## Knowledge, Attitude and Practices of Contraception among Women Attending Gynaecology OPD in a Tertiary Care Center in Central India

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#### **ABSTRACT**

### **BACKGROUND**

Implementation of population control policies depends not only on the resources put in to enforcing these policies but also on people's knowledge, attitude and acceptance.

#### **METHODS**

Ours is a cross sectional study conducted among women attending gynecology OPD in a tertiary care center in central India. The study was conducted from October 2018 to October 2019. Data collection was done using a questionnaire method. The results obtained were analyzed. Correlation of knowledge and attitude towards contraception was done with various socio-demographic parameters.

## **RESULTS**

Among the various contraceptive methods, knowledge regarding permanent and barrier methods was the highest, whereas knowledge regarding natural methods was the lowest. Social circle was the most listed source of knowledge. There was a positive correlation between the level of education and number of contraceptive methods known. The attitude of women was fairly positive towards contraception. There was a positive correlation between education as well as parity in terms of willingness to use contraceptive methods. In the study conducted, barrier methods were the most used methods of contraception. Only 5% of the subjects mentioned religious grounds, and 4.88% mentioned wanting a male child as a reason for not using contraceptives.

#### **CONCLUSIONS**

In our study, all the women were aware about at least one method of contraception. Barrier methods were the most used methods of contraception. There is a discordance between knowledge of contraceptive methods and practices. As a result the unmet need for family planning is very high.

## **KEYWORDS**

Contraception, Unmet Need, Family Planning

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### BACKGROUND

Contraception is defined as intentional prevention of conception or impregnation by interfering with the normal process of ovulation, fertilization and implantation through the use of various devices, agents, drugs, sexual practices, or surgical procedures.1 Reduction in the number of pregnancies, especially those that are a greater-than average risk to maternal, perinatal, and child survival are substantial benefits of contraception. Contraception also reduces the need for abortion, especially unsafe abortion. It also gives people the ability to determine the number and spacing of their children. India constitutes approximately 17.54% of the world population, while it occupies only 2.4% of the total world area. Around 248 million women in India lie in the reproductive age group.<sup>2</sup> Population growth has had a substantial impact on the health of women considering its limited and diminishing resources.

In India, implementation of various population control policies to curb the population growth, reduce maternal mortality and morbidity and improve maternal health has posed a big hurdle, as their effectiveness depends not only on the resources put in to enforce these policies but also on people's knowledge, attitude and acceptance which, in turn, are affected by various factors like age, number of living children, number of male children, occupation, socio-cultural factors such as religion and education of husband and wife. Voluntary acceptance of one of the approved contraceptive methods is required for their benefits to get quantified in the population. The family planning programme in India has over the years adopted a number of different strategic approaches, however, is still yet to attain replacement level fertility. In India, women still lack in decision-making with regards to family planning both at a family-level as well as a person-level. The concept of cafeteria approach and choosing an appropriate contraceptive method is deficient in Indian women.3,4

## **METHODS**

Ours is a cross sectional study conducted among women attending gynecology OPD in a tertiary care center in central India. The study was conducted from October 2018 to October 2019. Women attending OPD in the age group 18-45 years were included in this study. The subjects were asked prefixed questions through a structured questionnaire, and data regarding the following was obtained:

- Socio-demographic factors of the study population.
- Awareness regarding different contraceptive methods.
- Attitude and acceptance towards using contraceptives.
- Reasons for using contraceptive methods.
- Reasons for not using contraceptive methods.

The data obtained was studied and the results were analysed. Correlation of knowledge and attitude towards contraception was done with various socio-demographic

parameters. Appropriate statistical tests, wherever required were applied. Correlation of knowledge and attitude towards contraception with various sociodemographic parameters was studied.

