslims.

Conclusion: Women in our study sample who refused contraception did not seem to be empowered with education, employment, awareness, or cultural independence. Identifying these factors should help us achieve the tailor further delivery of family planning services to work toward achieving the target replacement fertility rate of 2.1.

KEY WORDS: Contraception, methods, women's choice

Access this article online	
Website: http://www.ijmsph.com	Quick Response Code:
DOI: 10.5455/ijmsph.2016.11022016404	

Introduction

The last UN estimate of Indian population by July 2015 was 1.3 billion, which is 18% of world population and makes it the second highest when compared with China. By the year 2022, it is predicted that India will become the most populous country in the world by surpassing China.[1] Maharashtra is one of the six most populous states in the country.[2]

Total fertility rate (TFR) has declined from 6.0 in 1961 to the current levels of 2.4, which make it one of the intermediate fertility rate countries.[1,3] India was the first country in the world to have launched a state-sponsored population program. Various initiatives such as National Population Policy 2000 and Janasankhya SthirataKosh have led to increasing public health centers, increasing specific number of beds for tubal ligature operations, and reorganization of rural health care with facilities of free home delivery of contraception by ASHA, which in turn have contributed to decreased fertility.

Currently, couple protection rate is approximately 40% (2011), with 34.9 million total family planning acceptors at national level comprising 5.0 million sterilizations, 5.6 million intrauterine device (IUD) insertions, 16.0 million condom users, and 8.3 million oral contraceptive pill (OCP) users.[2] This still leaves more than 60% of the eligible couple not using any contraception. This might be the result of socioeconomic and cultural barriers to uptake of contraception.[2] Targeting this group to find the reasons behind the refusal of contraception would help us the tailor further delivery of family planning services to work toward achieving the target replacement fertility rate of 2.1.[4]

This formed the basis of our study and led us to undertake a prospective study in our institute to assess on the uptake of contraception and analyze the influence of social, economic, and cultural barriers on the contraceptive practices of our patients.

Materials and Methods

This was a prospective case series and survey done at the Department of Obstetrics and Gynaecology of Cama & Albless Hospital, Mumbai, from July 24, 2015, to August 23, 2015.

Only women who had completed 37 weeks of gestation at the time of delivery and who delivered a live baby were included. Mothers with serious medical/obstetric complications such as preeclamptic toxemia, postpartum hemorrhage, antepartum hemorrhage, and postoperative complications or those whose babies needed neonatal intensive care (NICU) were excluded. The reason for this was that the mother or the family would not be in a right state of mind to make a choice of contraception when they experienced either maternal or fetal complications.

These women were asked about their knowledge and awareness of contraception and spacing and their wishes regarding further childbearing. After ascertaining their wish, they were counseled regarding the various methods available (cafeteria approach), and the most suitable one for their individual circumstances was suggested. Primiparas were counseled to preferably insert an IUD or injectable contraceptives for birth spacing as it is not patient compliance dependent. Those who declined were counseled and taught the usage of OCPs and barrier method of contraception (condoms, etc.). Increased emphasis was laid on permanent methods of contraception (tubal ligation and vasectomy) for multiparous women (para 2 and above). Those multiparous women refusing sterilization operations were then counseled about the other temporary methods of contraception.

Contraceptive counseling was offered to the families (husband, in-laws, and parents) of women who refused contraception at the outset, and they were also involved in counseling the woman for contraception.

The demographic, socioeconomic, and educational/professional background of the women and their partners were recorded. Parity and number of antenatal visits of these women, their knowledge/awareness of contraception, their responses to contraceptive counseling, and the reasons for refusal were also recorded. A prepared data sheet that included all these information was used to record each woman's data and response.

The data thus obtained was analyzed using SSPS, version 20. Independent *t* test and Mann–Whitney *U* test were used for continous variables depending on their distribution, and Pearson's χ^2 analysis was done for categorical variables. *P* value of <0.05 was considered significant.

