

ASSESSING THE KNOWLEDGE AND ATTITUDE TOWARDS THE CONTRACEPTIVES AND FAMILY PLANNING SERVICES AMONG POSTNATAL MOTHERS AND THEIR FOLLOW UP

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ABSTRACT

Background: Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods. Increasing population is a global problem today and India with 142.86 crore population is in number 1 in population, Number 7 in size in world. Uncontrolled population growth has been recognized as the most important impediment to our national development, despite the fact that India was the first country in the world to adopt a National population control program in 1952. **Aim And Objectives:** The aim is to educate high-risk women about family planning, assess contraception knowledge among postnatal women, address myths, promote service utilization, and follow up on contraceptive adherence. It also focuses on promoting permanent family planning, improving birth spacing, and exploring alternatives to PPIUCD due to its disadvantages. **Methodology:** A prospective description study of 360 postnatal women delivered in Govt. Thiruvavur Medical College and Hospital excluding unmarried primiparous women. Data collected using self-made questionnaire and analyzed using SPSS software. **Results:** PPIUCD coverage among woman with one live child is 100 % of which 18.7% woman had complaints with its usage and 3 % discontinued within 1 year of its usage. 94 % of woman with 2 live children have done sterilisation and did not have much complaints as of woman opted for temporary mode of contraception. Among postabortal women who have completed their family opted mostly for sterilisation. 25 % Postabortal woman opted chhaya pills. 80 % of chhaya pills opted post abortal women either did not use the drug or had difficulty in compliance with the drug. **Discussion:** The study highlights high awareness of family planning services, with 100% of women willing to undergo sterilization after their second child. Awareness of contraceptive methods was higher than in previous studies, particularly regarding IUCDs and male sterilization. Effective counseling and support improved contraceptive use, especially for temporary methods, and enhanced positive attitudes towards family planning. The study suggests ongoing support and counseling to reduce method discontinuation and improve family planning outcomes. **Conclusion:** It is essential to strength the already existing system for increasing contraceptive and sterilisation coverage to fulfil the pledge of the 2030 agenda for

sustainable development that “No one will be left behind”.

KEYWORDS: contraceptives, postnatal mother, family planning services.

INTRODUCTION

Family planning is a lifestyle choice made voluntarily by couples and individuals, based on informed knowledge, attitudes, and responsible decision-making. Couples make a deliberate effort to manage the quantity and timing of their children using contraceptive methods. Family planning also includes aspects of maternal reproductive health & overall well being of the family. Good maternal reproductive health is achieved by ensuring proper birth spacing between pregnancies, prevention from sexually transmitted diseases (STD's), avoiding unwanted pregnancies and abortions. The Global population currently stands at 7.7 billion and is projected to reach 9 billion by 2045. This rapid population growth is a pressing global concern, with India, home to 1.43 billion people, being the most populous country and ranked 7th in land area. Despite being the first country to launch a national population control program in 1952, India continues to face the challenge of uncontrolled population growth, which is a major barrier to national development. Therefore, it is crucial to ensure that all pregnancies are planned and wanted. The use of contraceptives can prevent at least 25% of maternal deaths by reducing unintended pregnancies, unsafe abortions, and high-order births, while also offering protection against sexually transmitted infections (STIs) like HIV, chlamydia, and syphilis⁷. However, in many developing countries, barriers such as lack of knowledge about contraceptive methods, limited access to supplies, high costs, and poor accessibility hinder their use. Many women of reproductive age lack adequate knowledge of contraception and family planning methods, or have incorrect information. Even if they know the names of contraceptives, they often don't know where to obtain them or how to use them. Additionally, negative attitudes toward family planning and the spread of false or misleading information, especially in rural areas, further complicate the situation. High expulsion rates of PPIUCD and the increasing risks associated with the most commonly used intrauterine devices (IUCDs) also make temporary contraception challenging. This study aims to explore the knowledge and attitudes of postnatal woman regarding family planning, as well as their follow up with temporary contraceptive methods. This research is crucial in reducing high order births and their associated complications.