## **Case Proforma**

## **Patient information:**

Name: Age:

Parity: Education/ Literacy:

Religion:

#### **Questionnaire:**

- 1. Are you aware about contraception?
  - a. Yes
  - b. No
- 2. Which contraceptive methods are you aware of?
  - a. Natural methods
  - b. Barrier methods
  - c. Oral contraceptive pills
  - d. Injectable contraceptives
  - e. Intrauterine devices
  - f. Permanent methods
  - g. No response
- 3. Do you have knowledge about Natural Contraceptive methods? If yes which?
  - a. Charting/ Calendar methods
  - b. Coitus Interruptus
  - c. Breast feeding as contraceptive
- 4. Do you have knowledge about Permanent contraceptive methods? If yes, which?
  - a. Tubal ligation
  - b. Vasectomy
  - c. None
- 5. What is your source of knowledge about contraceptives?
  - a. Media
  - b. Health Personnel
  - c. Social circle
  - d. Education
- 6. Attitude towards contraception?
  - a. Positive
  - b. Negative
- 7. Would you recommend use of contraceptives to a friend?
  - a. Yes
  - b. No
- 8. Does Husband approve use of contraceptives?
  - a. Yes
  - b. No
- 9. Desire to know about contraceptives.
  - a. Yes
  - b. No

- 10. Is religion a factor due to which you would avoid contraception/ family planning?
  - a. Yes
  - b. No
- 11. Is having at least one male child must?
  - a. Yes
  - b. No
- 12. Have you used any contraceptive method? Y/N If yes, which?
  - a. Natural methods
  - b. Barrier methods
  - c. OCP
  - d. IUCD
  - e. Injectable contraceptives
  - f. Permanent methods
  - g. No response
- 13. Reason for using contraceptives:
  - a. Completed their families
  - b. Spacing of birth
  - c. Avoid unwanted pregnancies
  - d. Improvement of health
  - e. Economic problems
- 14. Reasons for not using Contraceptives:
  - a. Worry about side effects
  - b. Family not complete
  - c. Lack of approval from partner
  - d. Insufficient knowledge
  - e. Religious grounds
  - f. No guidance
  - g. Want male child
  - h. No response
  - i. Any other

## **RESULTS**

The study subjects were evenly distributed across various age groups, levels of education, parity and religions. The knowledge regarding at least one contraceptive method was almost universal, as 99% of the subjects were aware of permanent methods of contraception, 95% were aware of barrier methods also. Natural methods were the least known contraceptive methods among the subjects with only 9.5% awareness. Among multiple sources of knowledge regarding contraceptive methods listed by the subjects, social circle was the most listed source (96%), while elementary education was mentioned by only 10.75% of the subjects. However, there was a positive correlation between the level of education and more number of contraceptive methods known which was found to be statistically significant. There was a positive correlation between the level of education and

the number of contraceptive methods known. As the education level increased beyond higher secondary level, more than 85% of the subjects knew more than 4 methods of contraception. This correlation was statistically significant with a p-value <0.0001.

| No. (n=800) | %   |
|-------------|---|
| 15          | 1.875%  |
| 263         | 32.875%   |
| 287         | 35.875%   |
| 235         | 29.375%   |
| 800         | 100%  |
| No. (n=800) | Percentage  |
| 396         | 49.5%   |
| 306         | 38.25%  |
| 82          | 10.25%  |
| 16          | 2%  |
| 800         | 100%  |
| No. (n=800) | %   |
| 108         | 13.5%   |
| 290         | 36.25%  |
| 212         | 26.5%   |
| 116         | 14.5%   |
| 40          | 5%  |
| 34          | 4.25%   |
| 800         | 100%  |
| No. (n=800) | %   |
| 33          | 4.125%  |
| 280         | 35%   |
| 297         | 37.125%   |
| 190         | 23.75%  |
| 800         | 100%  |
|             | 15 263 287 235 800 No. (n=800) 396 306 82 16 800 No. (n=800) 108 290 212 116 40 34 800 No. (n=800) 33 280 297 190 |