Results

Total deliveries during the period in the two units involved in the study were 260. After excluding 28 cases of NICU admissions, 20 cases of maternal complications, and 6 cases of intrauterine fetal death, a study sample of 206 was obtained.

Acceptance of Various Methods

The contraceptive uptake rate was 77.6%. Forty-five (21%) women refused any form of contraception. Among the rest who accepted some form of contraception (160), tubal ligation was the most popular permanent method, and combined contraceptive pills and barrier ranked next in the temporary methods accepted for spacing [Table 1]. Sixty-three percent (n = 102) of those who accepted were para 2 or more and half of them did who not want any more children but still opted for temporary methods.

Demographics and Socioeconomic/Cultural Factors

As evident from Table 2, there was no significant difference in the two groups in terms of women's or their partner's age.

Although 95% of women in both groups were unemployed and, hence, did not contribute to the family income, significant numbers of women in the refusal group were uneducated. In addition to this, the level of education was higher than SSC in 75% in the accepted group when compared with only 57% in the refused group. The number of graduates in the accepted group was also 12% compared with only 4.4% in the refused group.

Education of partners and the per capita income of the family were not significantly different between the groups. However, the refusal group consisted of significantly increased number of partners who were either unemployed or unskilled laborers.

Majorities belonged to the state of Maharashtra and were living in joint families: 62% versus 55.6% in the refused and accepted groups, respectively. Majority [117 (56.7%)] of our patients were also were Muslims. Cama and Albless is traditionally known as Women's Hospital and, hence, has catered to a certain drainage area with increased Muslim population from before. There was a slightly higher number of Muslims in the refusal group [27 (60%)] when compared with those in the accepted groups [90 (56%)] but this was not statistically significant.

Nearly half of the women who refused were para 2 or more. Majority of patients were registered for antenatal care at Cama and Albless hospital except 16/206 (8%) patients. Most of them had three or more visits. However, this did not seem to have any effect on the acceptance rate.

Mode of delivery did not have any effect on the acceptance as 36/45 (80%) with LSCS and 124/160 (77.5%) accepted contraception of some form.

Previous perinatal mortality did not seem to have any effect on the acceptance rate although the numbers were small (10 revealed previous perinatal mortality, of which 9 accepted contraception).

Knowledge and Awareness of Contraception

Half of them in both groups (25/45 and 91/160) thought that the minimum spacing between two children should be 3 years. Forty-eight percent (22/45) of those who refused had used traditional methods such as rhythm method for spacing unlike 136/160 (85%) of those in accepted group, who had used modern method for spacing ($P = 0.001$).

Fifteen (33%) of those who refused contraception when compared with 13 (8%) of those who accepted showed no prior knowledge of contraception ($P = 0.001$). In those who were aware, only 12/45 (26%) of those who refused showed comprehensive knowledge of all different methods of contraception. In others, the knowledge was patchy. This was in contrast to 32% (52/160) in the accepted group who were aware of all methods. Majority in both groups seemed to aware of mainly barrier method (male condoms).

This knowledge of contraception was obtained from health personnel/hospital in less than half [13/30 (43%)] in the refused group and only in a quarter [38/147 (25%)] in the accepted group. The main source of information in both groups was either family or media. Majority in both groups [38/45 (84%) in the refused group and 124/160 (77.5%) in the accepted group] thought that contraception was available only in the hospital. Nearly three-quarters [33/45 (73%)] in the refused group revealed no idea that contraception was free when compared with 89/160 (55.6%) in the accepted group ($P = 0.04$). Majority of women in both the groups [40/45 (89%) and 131/160 (81%)] possessed no knowledge of the incentive provided by the government for tubal ligation and IUCD insertion.

Previous Use of Contraception

Although majority of the women in both groups had not used any contraception prior, there was a significant difference in the two groups [42/45 (93%) in the refused group versus 89/160 (55.6%) in the accepted group; $P = 0.001$). Of these 42, half of them were of parity two or more. Barrier (male condoms) was the main method of contraception even in those who had accepted.

