ORIGINAL RESEARCH ARTICLE

Factors for non-acceptance of contraceptive methods amongst married women of reproductive age group in rural Patna

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ABSTRACT

Background: Population explosion has been India's major problem since independence. It is a major obstacle to the overall progress of the nation. Adoption of family planning methods is one of the best solutions to tackle this problem. The present study was planned to determine the factors for non-acceptance of different contraceptive methods among married women of reproductive age group in rural areas of Patna.

Methods: Study design: a community based cross sectional study. Study population: married women of reproductive age group (15-45 years). Study period: January 2012- July 2013. Study area: field practice area of PHC Sampatchak, Patna. Sample size: 705 using formula n =4p* q/d2. Study tool: pre tested semi-structured proforma. Collected data was analysed using latest version of SPSS.

Results: 705 married women of reproductive age group were surveyed and it was found that out of 705 women only 230 (32.65%) were using contraceptive methods. Amongst the users 70.87% were using permanent method of contraception and that too female sterilization. Of the temporary method users (29.13%) 2.60% were using condom, 15.21% were using OCP (oral contraceptive pills) and 11.30% were using IUCD (Intra Uterine Contraceptive Device). Choice of contraceptive method was mostly OCP (71.4%) when duration of marriage was <5 years. Greater the duration of married life more was the acceptance of Tubectomy. The main reasons for non-acceptance of contraceptives method was desire for child (31.17%) followed by fear of side effects (21.05%). Want of male child and opposition by husband accounted for 8.45% &12% respectively.

Conclusions: There is tremendous need to increase use of temporary contraceptives for spacing after one or two children. Male involvement in RCH care is essential. It is important to increase their participation as husbands often influence their wife’s decision regarding reproductive health.

Keywords: Contraceptive methods, Non-acceptance, Married women

INTRODUCTION

India is the second most populous country in the world with a population of more than 1.2 billion. Population explosion has been India's major problem since independence. It is a major obstacle to the overall progress of the nation. The explosive growth of human population combined with unsustainable production and consumption pattern, is putting increasing stress on air, water, land, energy and other essential resources.

There are a number of factors that affect population growth in India. These include socioeconomic factors, religious and cultural factors, and geographical factors. Poverty and illiteracy leads to poor utilization of family

Received: 22 April 2017
Revised: 30 April 2017
Accepted: 02 May 2017

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DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20172060
welfare services. To enable people around the world to meet their basic needs, without depriving future generation, poses a great challenge and requires urgent global attention and measures for population stabilization. Adoption of family planning methods is one of the best solutions to tackle this problem.

Family planning is defined as “a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude, and responsible decisions by individual and couples in order to promote the health and welfare of the family groups and thus contribute effectively to the social development of a country.”(WHO 1971).

In 1952, India launched the world’s first national program emphasizing family planning to the extent necessary for reducing birth rates "to stabilize the population at a level consistent with the requirement of national economy". Since then, the family planning program has evolved and the program is currently being repositioned to not only achieve population stabilization but also to promote reproductive health and reduce maternal, infant & child mortality and morbidity.

Despite improved availability and access to contraceptive services, a substantial proportion of pregnancies in India are unplanned (mistimed or unwanted). It is estimated that if all unwanted births could be eliminated, the total fertility rate would drop to the replacement level of fertility.

Acceptance of contraceptives and fertility pattern differs in the societies and the factors responsible for varied picture operate at individual, family and community level. Keeping all these facts in view, this study was planned to determine the factors for non-acceptance of different contraceptives in married women of reproductive age group in rural areas of Patna.

**METHODS**

A community – based cross-sectional study was carried out in the field practice area of Primary Health Centre, Sampatchak which is the Rural Health Training Centre of Nalanda Medical College, Patna. Sampatchak PHC caters a population of 76154 through 12 sub centres. All the households are rural households.