Common disadvantages of intrauterine contraceptive devices (IUCDs) include heavy menstrual bleeding, prolonged cycles, and painful periods. These issues typically improve after 3 to 6 months, although some women may experience cramps and intermittent bleeding or brown discharge in the initial months, with symptoms often peaking in the first 1 to 2 weeks. After insertion, it is important to avoid inserting anything into the vagina for 48 hours—such as tampons, baths, swimming, hot tubs, or sexual intercourse. There is a 1% chance of spontaneous expulsion of the IUCD, with the risk being highest in the first few weeks. Other potential adverse effects include the IUCD embedding in the myometrium, breakage of the device, fistula formation, and sepsis. Chronic issues like pain, discomfort, heavy menstrual bleeding, and continued pain often lead women to seek alternative contraceptive options. Follow up care for newly introduced contraceptives is important for addressing these concerns. As part of this study, newer contraceptives such as DMPA injection (ANTARA), CHHAYA pills, oral contraceptive pills (OCPs), and implantable devices, are being monitored and followed up in this study to assess effectiveness, side effects.

AIM AND OBJECTIVES

- To Educate the importance of family planning and to avoid unintended pregnancies mainly in high risk females (HIV, HBsAg positive, Heart disease, Higher order of

birth).

- To Assess the knowledge of contraception among postnatal women and to break the myths associated with it & and to increase family planning service utilisation by the postnatal mother.
- To Determine the reason in uncovered women and to suggest the alternative if possible.
- To Follow up the postnatal mother with temporary method of contraceptive to determine their adherence to it.
- To Determine the increasing disadvantages of most commonly used PPIUCD and to find a solution to it.

OBJECTIVES:

- To Promote permanent family planning method in multiparous women especially high risk group.
- To promote family planning services in all postnatal women to give adequate birth interval spacing and to improve maternal health & also reduce the neonatal complications.
- Enumerate the difficulties faced in temporary methods of contraceptive users.
- Suggest better alternative for PPIUCD the most commonly used method due to increasing disadvantages.

METHODOLOGY

STUDY GROUP: All Postnatal women in Post LSCS and PN ward, delivered in Government Thiruvarur Medical College and Hospital

INCLUSION CRITERIA: All Post natal women in Post LSCS and PN ward, delivered in Government Thiruvarur Medical College and Hospital Post Abortal women.

EXCLUSION CRITERIA: Unmarried primiparous women

TYPE OF STUDY: Prospective descriptive study

PLACE OF STUDY: GOVERNMENT THIRUVARUR MEDICAL COLLEGE HOSPITAL, THIRUVARUR

SAMPLE SIZE: 360 Post natal women A self designed questionnaire after reviewing different relevant literature is made, all postnatal women delivered at Government Thiruvarur Medical College and Hospital is approached for their willingness to participate in the study after explaining all the benefits and risks involved in the study. Data is collected from those who are giving consent to participate in the study. Data collected from participants will be entered in excel spread sheets and analysed using SPSS software.

Further the follow up of postnatal women opting the family planning services both temporary and permanent method is followed for a period of 1 year, by getting patient contact numbers and having regular contact with them also through their VHN's (village health nurses), family planning counsellor, family planning and family welfare department of Government Thiruvarur medical college and hospital. Their follow up data which includes their compliance with the mode of contraception opted eg. Complaints, difficulties, advantages regarding the mode of contraceptive adopted. The input data regarding the follow up is maintained month wise in a excel spread sheet and finally analysed using SPSS software.

SAMPLE SIZE CALCULATION: According to Bradley, S.E.K.,et al.,¹⁵

Estimating single proportion – finite population (absolute precision) Assumptions

- The outcome variable measure should be binary (success/failure, alive/dead)
- P is the probability of success in each trial ; (1-p) is the probability of failure
- The sampling distribution of the sample proportion (p) is approximated to normal

