Awareness about IUCD: As a method of contraception among the eligible couples of Ramanathapuram village, Puducherry

Naik Bijaya Nanda
Kar Sitanshu Sekhar
KC Premarajan
Sarkar Sonali

www.ijmch.org
Awareness about IUCD: As a method of contraception among the eligible couples of Ramanathapuram village, Puducherry

Naik Bijaya Nanda¹, Kar Sitanshu Sekhar², KC Premarajan³, Sarkar Sonali²

¹Resident, ²Associate Professor, ³Professor
Department of Preventive and Social Medicine, JIPMER, Pondicherry

Abstract:

Research question: To find out knowledge, attitude and practice about IUCD as a method of contraception among the eligible couples (EC) of Ramanathapuram village, Puducherry.

Design: Community based cross-sectional study.

Setting: Ramanathapuram village, June and July 2015.

Method: Total of 93 eligible couples included after obtaining written informed consent. Husband and wife were interviewed separately using questionnaire being developed. The knowledge component was assessed using score.

Result: Mean age of husband and wife was 33.48 + 7.1 and 28 + 7.2 years respectively. Nearly 52% of wives and 37% of husbands were aware about IUCD. Only 15% of wives and 10% of husbands had thought of delaying pregnancy using IUCD. Wives had better knowledge score about IUCD than Husbands (4.49±2.7 Vs 2.81±2.1). About 42% wives compared to 10% of husbands would like to recommend IUCD to others. One wife recommended inclusion of IUCD in school curriculum. Nearly one fifth of the wives had misconception about IUCD. The practice of IUCD among eligible couple was reported to be 2.2%.

Conclusion: More emphasis need to be given to IUCD while delivering health education on contraceptive methods. The contraceptive education should be focused on Husbands, which is often neglected.

Key words: IUCD, Contraception, Eligible couples, Community based study, Awareness

Introduction

India is the second most populous country in the world, sustaining 16.7% of world population over 2.4% of surface area. As per census 2011, the decadal growth rate of population in India is 17.64% with rural and urban areas showing 31.80% and 12.18% respectively (Census). The spacing between 1st and 2nd child is less than 3 years in 60% of cases in India and the family size is 4.8.

In 1950s, the family welfare programme was started with the objective of “reducing birth rate to the extent necessary to stabilize population at a level consistent with the national economy”. However, 60 years into the family welfare programme, contraceptive prevalence in India is 56.3% and the usage of Intra Uterine Contraceptive Device (IUCD) is 1.8%. The unmet need for family planning is around 13%, 6% for spacing and 9% for limiting birth. One of the reasons for the unmet need is fear of surgical operation (sterilization).

IUCD is an ideal candidate to address the unmet need as it is easy to use, reversible, one
time insertion, long acting and very less failure rate.\cite{3,4} So Ministry of Health and Family Welfare, Govt. of India, is trying to reposition and promote IUCD as a method of contraception for spacing as well as limiting birth. Though, the cafeteria choice is the best approach for contraceptive use promotion, often IUCD is not promoted by the field staff. Despite IUCD being widely available and ideal for spacing or limiting birth, adoption of IUCD is less because of ignorance or fear of complication.\cite{2,5} Myths about IUCD and lack of information on its use or where to procure them often has led to very minimal use of IUCD as a method of contraception. Low usage of IUCD is reflected in some report and studies.\cite{2,4}

In the neighbouring state of Tamil Nadu, another high performing state in terms of education and health like Pondicherry, the awareness of IUCD as a method of contraception is 84.6% among wives which is higher than national level of 74% among wives.\cite{2}

Review of Eligible Couple register available at Jawaharlal Institute Rural Health Centre (JIRHC), Ramanathapuram revealed that prevalence of sterilization was very high compared to other methods, but in majority of cases the spacing between two children was less than 3 years. IUCD can be a candidate for promotion of postponement of pregnancy among the nulliparous or spacing between children among primi or multiparous women and also those who want to limit the births but fear of surgical intervention hamper the initiative.\cite{3} In this background, present study was conducted to find out knowledge, attitude and practice about IUCD as a method of contraception among the eligible couples (EC) of Ramanathapuram village, Pondicherry.