Table 1. Distribution of Study Subjects According to Age, Education Level, Parity and Religion

| Contraceptive Methods                               | Respondents (%) |  |
|---|-----------------|--|
| Natural methods                                     | 76 (9.5%)       |  |
| Barrier methods                                     | 760 (95%)       |  |
| OC pills  | 521 (65.125%)   |  |
| Intrauterine devices                                | 655 (81.875%)   |  |
| Injectable contraceptives                           | 223 (27.875%)   |  |
| Permanent methods                                   | 792 (99%)       |  |
| Table 2. Awareness of Various Contraceptive Methods |                 |  |

| No. of Methods Known  |   | Total  |  |
|---|---|--|--|
| 3 or less   | 4 or more   |  |  |
| 86 (79.6%)  | 22 (20.4%)  | 108  |  |
| 117 (40.3%)   | 173 (59.7%)   | 290  |  |
| 66 (31.13%)   | 146 (68.87%)  | 212  |  |
| 16 (13.8%)  | 100 (86.2%)   | 116  |  |
| 5 (12.5%)   | 35 (87.5%)  | 40   |  |
| 3 (8.82%)   | 31 (91.18%)   | 34   |  |
| 274   | 526   | 800  |  |
| Chi-Square test: p-value < 0.0001 (statistically significant) |   |  |  |
|   | 3 or less<br>86 (79.6%)<br>117 (40.3%)<br>66 (31.13%)<br>16 (13.8%)<br>5 (12.5%)<br>3 (8.82%)<br>274<br>t: p-value < 0.00 | 3 or less         4 or more           86 (79.6%)         22 (20.4%)           117 (40.3%)         173 (59.7%)           66 (31.13%)         146 (68.87%)           16 (13.8%)         100 (86.2%)           5 (12.5%)         35 (87.5%)           3 (8.82%)         31 (91.18%)           274         526           t: p-value < 0.0001 (statistically significant) |  |

Table 3. Correlation of Education Level of Subjects with Respect to Number of Contraceptive Methods Known

|  | Positiv | /e/Yes | Negat | ive/No |
|--|---------|--------|-------|--------|
|  | No.     | %      | No.   | %      |
| Willing to use                                   | 644     | 80.5   | 156   | 19.5   |
| Approval from partner                            | 667     | 83.38  | 133   | 16.62  |
| Recommend use of contraceptive to a friend       | 626     | 78.25  | 174   | 21.75  |
| Desire to know more about contraception          | 713     | 89.125 | 87    | 10.875 |
| Religion as a factor due to which use is avoided | 76      | 9.5    | 724   | 90.5   |
| Table 4. Attitude of Women towards Contraception |         |        |       |        |

The attitude of women was fairly positive towards contraception. 80% of the women were willing to use at least one or the other method, 83.38% had approval from their partners while 93% responded positively when asked about whether they would recommend the use of contraceptives to a friend. 9.5% subjects mentioned religion as a factor that discouraged the use of contraceptives. There was a positive correlation between education and willingness to use contraceptive methods. Almost all the subjects who had an education level of higher secondary and above were

willing to use contraceptive methods. This correlation was statistically significant with a p-value of 0.012.

| Education   | Willing to Use Contraceptives Total |             |     |
|---|-------------------------------------|-------------|-----|
|   | Yes                                 | No          |     |
| Illiterate  | 57 (52.78%)                         | 51(47.22%)  | 108 |
| Primary education   | 240 (82.76%)                        | 50 (17.24%) | 290 |
| Secondary   | 166 (78.3%)                         | 46 (21.7%)  | 212 |
| Higher secondary  | 107 (92.24%)                        | 9 (7.76%)   | 116 |
| Graduate  | 40 (100%)                           | 0           | 40  |
| Post graduate   | 34 (100%)                           | 0           | 34  |
| Total   | 644                                 | 156         | 800 |
| Chi-Square test: p-value= 0.012 (statistically significant) |                                     |             |     |
| Table 5. Correlation of Education with                      |                                     |             |     |
| Willingness to Use Contraceptives                           |                                     |             |     |