Based on the information collected from Family Welfare Statistic (2011), MOHFW, GOI, the proportion of women in age group 15–45 years using any contraceptive methods was 46%. The sample size based on this proportion, and at 95% confidence interval with 10% margin of error was estimated around 470. ($n= 4pq/d^2$; where $p= 46\%, \ q=54\%$ and $d=10\%$ of 46% $=4.6$). Taking design effect of size=1.5, the sample size for using cluster sampling was around 705.

Hence a total of 705 married women between the age group of 15–45 years were sampled using two stage cluster sampling method. In the first stage, the primary selection unit (PSUs) were villages. Thirty villages (30) were selected randomly from the list of villages, and in each village nearly 24 married women were selected randomly from each village, and they were interviewed using a pre-tested structured questionnaire. Those widowed, divorced, separated and those undergone hysterectomy were excluded from the study.

Study was conducted upon the currently married women in the reproductive age group of 15–45 years during study period of one and half years i.e. (from January 2012 to July 2013). Twice a monthly visit was done to collect the data. The data collected was compiled and analysed using latest version of SPSS software.

**RESULTS**

Mean age of the study population was 27.7±6.9 years, majority of women were between 20-30 years of age. About 65% were illiterate, 32% had education up to primary. 23.40% of them belonged to nuclear family, 47.80% to joint families. All of them were Hindu by religion (Table 1).

Knowledge of any contraceptive method was universal among study group but knowledge of traditional method was less than modern methods. Only a small percentage knew about ≥3 modern methods (Table 2).

Out of 705 married women only 230 (32.65%) married women were using contraceptive methods and this was equivalent to the acceptance rate of any modern method of contraception while 475 (67.35%) married women were not using any contraceptive method. As far as the distribution of current contraceptive users on the basis of different contraceptive methods they have selected is concerned female sterilization itself accounts for 70.87% of contraceptive prevalence in the study group. Modern spacing methods users were only 29.13% of the total contraceptive users. 2.60% were using condoms, 15.21% were using OCP and 11.30% were using IUCD.

**Figure 1: Duration of married life and choice of different modern contraceptive methods.**
Choice of contraceptive method was mostly OCP (71.4%) when duration of marriage was <5 years. Greater the duration of married life more was the acceptance of tubectomy (Figure 1).

All the women in study group started using contraception only after they had at least one living child. Among the contraceptive users majority (72.6%) accepted any contraceptive method after having ≥3 living children.

Permanent method of contraception was the most accepted method after having ≥3 children (Figure 2).

A significant association was found between number of surviving sons and contraceptive users (p <0.0001). Among the non-acceptors 184 (38.73%) were those who had no surviving sons while majority of the acceptors 151 (65.65%) had 2 or more surviving sons in their family (Table 3).

Table 1: Demographic profile of the study population.

| Educational status | Social class: modified BG Prasad | Type of family | No. | Total |
|--------------------|----------------------------------|----------------|-----|-------|
| Illiterate         | I                                | Nuclear        | 460 | 165   |
| Primary            | II                               |                | 225 | 203   |
| Middle school      | III                              | Extended       | 18  | 203   |
| High school        | IV                               |                | 2   | 198   |
| Graduate           | V                                | Joint          | 0   | 337   |

Table 2: Knowledge of contraceptive methods among the study population.

| Methods                        | Users (n=230) | Non users (n=475) | Total |
|--------------------------------|---------------|-------------------|-------|
|                                | No. | %   | No. | %   | No. | %   |
| Any method                     | 230 | 100 | 475 | 100 | 705 | 100 |
| Any modern method              | 230 | 100 | 475 | 100 | 705 | 100 |
| Any traditional method         | 137 | 59.57 | 157 | 33.05 | 294 | 41.70 |
| ≥3 modern method               | 95  | 41.30 | 67  | 14.11 | 162 | 22.98 |
| Total no. of women             | 230 |      | 475 |      | 705 |      |

Table 3: Number of surviving sons and contraceptive use.