$$N = Z^2 \cdot p \cdot (1 - p) / d^2$$

The sample size adjusted for finite population is given by,

$$N_{\text{Finite}} = F \cdot n$$

Where,

$$F = 1 / (1 + \frac{n}{N_{\text{population}}})$$

n/N_{population}

p: Expected proportion

d: Absolute precision

1 - α: Desired confidence interval

N: Population size

Expected proportion – 0.6

Precision (%) – 5

Desired confidence interval (1 – alpha)%

- 95 Population size – 10000

Required sample size – 356

Hence 360 sample size is taken for this study

RESULTS

This study was conducted in Govt. Thiruvavur Medical College & Hospital. 360 Post natal mother given consent were included in the study, they were followed up to a period of 1 year. The outcomes of the study were recorded and presented below Among women with one live child 80 women participated of which 92% (73) women were within 30 years of age and 8% (7) were above 30 years of age. Of which 97% (78) were Hindu by religion and 3% (2) were Christian Of these 80 women, 70% (56) women was homemaker by occupation, 15% (12) were of farmer, 12.5% (10) was doing clerk job and 2.5% (2) were daily wage worker. 5% (4) women had income Rs 5000 & and less, 33.7% (27) women had income Rs.10000 & less, 46% (37) women had income Rs 15000 & less, 15% (12) women had income above Rs 15000 and within Rs 20000. 85% (68) Women had education maximum up to 12th standard and 15 % (12) did their bachelor degree About 96.3% women have non consanguineous marriage and 3.7% have consanguineous marriage. 91% women have regular menstrual cycle and 9% have irregular cycles 100% (80) women are aware of birth spacing after 1st child birth and agree that sterilisation is essential after 2nd child birth 100% (80) woman are aware of IUCD contraceptive, only 1.2 % (1) were aware about implants. 50 % (40) of women are aware of the temporary contraceptives which includes IUCD, Antara, Chaaya pills, OCP'S. All women are aware of IUCD and after 1st child birth all women are preferring IUCD for other contraceptives.

100% (80) women with one live child have have opted for IUCD. PPIUCD coverage is 100%. All are followed up for a period of 1 year and the outcome is tabulated

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.051 ^a	13	.690
Likelihood Ratio	12.788	13	.464

N of Valid Cases	80		
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26 cells (92.9%) have expected count less than 5. The minimum expected count is 28.

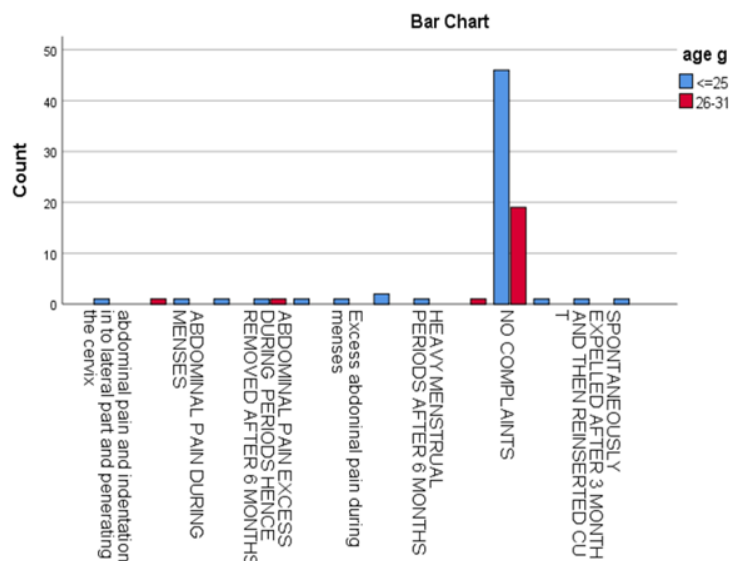


Figure 1

Of 100 % (80) woman using PPIUCD 18.7% (15) woman are facing side effects and disadvantages of the same and 3.7% (3) voluntarily removed PPIUCD within 1 year at 6 and 10 months of usage. 2.5% (2) had spontaneous expulsion at 3 and 6 months of usage of which 1.2% (1) went for interval IUCD insertion. Hence it is essential to develop other contraceptives for more convenience and comfortable usage for women.

200 women with two or more live child participated. 81.5% (163) Women were within 25 years old, 18.5% (37) were above 25 years of age