Decision-Making

Decision-making regarding contraception use was significantly different in the two groups. Although only 20% of women were allowed to solely decide on the choice of contraception in both groups, the accepted group showed a higher chance of joint decision-making with the husband and less interference from any other member in the family [Table 3].

What was also surprising was that, in the refused group, nearly half of them ($n = 21$) did not want more children. There was not any one particular reason for refusal in them.

Only two in the study sample underwent vasectomy. The main reasons given for not opting for vasectomy were unwillingness by the male partner and religious grounds.

Two common reasons for refusal were religious grounds and did not feel the necessity of contraception. Of 11 cases of refusal based on religious grounds, 10 were Muslims [Table 4].

Discussion

The contraceptive uptake in our study seemed to be considerable higher (77%). We also found that the type of method chosen was almost equally distributed between the terminal method such as tubal ligation and spacing methods such as barrier and contraceptive pill. IUCD, although being an effective spacing method that does not rely on the male factor or compliance, does not seem to be the very popular. Only 2 of 206 opted for vasectomy. Similarly, injectable contraceptives were not favored. We found an increased number of women with parity more than two refusing contraception. There is no difference in the acceptance of contraception between those women whose one or more of their children had died in the past in our study. The main source of information seemed to be from media and family in our sample. Our study showed a large number of unemployed women in both groups, and a significant number were not only uneducated in the refusal group but also the level of education was also low. As joint families usually have senior members as decision-makers, there is more interference with women's choice in such cases as shown in our study where only 20% of women were allowed to solely decide on the choice of contraception but the accepted group showed a higher chance of joint decision-making with the husband and less interference from any other member in the family. In our study, not only the choice was skewed toward barrier method but also one of the main reasons for refusal was religious grounds.

The contraceptive uptake in our study seemed to be considerable higher (77%) when compared with other studies, which were below 60% and the still lower (40%) of national average.[2,5–7] We also found that the type of method chosen was almost equally distributed between the terminal method

Table 1: Accepted methods of contraception

Method of contraception accepted	*n* (%)
Tubal ligation	41 (25)
Barrier method	46 (28)
Combined contraceptive pill	41 (25)
IUCD	27 (16)
Vasectomy	2
Injectable contraceptive	2

Table 2: Demographic/socioeconomic/cultural characteristics of women/partners who accepted/refused contraception

	Accepted (*n* = 160)	Refused (*n* = 45)	*P*
Age (wife) in years (mean)	25.4 ± 4.1	24.9 ± 4.7	NS
Age (husband) in years (mean)	29.2 ± 4.7	28.5 ± 4.8	NS
Uneducated wife, *n* (%)	18 (11)	14 (31)	<0.001
Unemployed wife, *n* (%)	152 (95)	43 (95)	NS
Uneducated husband, *n* (%)	6 (3)	16 (35)	0.001
Occupation of husband (unemployed/unskilled laborers), *n* (%)	80 (50)	33 (73)	0.005
Religion (Muslim/Hindu), *n*	90/70	27/18	NS
Family (joint/nuclear), *n* (%)	71/89 (44)	17/28 (60)	NS
Median per capita income (min–max)	1400 (142–6666)	1250 (200–6666)	NS
Parity ≥ 2, *n* (%)	102 (63)	22 (48)	NS

Table 3: Decision-maker

Decision-maker	Refused group (*n* = 45), *n* (%)	Accepted group (*n* = 160), *n* (%)
Husband	21 (46)	54 (33)
Wife	9 (20)	33 (20.6)
Husband and wife	7 (15)	55 (34)
Husband + wife + mother-in-law	0	1
Elderly member of the family	7 (15)	16 (10)