| No. of surviving sons | Acceptors | Non acceptors | Total | χ²=177.7 | df=2 | p<0.0001 |
|-----------------------|-----------|---------------|-------|----------|------|----------|
| 0                     | 16        | 184           | 200   |          |      |          |
| 1                     | 63        | 210           | 273   |          |      |          |
| 2 or more             | 151       | 81            | 232   |          |      |          |
| Total                 | 230       | 475           | 705   |          |      |          |

Table 4: Contraceptive use and literacy status of husbands.

| Educational status | Users | Non users | Total | χ²=406.2 | df=4 | (0.05)=9.4 |
|--------------------|-------|-----------|-------|----------|------|------------|
| Illiterate         | 0     | 369       | 100   | 369      | 100  |            |
| Primary            | 126   | 92        | 42.21 | 218      | 100  | p<.0001    |
| Middle school      | 89    | 13        | 57.79 | 103      | 100  |            |
| High school        | 11    | 100       | 6.30  | 11       | 100  |            |
| Graduate           | 4     | 0         | 0     | 4        | 100  |            |
| Total              | 230   | 475       | 705   |          |      |            |

460 women in study group (460 out of 705) were found to be illiterate of which 395 (85.8%) were non-users of any contraceptive methods. With increase in the level of education there was an increase in the acceptance of contraceptive methods which was found to be statistically significant (p <0.001). It was also found that all the women with illiterate husbands were non users. With increasing level of education of their husbands contraceptive method use significantly increased among the women (Table 4).
The main reasons for non-acceptance of contraceptives method was desire for child (31.17%) followed by fear of side effects (21.05%). Want of male child and opposition by husband accounted for 8.45% &12% respectively. Family pressure 8% while others accounted for 13.89% of the reason (Table 5).

![Figure 2: Number of living children and contraceptive use.](image)

Those who were current non-users but had used contraceptive methods previously quoted that most common cause for discontinuing contraceptive use was desire for more/male children 88 (46.31%) followed by method failure 46 (24.21%), side effect of contraceptives 34 (17.89%).

| Reason                  | Number | %  |
|-------------------------|--------|----|
| Desire of child         | 148    | 31.17 |
| Wanted more children    | 143    | 30.10 |
| Wanted male child       | 65     | 13.68 |
| Health concerns         | 40     | 8.4  |
| Hard to get method      | 1      | 0.21 |
| Opposition to use       | 95     | 20   |
| Opposition by husband   | 57     | 12   |
| Family pressure         | 38     | 8    |
| Others                  | 70     | 13.89 |
| Total                   | 475    | 100  |

**DISCUSSION**

National Family Health Survey-3 (NFHS-3), India shows that among currently married women in rural India knowledge about any method was 99.1% and knowledge about any modern method was 99.0%. Similar was the finding in the present study.1

In the present study it was found that female sterilization itself accounts for 70.86% of contraceptive prevalence in the study group. Modern spacing methods users were only 29.13% of the total contraceptive users. 2.60% were using condoms. 15.21% were using OCP and 11.30% were using IUCD. OCP was the most popular method and condom was the least popular method among temporary/spacing methods.

In the district level household survey-3, Patna district survey (2007-08) study of rural population Patna shows that female sterilization was the most common method used. 32.3% of all current users had tubectomy done.5 Among modern spacing methods Condom was used by 2.0%, OCP by 1.1% and IUCD by 0.4%. In NFHS-3 (India), among modern spacing methods condom was used by 3.2%, OCP by 2.8% and IUCD by 1.1%.4

Higher acceptance of female sterilization has been reflected by different studies all over India including Bihar.6,8 The present study reflects the same trend. Higher acceptance of female sterilization in the present study may be attributed to existing family planning programmes which promotes permanent method of contraception by providing cash incentives for acceptors as well as the ASHAs motivating them. Other reason behind may be the lower awareness regarding spacing methods among the study population. Such women are more focussed on completing their family quite early in their married life and thereafter go for permanent method. Reason for OCP being the most accepted method may be its easy and free of cost availability as well as more promotion by health personnel and media.