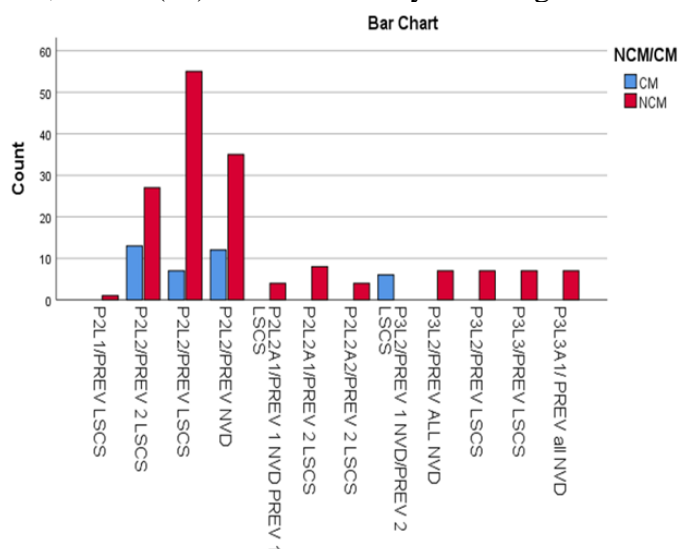
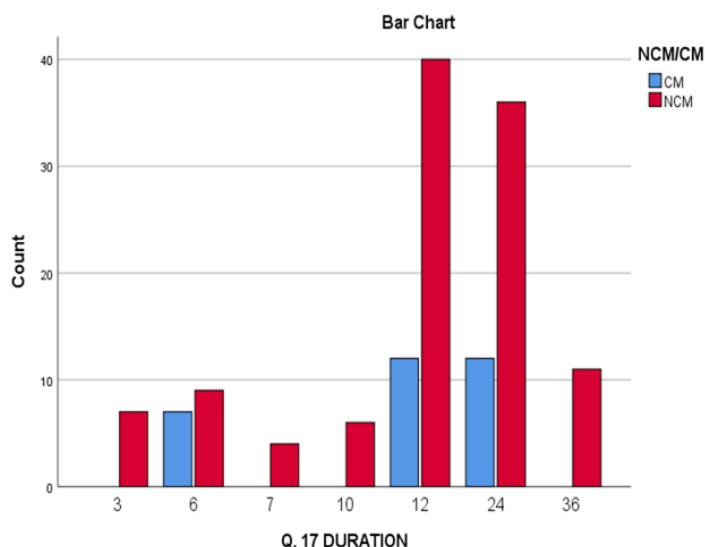


Figure 2

154 mothers 77% are aware of birth spacing and 46 mothers 23% are not aware of birth spacing interval. 72% of mothers used temporary mode of contraception after 1st child birth 28% did not use any mode of contraception. Among the 72 % women who used contraceptive 100% of them have used only PPIUCD.

The months of usage of PPIUCD after first child birth

**Figure 3**

On further questioning if used only for less than a year many women landed with removal of IUCD was due to abdominal pain, increased abdominal pain during menses, heavy menstrual bleeding, excessive bleeding per vaginum after insertion, and spontaneous expulsion of PPIUCD.

Of the 28 % who did not use any contraceptive the reason given by various women for not using were husband working in abroad, 1st child delivery in private sector, not aware, not interested to use contraceptives, and some as they were PCOD they were not willing to use any mode of contraceptives.

All women have stated that sterilisation is necessary after 2nd child birth and willing to do after second child birth among temporary contraceptives awareness all were aware of IUCD. 17.5% of women were aware of all the contraceptives

75.5% women are aware of male sterilisation and the remaining 24.5% women have stated that they were not aware of male sterilisation

94 % women have done sterilisation after second child birth. 6% women haven't done sterilisation even after two live child and who expressed that they were willing for sterilisation earlier, when asked for reasons revealed that

- First child had cerebral palsy
- Religious reasons
- Baby was in NICU, and couldn't get baby fitness for puerperal sterilisation
- Both the child of same sex
- Mother severely anaemic and couldn't be posted for puerperal sterilisation and hence PPIUCD inserted
- Severe Heart disease hence advised for interval sterilisation also for male sterilisation
- Pt TSH was elevated hence could not be posted for puerperal sterilisation
- Due to lack of instruments and expertise, in a woman with previous ectopic operated who had sigmoid rent repair done, colostomy done and enterocutaneous fistula repair done.

All the 200 women were followed up for a period of 1 year and the outcome is tabulated, of the 6 % who were not sterilised on follow up for 1 year 2 % underwent interval sterilisation.

Of these women who did sterilisation and discharged didn't have much complaints as of women who used temporary mode of contraception. The ASHA, VHN staffs also worked well

in bringing the patients for interval sterilisation and in spreading awareness of various contraceptives.