Table 4: Reasons for refusal of contraception

Reason	Number of women = 45, *n* (%)
No reason given	10 (22)
Would like to have more children	6 (13)
Not necessary	10 (22)
Family pressure	6 (13)
Religious grounds	11 (24)
Fear of complications	4 (<1)

such as tubal ligation and spacing methods such as barrier and contraceptive pill. These findings were similar for previous contraception used by these women. This again was in contrast with the findings of others, where there was more skewing toward terminal methods.[7,8] The probable reason for this shift might be owing to the increased number of Muslim population in our study as there is evidence to show Muslim women irrespective of their education or socioeconomic status reveal low rate of acceptance of terminal methods and prefer to use spacing and traditional methods more.[7] Otherwise, stigma against terminal methods of contraception is apparent among women of other religions belonging of low socioeconomic status.[7]

India is the first country to have started the social awareness and marketing of condoms with the launch of "Nirodh" as not just a method of contraception but also to prevent sexually transmitted diseases, and the fact that it is freely made available by the government and NGOs has lead to its popularity and, hence, increased use.

However, when it comes to barrier method, we feel that it might be a matter of concern in two ways. The acceptance of barrier method in a woman with parity of two or more might be

misleading. This raises doubt on the intention of the woman choosing it as she might be using this option as a cover for refusal. Added to this is the male factor compliance of this method (as in our study the acceptance of barrier method was solely male condoms). This might be one of the reasons why our study shows increased overall uptake.

IUCD, although being an effective spacing method that does not rely on the male factor or compliance, does not seem to be the very popular. This again is reflected in other studies as well. The reason for this might be the probably interference with periods and the idea of foreign body in the uterus.[9,10]

Only 2 of 206 opted for vasectomy, which reflects the low male partner involvement in contraception, which is very similar to other studies.[8,11] This may be because they equate their maleness to the childbearing capacity and the poor reversal rates with vasectomy.

Male involvement and awareness is a major issue not just in India but in other countries where fertility rates are high.[12,13] Majority of contraceptive programs are female centered as they access the obstetric care. This calls for a male-centered approach to improve contraceptive uptake or even a family-centered approach than an individual approach. Studies have shown that male partners' awareness and support exert a positive impact on the female intent to use contraception.[14,15]

Similarly, injectable contraceptives were not favored because they are not freely available in the government setup and contraception does not figure out as an important thing to spend money on in the socioeconomic class of our study sample.[16]

Usually, as women grow older, their need for contraception increases as their parity increases and, hence, the acceptance rate.[17] Although women who accepted were slightly older in our study, this was not statistically significant.

In contrast to other studies,[7,18] we showed an increased number of women with parity more than two refusing contraception. This is probably owing to the religious and socioeconomic background of our patients.

Evidence on the effect of antenatal care on contraceptive uptake is varied.[19,20] In our study, unfortunately, antenatal registration did not make a difference to the uptake. This probably calls for an intensified approach to counseling of these women.

Although it was noted that women were less likely to use contraception if one or more of their children had died in the past,[18] we did not find such a difference in our study.

Significant numbers of women in our refused group were not aware of various aspects of contraception such as different methods, place of availability, and the incentives that the government is providing. Awareness is obviously a strong factor in promoting contraceptive uptake.[21] The main source of information seemed to be from media and family in our sample, which is similar to other studies.[18,22] This can be useful in promoting contraception in women widely and might be more so for women who are uneducated as most households do have TV exposure these days.

Women's empowerment is a multifaceted entity that involves both economic and noneconomic factors such as cultural, social, and political aspects. It is determined by their behavioral reactions to situations that reflect their well-being. Some of these can be directly measured, and some are not.

Our study included a large number of unemployed women in both groups, and a significant number were not only uneducated in the refusal group but also the level of education was also low.