**Materials and Method:**

The cross-sectional study was carried out in the months of June and July 2011 in the Ramanathapuram village of Jawaharlal Institute Rural Health Centre (JIRHC) service area. JIRHC is the rural field practice of Jawaharlal Institute Postgraduation Medical Education and Research (JIPMER), Pondicherry attached to Department of Preventive and Social Medicine. Out of the four villages under JIRHC, Ramanathapuram was selected purposively as the populations in all the four villages are similar socio-culturally and economically. JIRHC being situated in the Ramanathapuram village, it was convenient for data collection.

The population of Ramanathapuram village was 2160 and total number of eligible couples in Ramanathapuram village was 120. The operational definition adopted for eligible couple (EC) for present study was “A married couple living together, where the wife is in age group of 15 – 45 years and has not adopted permanent method of sterilization”. All the 120 eligible couples from the study area were listed from the Eligible Couple Register available at JIRHC and which is updated on yearly basis.

Minimum sample size was calculated to be 73 using \(4pq/l^2\) formula and based on 84.6% awareness level among ECs in Tamilnadu and considering 10% margin of error. Considering 20% non-response rate, final sample size was calculated to be 88. However, it was planned to include all the 120 eligible couples from Ramanathapuram village for the present study.

A questionnaire was developed referring to NFHS 3 interviewer’s manual and pretested. The resident posted in JIRHC, Ramanathapuram trained the interns with respect to interview technique, method of data collection and data entry, under the supervision of faculty.
posted in the JIRHC. The trained interns made house visits to all the eligible couples and interviewed the husband and wife separately after obtaining informed consent. The eligible couples whose house was locked even after two visits and those who did not give informed consent were excluded from the study. The information collected was recorded in the questionnaire. At the end of the study, 27 eligible couples either refused to participate or could not be contacted even after two house visits.

The data obtained were entered and analysed using SPSS 16.0 version. Descriptive statistics and unpaired ‘t’ test were used for analysis. The level of significance was fixed at p < 0.05. A scoring pattern was developed to categorize the knowledge level. There were seven items in the questionnaire related to knowledge on IUCD. The correct and wrong responses to these items were awarded score of 1 and 0 respectively. The score obtained range from ‘0’ to ‘21’. The score was divided into four quartiles and three categories were made namely, poor score (0-5), average score (6-15) and good score (16-21). The ethical principle of obtaining informed consent was adhered to throughout the study.

**Result:**

Totally 93 eligible couples were interviewed. The mean age of wives and husbands was 28.47±7.2 years and 33.48±7.1 years respectively (Table 1). Nearly one forth of wives and less than 10% of husbands did not have formal education (Table 1). Majority (73%) of eligible couples belonged to nuclear. Maximum number of wives and husbands were housewife and labourer respectively by occupation. Majority of the eligible couples (53.8%) had two or more children. Most of the ECs (71%) belong to BPL category with monthly income less than Rs 4000 (Table 2).

**Table 1: Mean age and Education status of wives and husbands in the studied population**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Wives</th>
<th>Husbands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years (Mean ±SD)</td>
<td>28.47±7.2</td>
<td>33.48±7.1</td>
</tr>
<tr>
<td>Education (n (%))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>22 (23.7)</td>
<td>6 (6.5)</td>
</tr>
<tr>
<td>Primary school</td>
<td>4 (4.5)</td>
<td>8 (8.6)</td>
</tr>
<tr>
<td>Middle school</td>
<td>22 (23.7)</td>
<td>16 (17.2)</td>
</tr>
<tr>
<td>High school</td>
<td>37 (39.8)</td>
<td>45 (48.4)</td>
</tr>
<tr>
<td>Higher secondary</td>
<td>69 (6.5)</td>
<td>9 (9.7)</td>
</tr>
<tr>
<td>Undergraduate/Postgraduate</td>
<td>2 (2.2)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Total</td>
<td>93 (100)</td>
<td>93 (100)</td>
</tr>
</tbody>
</table>

**Table 2: Distribution of ECs based on type of family, no of children and family income (N=93)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>68</td>
<td>73.1</td>
</tr>
<tr>
<td>Joint</td>
<td>25</td>
<td>26.9</td>
</tr>
<tr>
<td>Number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No children</td>
<td>11</td>
<td>11.8</td>
</tr>
<tr>
<td>1 child</td>
<td>32</td>
<td>33.4</td>
</tr>
<tr>
<td>2 or &gt;2 children</td>
<td>50</td>
<td>53.8</td>
</tr>
</tbody>
</table>
About 98% of eligible couples knew that it is possible to delay pregnancy. Nearly 52% of the wives and 38% of husbands were aware of IUCD as a method of contraception. Though 61.3% of wives and 43% of husbands had ever thought of delaying pregnancy, only 15.1% of wives and 9.6% of husbands had thought of delaying pregnancy by adopting IUCD.