| Parity   | Willing to Use ( | Willing to Use Contraceptives |     |
|--|------------------|-------------------------------|-----|
|  |                  | No                            |     |
| 0  | 13 (39.39%)      | 20 (60.61%)                   | 33  |
| 1  | 146 (52.14%)     | 134 (47.86%)                  | 280 |
| 2  | 295 (99.3%)      | 2 (0.7%)                      | 297 |
| ≥3   | 190 (100%)       | 0                             | 190 |
| Total  | 644              | 156                           | 800 |
| Chi-Square test p-value < 0.0001 (statistically significant) |                  |                               |     |
| Table 6. Correlation of Parity with                          |                  |                               |     |
| Willingness to Use Contraceptives                            |                  |                               |     |

There was a positive correlation between parity and willingness to use contraceptive methods. Almost all the subjects with parity 2 or more were willing to use some or the other form of contraception. This correlation was statistically significant with a p-value < 0.0001.

| Contraceptive Methods Used   | No. of Respondents (%) |  |
|--|------------------------|--|
| Natural methods  | 66 (8.25%)             |  |
| Barrier methods  | 533 (66.63%)           |  |
| OC pills   | 152 (19%)              |  |
| Intrauterine devices   | 51 (6.38%)             |  |
| Injectable contraceptives  | 31 (3.88%)             |  |
| Permanent methods  | 355 (44.38%)           |  |
| Table 7. Contraceptive Usage among Study Subjects<br>According to Various Methods Preferred.<br>(Multiple Responses) |                        |  |

Among the various contraceptive methods studied, barrier methods were preferred by majority of the subjects (66.63%), while only 3.88% and 6.38% of subjects preferred injectable and intrauterine devices respectively.

| Reasons   | Respondents  |  |
|---|--------------|--|
| Completed family size   | 337 (42.13%) |  |
| Spacing of births   | 366 (45.75%) |  |
| Avoid unwanted pregnancies  | 380 (42.13%) |  |
| Improvement of health   | 18 (2.25%)   |  |
| Economic problems   | 41 (5.13%)   |  |
| No response   | 75 (9.38%)   |  |
| No contraceptives used  | 77 (9.63%)   |  |
| Table 8. Reasons for Using Contraceptives<br>(Multiple Responses) |              |  |

| Reasons                                       | Respondents  |  |
|---|--------------|--|
| Worry about side effects                      | 209 (26.13%) |  |
| Family not complete                           | 188 (23.5%)  |  |
| Lack of approval from partner                 | 133 (16.63%) |  |
| Insufficient knowledge                        | 92 (11.5%)   |  |
| Religious grounds                             | 76 (9.5%)    |  |
| No guidance                                   | 47 (5.88%)   |  |
| Want male child                               | 39 (4.88%)   |  |
| No response                                   | 128 (16%)    |  |
| Table 9. Reasons for Not Using Contraceptives |              |  |
| (Multiple Bernanges)                          |              |  |

Among the various reasons for using contraceptives mentioned by subjects, completion of family size (42.13%), spacing of births (45.75%) and avoiding unwanted

pregnancies (42.13%) were the most stated reasons. Only 2.25% of the subjects mentioned improvement of health as a reason for using contraceptives. Among the various reasons for not using contraceptives mentioned by subjects, worry about side effects, incomplete family and lack of approval from partner were the most frequently stated reasons. Only 5% of the subjects mentioned religious grounds, and 4.88% mentioned wanting a male child as a reason for not using contraceptives.

### **DISCUSSION**

## **Demographic Distribution of Subjects**

In the present study, subjects were distributed uniformly across age groups. 60.75% of the subjects were Hindus, 38.25% Muslims and 1% Christians. Of the total subjects, 36.25% had completed primary education and almost 50% of the subjects had completed secondary education or above. 13.5% of the subjects were illiterate. Of the total subjects, 95.875% of the subjects had one or more child and 4.125% were nulliparous.