As per the recent SRS census data, female literacy in India is 65% when compared with male literacy rate of 82%. Of the literate women, about 81.8% have education up to class X, 10.7% women have education level of class XII, and only 7.4% have reported education level of graduate and above. On average, an illiterate woman in India is bearing 1.2 children more than a literate woman (3.4 against 2.2). The TFR among women who have studied till at least class X was as low as 1.9. This further dips to 1.6 among women who have studied till class XII.

Among the illiterates, Kerala (1.2) has the lowest and Bihar (49.3) the highest percentage of illiterate women, which is reflected in TFR rates of these states. Female education is the strongest predictor for state-level variations in TFR.[3,18] Despite both employment and education being strong factors in increasing contraceptive use among women, education has a stronger influence independent of employment as seen in our study and in the national data.[3,18]

The reason for this is probably education not only improves the chances of employment but also awareness regarding contraception in women, and it also helps them to access information through mass media.

There was a significantly increased number of unemployed or even if employed unskilled partners in the refusal group. Partners' education and employment are factors that play an indirect role in women's empowerment.[23]

Although economic factors are the most significant and measure component of women's empowerment, the sociocultural factors can play a larger role, especially in underdeveloped and developing countries as they also form the basis of health and education for women.

Women's decision-making ability is not only influenced by their education, awareness, and employment but also by the community/religion they belong to and the family dynamics.

The number of women living in joint families was higher in the refused group although not significant. It is evident that women who lived in joint families were likely to refuse contraception.[18]

As joint families usually have senior members as decision-makers, there is more interference with women's choice in such cases as shown in our study where only 20% of women were allowed to solely decide on the choice of contraception, but the accepted group showed a higher chance of joint decision-making with the husband and less interference from any other member in the family. What was also surprising was that, in the refused group, nearly half of them [21/45 (46%)] did not want more children. There was no one particular reason for refusal in them. This probably implies that the woman did not have the power to make an independent decision.

Although numbers are small in our study, not only the choice was skewed toward barrier method but one of the main reasons for refusal was religious grounds, which is found to be consistent with existing evidence.[24]

Effort has been made to address this aspect by training opinion leaders in the community regarding family planning.[25]

Strength and Limitations

Strengths

Our study was a prospective study, and the information was collected directly from the women after in depth questioning of these women within the first week of their childbirth when they are most inclined toward contraception and, hence, reflects the true state of mind thinking of these women to make choices. Although our sample did not comprise women belonging to higher socioeconomic background, we still had had a good mix of women who came from disadvantaged socioeconomic backgrounds and otherwise, which gives us a good comparison to see the effects of various factors that empower women.

Limitations

As our study population consisted mainly of women who were unemployed and from Muslim background, it might not truly represent nationwide mix of population.

Conclusions

We conclude that women's empowerment is a key factor in promoting contraceptive choice. This empowerment should not only be addressed at the education/employment level but more so at the family/community/religious levels. Higher involvement of community leaders is essential to overcome the barrier. Efforts should also be directed at improving male education/employment and, especially, male awareness. Family- and couple-oriented joint counseling regarding family planning is the way forward. However, there are some limitations to our study. It is relatively a small sample drawn from a selected population of women in which majority belonged to urban poor and a particular religion, and, hence, the results cannot be generalized to a national level. We also did not ask women about emergency contraception, the role of which has gained more importance in the recent family planning strategy.

References

1. World Population Prospects. *The 2015 Revision. Key findings and Advance Table*. New York: United Nations, Department of Economic and Social Affairs, 2015. Working Paper No. ESA/P/WP. 241. pp. 1–5.
2. *Family Welfare Statistics in India 2011*. New Delhi, India: Ministry of Health and Family Welfare, 2011.
3. *SRS Census Data 2011*. New Delhi, India: Government of India, Ministry of Affairs, 2011.
4. *Eleventh Five Year Plan or Health Eleventh Family Welfare Plan*. New Delhi, India: Government of India, 2008.
5. International Institute for Population Sciences. *District Level Household and Facility Survey (DLHS-3), 2007–08*. Mumbai, India: IIPS, 2010.
6. United Nations. *Update for the MDG Database: Contraceptive Prevalence*. New York: Department of Economic and Social Affairs, Population Division, 2012.
7. Chaurasia AR. Contraceptive use in India: a data mining approach. Int J Popul Res 2014;2014:Article ID 821436.
8. Chankapa YD, Pal R, Tsering D. Male behavior toward reproductive responsibilities in sikkim. Indian J Community Med 2010; 35(1):40–5.
9. Kathpalia SK, Mustafa MS. Awareness about postpartum insertion of intrauterine device among antenatal cases. Med J Armed Forces India 2015;71(3):221–4.
10. Mohamed SA, Kamel MA, Shaaban OM, Salem HT. Acceptability for the use of postpartum intrauterine contraceptive devices: Assiut experience. Med Princ Pract 2003;12(3):170–5.
11. Balaiah D, Naik DD, Parida RC, Ghule M, Hazari KT, Juneja HS. Contraceptive knowledge, attitude and practices of men in rural Maharashtra. Adv Contracept 1999;15(3):217–34.
12. Mistik S, Naçar M, Mazicioğlu M, Cetinkaya F. Married men's opinions and involvement regarding family planning in rural areas. Contraception 2003;67(2):133–7.
13. 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;15:879.
14. Char A, Saavala M, Kulmala T. Male perceptions on female sterilization: a community-based study in rural Central India. Int Perspect Sex Reprod Health 2009;35(3):131–8.
15. Tilahun T, Coene G, Temmerman M, Degomme O. Couple based family planning education: changes in male involvement and contraceptive use among married couples in Jimma Zone, Ethiopia. BMC Public Health 2015;15:682.
16. Samal J, Dehury RK. Family planning practices, programmes and policies in India including implants and injectables with a special focus on Jharkhand, India: a brief review. J Clin Diagn Res 2015;9(11):LE01–4.
17. Rahayu R, Utomo I, McDonald P. Contraceptive use pattern among married women in Indonesia. Presented at the International Conference on Family Planning: Research and Best Practices; November 15–18, 2009; Kampala, Uganda.
18. Jain AK, Jain A, M.P.H Family Planning and Fertility in India Family Planning in Asia and the Pacific: Addressing the Challenges; December 8–10, 2010, Bangkok, Thailand.
19. Do M. Hotchkiss D. Relationships between antenatal and postnatal care and post-partum modern contraceptive use: evidence from population surveys in Kenya and Zambia. BMA Health Serv Res 2013;13:6.
20. Tisha S, Raysul Haque SM, Tabassum M. Antenatal care, an expediter for postpartum modern contraceptive use. Res Obstet Gynecol 2015;3(2):22–31.
21. Al Sheeha M. Awareness and use of contraceptives among Saudi Women attending primary care centers in Al-Qassim, Saudi Arabia. Int J Health Sci (Qassim). 2010;4(1):11–21.
22. Singh N, Patange RP. Awareness and practice of contraception among Indian women attending a rural tertiary care hospital. Natl J Commuity Med 2014;5:373–7.
23. Alamgir Kabir M, Khan MMH, Kabir M, Rahman MM, Patwary AFK. Impact of woman's status on fertility and contraceptive use in Bangladesh. *Available at: medind.nic.in/jah/t05/i1/jaht05i1p1 1999-2000.*

24. Gyimah SO, Adjei JK, Takyi BK. Religion, contraception, and method choice of married women in Ghana. J Relig Health 2012;51(4):1359–74.
25. Sharma V, Sharma A. Training of opinion leaders in family planning in India: does it serve any purpose? Rev Epidemiol Sante Publique 1996;44(2):173–80.

How to cite this article: Kiran TU, Katke RD, Mane P, Mane P, Pimple PG. How empowered are women to choose contraception?. Int J Med Sci Public Health 2016;5:2019-2025

Source of Support: Nil, **Conflict of Interest:** None declared.