Majority of wives (71%) as well as husbands (93%) had poor knowledge score with respect to IUCD as a method of contraception. Wives had better knowledge score on IUCD as a method of contraception than husbands (wives 4.49 ± 2.7 and husbands 2.87 ± 2.1).

**Table 3: Distribution of wives and husbands based on IUCD knowledge score**

<table>
<thead>
<tr>
<th></th>
<th>Wives</th>
<th>Husbands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Average (6 – 15)</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Poor (0 – 5)</td>
<td>66</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

**NB: Neither wives nor husbands had good score**

About 65% of wives got the information on IUCD from health personnel and 63.5% of wives know which place to go for insertion of IUCD. About 42% of wives intended to recommend IUCD to others, whereas only 9.7% of husbands had the intention of recommending IUCD. Majority of the wives would not like to recommend IUCD because of its side effects. The major reason for not recommending IUCD as method contraception to others by the husband was that they were unaware of its advantages and disadvantages. Majority of wives (74%) had the view that IUCD can be popularize through mass media like newspaper, magazine and advertisement in TV. One wife recommended that it should be included in school curriculum as well.

The prevalence of myths among the wives was 18.3% which they overheard through social interaction. These are weakness (most responses), perforation, decreased fertility and fetal anomalies.

The practice of IUCD as a method of contraception was reported to be 2.2%.
Discussion:

Family Welfare Division, Ministry of Health and Family Welfare, Government of India is trying to promote adoption of Copper T 380A which provide longer duration of protection against pregnancy than Copper T200B. Awareness about IUCD will be pivotal in adoption by the eligible couples.

About 97.8% eligible couples (nearly equal for both husband and wife) knew that pregnancy can be delayed with contraception methods. Similar findings were reported by NFHS 3.[2] Saluja et al also found similar result from a study done at rural Haryana (97.2%).[6] However present study reported slightly lower awareness than that reported by Takkar et al[7] and higher awareness than that reported by Bhattacherjee et al (87%)[8], Kumar et al (75%)[9], Chandhick et al (74%)[10] and Patro et al (95%)[11]. Takkar et al had included only educated women where as in the present study nearly one fourth of wives and 7% of husbands had no formal education.

The prevalence of awareness of IUCD as a method of contraception in rural service area was found to be 51.6% among the wives and 37.6% among the husband. However, NFHS 3 reported higher prevalence at national level (74%) and Tamil Nadu (84.6%).[2] The operational definition adopted excluded many wives in the reproductive age group to participate in the study.

The present study revealed that 29% of wives have average knowledge as compared to 7.5% of husbands. Neither wives nor husbands showed good knowledge score. This is in accordance with the findings reported by Population Counsil, FRONTIERS in reproductive health.[12] Nearly two third of the wives knew the service source for availability of IUCD. Similar finding was reported by Chandhick et al among non user of any of the family planning services.[10]

The fear of side effects among wives led to non-adoption of IUCD and recommending the same to others. Similar finding was reported by Khokhar and Mehra from resettlement area in Delhi.[13] According to the wives, educating and sensitizing the community through mass media, as recommended by majority of wives can alleviate myths and increase the acceptance of IUCD as a method of contraception.

The IUCD adoption percentage in the present study was higher than the national average[2] and as reported by Baur[5] et al. However, NFHS III reported higher IUCD usage among eligible couples in Tamilnadu data (3.2%).[2]

Conclusion:

The awareness about IUCD as a method of contraception among the study population was found to be much lower than of Tamil Nadu and India. The awareness level as well as knowledge score was found to be lower among husbands than wives. The attitude shown by the wives in terms of recommending to others and how to popularize IUCD is a good sign. So health education needs to be strengthened targeting the husbands to increase their awareness level and also the wives to alleviate their fear of side effects and myths. Though “Cafeteria Choice” is the rule for contraceptive counseling, the negligence on IUCD by the field staff need to be reviewed. The IUCD should be promoted in same line with condom, ocp and sterilization.
Acknowledgement:

Special thanks to the interns (Shakthivel, Rathnapradeep, Supriya Chauhan and Senthil Ganesh) for their help in data collection.

References:


