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BARRIERS FOR ACCEPTANCE OF INTRA UTERINE CONTRACEPTIVE DEVICES AMONG POSTNATAL MOTHERS RESIDING IN RURAL AREAS OF MANDYA, KARNATAKA: A CROSS – SECTIONAL QUALITATIVE STUDY

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Abstract

Background: The modern Intra Uterine Contraceptive Device(IUCD)s are highly effective, safe, long acting, coitus independent, convenient for insertion and efficient in the immediate postpartum periods. Despite this, IUCD is not much utilised in India. To explore the barriers for acceptance of IUCD among postnatal mothers residing in rural areas of Mandya District this study was conducted. **Materials & Methodology:** It is a Cross-sectional Qualitative study using Focus Group Discussion (FGD) and matrix ranking method. FGD guide, Matrix chart and pebbles were used as study tool. Study population includes Postnatal mothers AND Female health care staff [Accredited Social Health Activist (ASHA, Junior Health Assistant (JHA) Female] residing in Melkote PHC area, Mandya District. Statistical analysis was done by reviewing the FGD transcripts for themes and domains. Themes and sub-themes were drawn using grounded theory method. Data triangulation was done from transcripts of all discussions and reflections of matrix ranking exercise. **Results:** Among the study participants, 75% expressed high acceptance rate for IUCD. The study lead to the exploration on barriers in accepting the IUCD, the most common reason being malignancy followed by pain, excessive bleeding, growth of extra tissue, no family support, weight loss, and listening to incidents of contraceptive failure. **Conclusions:** In the study area woman is not the sole deciding person, husband and in-laws play a major role in decision making related to family planning devises. Myths and fear of complications related to IUCDs are the major barriers.

Key-words: IUCD, contraception barriers, rural mothers

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Introduction

India is the first country to launch a nationwide family planning programme in 1952.[1] In recent days there are various methods of contraception a woman can opt for. The present approach in family planning programmes is to provide a 'cafeteria choice 'that is to offer all methods from which an individual can choose according to her needs and wishes.[2]

NFHS 4 (National Family Health Survey 4) data showed a nationwide percentage utilisation of pill, condom, female sterilisation, male sterilisation and IUCD as 1.5%, 5.6%, 36.0%, 0.3 % and 1.5% by married women aged between 15 to 49 years. Where NFHS 3 data showed the utilisation of IUCD at national level as 1.7%.[3] The NFHS 5 data in the Karnataka state level utilisation of IUCD is 2.9%, in that 3.4% constituted urban and 2.5% of rural area. In Mandya district, the utilisation was 3.6% in the year 2019 and 2020.[4,5]

Most women find IUCD to be very convenient because it requires little action once it is inserted. According to the World Health Organization Medical Eligibility Criteria, an IUCD can be inserted in the 48 hours postpartum, referred to here as a postpartum IUCD (PPIUCD), or after six weeks following a birth.[6,7] From year 2013 to 2018 various studies conducted in Delhi, Gujarat, Bhopal and Karnataka observed, 48.4% women were aware of Cu T (Copper T) as a method of contraception, only 21.9% of 48.4%, were aware of PPIUCD. The non-acceptance rate maintained at 88.0% to 86.5%.[8,10,11,12]

The modern IUCD 380A is highly effective, safe, long acting, coitus independent, insertion is convenient and efficient in the post placental and immediate postpartum periods. Insertion at these times is demonstrably safe, having a low incidence of infection, few bleeding problems, low perforation rates and rapidly reversible method of contraception.[8,9] Despite this, IUCD is not much utilised in India. Public health workers feel it is difficult to convince mothers for IUCD as compared to other contraceptive methods.

Many studies have been conducted on barriers to acceptance of IUCD but no published literature was available on the perceptions of the beneficiaries for non-acceptance of IUCD. Hence the current study was undertaken to ascertain the perception, practice, myths and other factors related to barriers towards the acceptance of IUCD among postnatal mothers residing in rural area.

Methodology

A Qualitative study using Focus Group Discussion (FGD) and matrix rating method was conducted at Melkote PHC area, Mandya district in March 2021. Study population included were post natal mothers and female health care staff [Accredited Social Health Activist (ASHA), Junior Health Assistant (JHA) Female]. Two FGDs and two matrix ranking exercises were conducted among participants who were included in the study. Inclusion criteria for the study were post natal mothers within 6 months after delivery and who are willing to participate in the FGD, and those participants who are unable to sit through the sessions because of health issues were excluded from the study.

Method of data collection: Eligible participants were informed prior about the date, place and timings of the discussion. FGD was conducted at meeting hall of Melkote PHC. Participants were seated in a well-lit and aerated room in a circle. Discussion was moderated by an Assistant professor in Community Medicine. The findings were noted and recorded by postgraduate student and medical officer of the PHC. Study consisted of two FGD with Female health care workers and eligible mothers. Group was consisting 8 to 10 members in

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each session. Female health care workers, Accredited Social Health Activist (ASHA) had experience of 2 to 30 years in the working field. Majority of health care workers had 10 years of experience in their field. The postnatal mothers had education of primary schooling to degree. Majority of them had completed their secondary schooling. After an informal opening remark, participants were briefed about the study objectives and methodology in their regional language (Kannada). Audio recordings were taken with the permission of participants. By using Matrix ranking method first FGD of health care workers conducted. Matrix ranking method (with the help of facilitator) was used first to determine the preferences of the study population (postnatal mothers) with respect to the available contraceptive methods. Twenty stones were given to the participants and asked them to place the stone on the charts according to their highest to least preferential order after having a discussion among them. Using a discussion guide, facilitator moderated the discussion to determine possible reasons for decreased utilisation of IUCDs. Medical, social, cultural factors and beliefs related to the use of IUCD were ascertained.

Study tool: FGD guide**,** Matrix chart and pebbles.

Data analysis: FGD transcripts were prepared on the same day with the help of audio recording. Recurring themes and domains, code directory were organised according to the primary topic of interest: Barriers in acceptance of IUCD among postnatal mothers and contraceptive preferences. Conclusions were drawn using grounded theory method. Data triangulation was done from transcripts of all discussions, reflections of matrix ranking table and results were presented in the form of theme tables.

Results

Observations obtained from the FGD among Female health care staff workers and mothers, have been depicted in table 1 and 2.

Table 1: Marital and fertility practices among study population.

Sl. No	Theme/ Subtheme	Observations (ASHA & Mothers)
1	Age at marriage	• 80% of the population practiced marriage at >18 years of age
		• 20% of the population practiced marriage at <18 years of age during COVID pandemic
2	Age at conceiving 1st child	• Mothers residing in urban areas plans after 2 years of marriage
		• Rural population conceive within few months of marriage
3	Spacing for 2nd child	• Half of the population practices spacing for around 3 years
4	Preference for male child	• Around 20% couples aspire for male child.
		• 80% are neutral towards gender
5	Family size preference	• One child preference by 25% couples
		• Two child preference by remaining. More than that is very rare.

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Table 2: To determine the contraception practices among rural population in Mandya

Sl. No	Theme	Observations (ASHA & Mothers)
1	Contraception utilization	• Three out of five delivered mother opted IUCD
		• Next in the order of preference were OCPs, barrier methods (condom), injections.
		• Calendar method was used by few educated mothers
2	Method preferred for spacing	• Majority – IUCD
		• Before 1st child– Condom
		• After first child – IUCD
3	Barriers for IUCD	• Fear of malignancy
		• Fear of Pain as described by the relatives or neighbors
		• Myths like weight loss & growth of extra tissue
		• Discouraged by family members out of fear of complications like perforation.
		• Fear of failure of contraception.

The female health care staff had come across under age marriage happening at their working area which had increased during COVID-19 pandemic. "*Two out of ten marriages which had happened during the lockdown were child marriages. All such weddings were unnoticed by authorities, as these marriages were held secretly and with small gathering" opined by an ASHA worker.*

Both mothers and female health care workers opined the same that the practice of conceiving the first child is as early as possible in the rural areas, where as in urban area its two - three years after wedding. As opined by both health care workers and postnatal mothers the reason being early conception are: *"Bearing a child is a god given gift, due to family pressure, delaying pregnancy may lead to infertility in later life".*

The spacing for the second child had been practiced in both urban and rural areas, with the gap of 3yrs from previous live birth. Majority of postnatal mothers were aware that spacing of three years is needed between the next pregnancies. One of the health worker observed ; "*In spite of the knowledge, half of the eligible couple will plans their second pregnancy early: as they don't want to give separate time, they want to complete their family when their parents are healthy, they believe if they opt interval family planning there might be problem conceiving second child, working women wants to complete the family as early so that she can work without interruption and doesn't want to go through the maternity leave process again at her work place and once they complete family they can opt permanent method of sterilisation early"* as said by both. One female health worker said that *"she has come across practice of 5 years spacing during field postings".*

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The desire for one and two children being 25% and 75% respectively among that there was 20% willingness to bear a male child. One of the ASHA said, *"Couples are aware of present high cost of living, they think of giving all the comfort to single kid (25% willing) and raise them well rather than giving a spilt compromised living style to two kids". "Majority ASHA workers said preference of male child is the major reason for opting two or more children in the family."* Figure 1 and figure 2 shows the matrix rank activity done by female health care workers and postnatal mothers. Column head from left to right indicates Condom, Oral Contraceptive pills, IUCDs, Injectables and others. Row head from top to bottom indicates Awareness, Usage, Availability, Familial support, Side effects, Misconceptions and Failure. Number of stones in each box indicate the preferential order i.e., more the pebble in a particular box indicates higher preference and vice-versa

Figure 1: Matrix ranking activity by Female health care workers of Melkote PHC

Figure 2: Matrix ranking activity by postnatal mothers of rural population, Melkote

PHC

The table 3 and table 4 depicts the same. The present study also elicited the limitations for injections were abnormal weight gain, low back ache, menstrual irregularity, multiple hospital visit, difficulty bearing second born, no family support and the injections available

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only at Community Health Centre(CHC) and taluka hospitals as opined by female health care staff. Limitations for OCP were, the first and foremost is forgetfulness, regularity of time is not maintained, missed dose has to be taken along with the regular dose (which causes discomfort) and weight gain as opined by both.

Table 3: Matrix ranking activity by female health care workers of Melkote PHC

	Condom	**OCP's**	**IUCD**	**Injections**	**Others**
Awareness	6	4	8	1	1
Utilization	6	6	4	2	2
Availability	8	5	5	2	0
Family support	8	2	2	1	2
Side effects	0	2	7	3	0
Myths	2	5	8	4	0
Failure rate	6	1	3	0	5

Table 4: Matrix ranking activity by postnatal mothers of rural population, Melkote PHC

	Condom	**OCP's**	**IUCD**	**Injections**	**Others**
Awareness	4	4	8	3	1
Utilization	7	6	4	2	1
Availability	5	5	5	5	0
Family support	6	3	9	2	0
Side effects	0	10	2	8	0
Myths	0	6	10	4	0
Failure rate	7	9	0	0	4

Discussion

In the present study the majority of the participant mothers were aware that the legal age for wedding is 18years (80%). The healthcare worker mentioned that recently they observed significant raise of 20% compared to legal age wedding on the practices of child marriage in their area. According to NFHS 5 survey women who were married before the age of 18 years in Mandya district is 13.1% (2019-20) as compared to NFHS 4, which was 22.2% (2015-16). As the national survey has not been conducted after the COVID-19 pandemic, this observation is not reflected yet.[4]

In this study the practice of conceiving first born after wedding is as early as possible in the rural areas. Where in urban areas the working women follows 2 years of spacing. In rural areas rather than couple it's the elderly parents/ grandparents who compel the couple to bear a child immediately after the wedding. According to NFHS 5 survey 5.9% of women who

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were between 15-19 years had conceived before the age of 18 years as compared to NFHS 4 where 8.5% had conceived. Our study observations support this trend of increased awareness.[3,4]

In this study the knowledge of three years of gap between the first and the second child is being practiced by only 50% of the eligible couple. Working women have a different concern of not practicing birth spacing. They feel completing the two-child family as early as possible saves them by putting maternity leaves repeatedly, reduces the absenteeism from work and once they complete family they can opt permanent method of sterilization early. Health workers found great difficulty in motivating the educated/working women.

We also noticed a demographic shift as nearly 25% of the couples opted for single kid, where the rest of the couple opt more than two children. The main reason being such practices are "willingness of the male baby" by the couple as well as from in law family is coming down. In the study area, couples waiting for a male child has come down to less than 20%.

In a study done in Dakshina Kannada district, Child preference was seen in 32.2% of the subjects, preference for male child was associated with lower education and low income.[13] In another study done in urban slums of Bengaluru district, it was found that desire to have a small family is at least as strong as that to have a son, and after three children, family size is a stronger motivation to stop child bearing that is the presence of a son.[14]

IUCD was the most utilized method followed by, OCP's, condom, injection and calendar method. IUCD has the 75% of acceptance rate. According to NFHS 5, use of family planning methods (any method) among married women age 15-49 years in Mandya district has increased to 80.0% from 59.4% as observed in NFHS 4 survey. Highest being for female sterilization (70.2%) followed by IUCD/PPIUCD and Condom (3.6% each), OCPs (0.4%) and Injectable (0.1%).[5]

In this study even though the IUCD acceptance rate is high, mothers are not very much convinced by it because of the myths or fear of side effects like malignancy, pain, excessive bleeding, growth of extra tissue, no family support, weight loss, listening to failure stories from the surroundings. As the female health worker say "majority of women are happy with the IUCD after few months of insertion. Initially they too had complained about excessive bleeding and weight loss". Health workers have convinced them by saying "IUCD will take at least 4 months to get adjusted". Various studies showed the most common reasons for non-acceptance being fear of side effects, no family support or no support from husband, lack of personal interest to use contraceptives, not aware of contraceptive methods, usage of other methods, desired for girl/boy child and had fear of malignancy being 9.7% to 65.2%, 17.7% to 59.0%, 7.4% to 23.2%, 17.9% to 25.3%, 11.6%, 31.3% and 38.0% respectively.[8,10,11,12]

Strengths: The majority of female health staff had 10 years of experience and had good knowledge towards various methods of contraceptives. Most of the mothers were educated and had a awareness regarding the available methods of contraception.

Limitations

The Limitations of the study is that it was confined to only one PHC area, which results in limited generalizability to the general population. Only ASHA workers and mothers who recently delivered were considered for the study, as family members play important role in

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decision making pertaining to acceptance of IUCD, this calls for inclusion of family members like Husband and in-laws in future studies to explore the barriers for IUCD acceptance among decision makers in the family.

Conclusion

The common myths which were discouraging the utilization of IUCD are malignancy, has negative impact on spouse health, menstrual irregularity, perforation into thoracic cavity, white discharge. Incidents of missing thread where IUCD had been removed under the guidance of ultrasound also contribute in non-acceptance of IUCD. Health education among the post natal mothers and their family members can improve the acceptance rate of IUCDs in rural areas. Larger study with more number of participants can bring further insight and magnitude of each of these factors leading to non-utilization of IUCDs among postnatal mothers.

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