# Knowledge Regarding Various Contraceptive Methods

In our study, all the women were aware about at least one method of contraception. Awareness regarding permanent methods was the highest (99%) followed by barrier methods (95%), IUCD (81.87%) and OC pills (65.12%). Awareness levels regarding injectable contraceptives (27.87%) and natural methods (9.5%) were substantially less. These results are similar to the knowledge of contraceptives among subjects in the study conducted in Bhopal, MP by Mandloi N. et al. in 2015, in which 91.41% of the subjects were aware of barrier methods.<sup>5</sup> Whereas in the study conducted by Renjhen P. et al, the highest percentage of awareness among subjects for a particular method was for oral contraceptive pills (95.8%).6 The study subjects had received information about contraception from one or multiple sources, viz. media, health service providers, elementary education and social circle. In the present study, 96% of the subjects obtained knowledge about contraception from social circle. This is critical for dissemination of knowledge in the society where the level of education is not high.

## **Attitude towards Contraception**

In the present study, 644 (80.5%) of the subjects were willing to use contraceptives. This result is similar to the studies conducted by Mandloi et al. and Lakshmi MM et al. in which 83.59% and 87.2% of the subjects were willing to use contraceptives respectively.<sup>6,7</sup> In the present study, 667 (83.38%) subjects had approval for contraceptive use from their male partners. In the study conducted by Mandloi N et al, only 45.68% of the subjects had approval for contraceptive use from their male partners. While in the study conducted by Rhenjen P et al, 97.6% of the subjects' male partners approved the use of contraceptives.<sup>5,6</sup> In the

present study, 713 (89.13%) subjects were desirous of adding to their present level of knowledge about contraception, compared to only 24.56% of the subjects in the study conducted by Mandloi et al.<sup>6</sup>

## **Practices of Contraceptive Methods**

In the study conducted, barrier methods were the most used methods of contraception. Most respondents reported using multiple methods. The practice of combining methods in order to increase one's level of protection from pregnancy was prevalent. These behaviors were mainly informed by deep anxiety about both the efficacy of contraceptive methods and about respondent's own perceived ability to prevent pregnancy. These findings have implications for clinical contraceptive counselling practice. Barrier methods and permanent methods were the most preferred methods listed by the study subjects, whereas the preference for injectable contraceptives and intrauterine devices was the least. The prevalence of knowledge about contraception does not reflect in the use of contraception. This discordance between knowledge and practice is due to multiple factors that include a very conservative attitude towards contraception, improper and inadequate knowledge, religious beliefs, desire for a male child, misconceptions and fear of side effects.

## **Unmet Need for Family Planning**

Unmet need for family planning can be calculated by calculating proportion of women who do not want to become pregnant but are not using any contraception. Of all the subjects, 156 subjects were not willing to use contraceptives. Thus, the unmet need for family planning is 19.5%. This result is comparable to the unmet need for family planning in Maharashtra which is 19.0%. The unmet need for family planning in India which is 21.3%.8 Even though the literacy of the subjects is fairly average (86.5% subjects are literate), the number of women acquiring knowledge of contraception from education is very less. This does not reflect in the awareness of at least one or more methods of contraception among the subjects, as almost all subjects acquired knowledge regarding contraception from their peers. The low level of education does however reflect in the attitude towards contraception and more so in the practices of various contraceptive methods.

#### **CONCLUSIONS**

In our study, all the women were aware about at least one method of contraception. Barrier methods were the most commonly used methods of contraception. There is a discordance between knowledge of contraceptive methods and practices. As a result, the unmet need for family planning is very high. Inclusion of knowledge about contraception in school syllabi at late primary or secondary school level should be considered and emphasized. There should be widespread dissemination of appropriate and sufficient knowledge about family planning, and various contraceptive methods at all levels of health care. Healthcare providers should not only be trained providing family planning services but also encouraged to transform the attitude of users not only for the purpose of population control, but also for prevention of STDs, improvement of maternal health and the betterment of economy by reducing the unmet need for family planning.

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