As the most popular method among contraceptive users were sterilization (permanent method) with the increased duration of married life number of acceptors get cumulated and shows higher rate of contraceptive use between 10-20 years of marriage duration there after there is fall in acceptance rate. This is in agreement with the study by Bhasin et al in Delhi where they found that duration of marriage was one of the important determinant of contraceptive use.10

Number of surviving son had a direct impact on contraceptive acceptance and also on adoption of permanent methods. None of the women in study group accepted permanent method when they had no son. Among permanent method users only 24 out of 163 were having one surviving son. Rest 139 accepted the permanent method only after having two or more sons. However the acceptance of temporary methods decreased after having two or more sons. This indicates that after attainment of desired family size and sex composition of the family majority opted for permanent method (sterilization). In the present study, son preference may be due to fact that in a patrilineal-patriarchal family system as in India especially in rural areas, a son is considered essential to perform a number of important social, cultural and religious functions. Similar finding was observed by Rajaretnam and Mohanan et al.11,12

In the present study a significant association was found between literacy status of women and contraceptive use
460 women in study group (460 out of 705) were found to be illiterate and 369 out of 705 women’s husbands were found to be illiterate. This group comprised the majority of nonusers. All the women with illiterate husbands were non users. It interprets that husband’s literacy status has influence on women’s decision regarding contraceptive use. With primary level education of husband contraceptive use significantly increased. All the couples with education up to matriculation or higher were among contraceptive user (100% acceptance). Similar studies by Dwivedi, Sharma et al, Sultana et al and Philip revealed that percentage of contraceptive method users increased with level of education.13-16

During the survey reason for non-acceptance of contraceptives were asked. The main reasons for non-acceptance of contraceptives method was desire for child (31.17%) followed by fear of side effects (21.05%). Want of male child and opposition by husband accounted for 8.45% &12% respectively. Family pressure 8% while others accounted for 13.89% of the reason. The main reason (34.94%) found was method related problem i.e. health concerns (13.68%) and fear of side effects (21.01%), followed by want of more/male children (31.17%). Cost of contraceptive was not a barrier to use as government of India provides most of the modern contraceptive methods for free at govt. health facilities. Similar studies by 17. Rangamutha, Rama et al, Das et al, Patro et al, Murarkar and Ghosh et al revealed that commonest reason for not accepting contraceptive was desire of more children/desire for male children followed by fear of side effects and others.17-22

The most common reason for discontinuation among former users was desire for more /male children (46.31%) followed by method failure (24.21%), side effects (18.42%), inconvenient to use (7.36%), didn’t like the method (2.10%) and lack of sexual satisfaction (1.57%).

In similar study Kanitkar et al found that out of 133 drop outs in OCP users 49 had complaints related to medication and 17 discontinued because of husband’s objection.23

In Prabhawati and Shesaderi’s study, method failure lied in the range of 1-2% in 12 month period. The main reason for IUCD removal was related to early side effects (29.1%). Other leading reasons included desire for another child (13.8%), IUCD expulsion (7.9%) and 6.9% switched over to a terminal method.24

Contraceptive practices found in the study population shows that the knowledge about the contraceptive methods is not reflected in their actual acceptance. More efforts are required to increase the acceptance rate of contraceptives. There is tremendous need to increase use of temporary contraceptives for spacing after one or two children. Male involvement in RCH care is essential. It is important to increase their participation as husbands often influence their wife’s decision regarding reproductive health.

ACKNOWLEDGEMENTS

We gratefully acknowledge the active participation of married women of reproductive age group, the Ex. Head of the Department of Community Medicine, NMC, Patna Prof. Dr. Geeta Singh, Associate Prof. Department of Community Medicine, NMC, Patna Dr. A P K Sinha for their co-operation in supporting the study.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

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Cite this article as: Shree V, Prasad RR, Kumar S, Sinha S, Choudhary SK. Factors for non-acceptance of contraceptive methods amongst married women of reproductive age group in rural Patna. Int J Community Med Public Health 2017;4:1882-7.