80 postabortal women participated, 72.5% (58) women were 25 years of age and younger, 27.5% (22) were above 25 years of age.

All women are aware that birth spacing is necessary even after abortion and 1st child birth. All women feel sterilisation is essential after second child birth

12.5% (10) women prefer Antara injection, 25% (20) prefer Chaaya pills and the rest 62.5% (50) women prefer IUCD after abortion as temporary contraceptive.

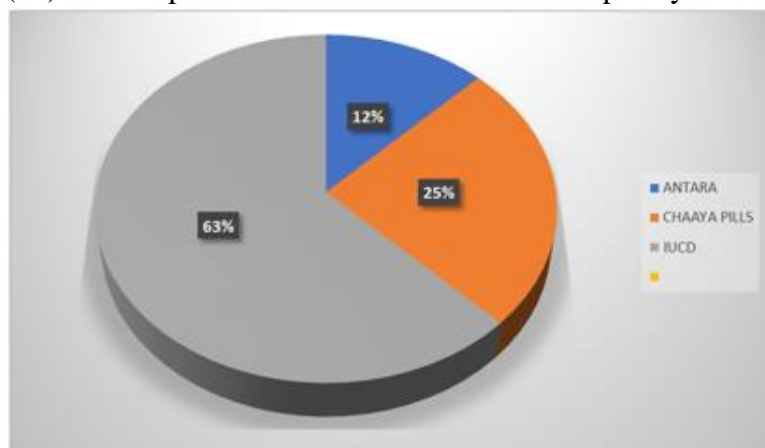


Figure 4

13.7% (11) women were aware of IUCD, Chhaya pills, Antara, OCP'S temporary contraceptive, only 1.2% (1) aware of implants, 100 % (80) aware of IUCD

Among postabortal woman who have completed their family underwent sterilisation. 43.7% (35) underwent sterilisation. 25 % (20) opted Chhaya pills, 21.2% (17) PAIUCD and 10% (8) opted Antara injection. 80 % of Chhaya pills opted postabortal women either did not use the drug or had difficulties in compliance with the drug. Only 20 % used Chhaya pills regularly for 1 year. 75 % of Antara using postabortal women complains of amenorrhoea, irregular periods. 23.5 % postabortal women using IUCD have complaints of which 11.7% have myometrial penetration of IUCD within one year and requires surgery to remove it.

Among the newer available Antara and Chaaya pills, the patient compliance plays a major role for Chaaya pills has many advantages among other temporary contraceptive but its daily usage seems to be the disadvantage, women using Antara are complaining of amenorrhoea even after a period of 3 month of usage

DISCUSSION

India has had a National Family Planning Program since 1952, aiming to expand coverage at the primary care level. However, the success of this program can only be enhanced if all eligible couples are both informed and have a positive attitude toward family planning services. The results of this study indicate that 100% of women, when interviewed antenatally, expressed willingness to undergo sterilization after the birth of their second child, provided the first child is healthy.

In terms of awareness, 75.5% of women were knowledgeable about male sterilization. Among women with one live child, 50% were aware of all contraceptive methods, with 100% being familiar with the IUCD. Additionally, all women were aware of birth spacing. Among those with two or more live children, 77% were aware of birth spacing, and 72% had used temporary contraception after the birth of their first child. All of these women expressed willingness to undergo sterilization after the birth of their second child. Furthermore 17.5% were aware of all contraceptive methods and 100% knew about the IUCD.

Even among postabortal women, 100% were aware of the importance of birth spacing after an abortion, and all expressed willingness for sterilization after the second child. However, only 13.75% of these women were aware of all contraceptive methods.

The awareness rate in our study was significantly higher compared to other studies conducted in Northern India. For instance, only 68% of women in a study from that region were aware of female sterilization. In contrast, our study found 100% awareness of the IUCD among women with at least one live child, which is notably higher than the 93.1% reported in a study conducted in Uttar Pradesh among married women of reproductive age.

Additionally, in our study, the most commonly known temporary contraceptive was the IUCD, whereas in Uttar Pradesh, oral contraceptive pills (OCPs) were the most commonly used, with a usage rate of 74.8%. Furthermore, the awareness of male sterilization was considerably higher in our study (75.5%) compared to just 25.3% in Uttar Pradesh.

The positive attitude towards family planning services in our study was reflected in the 100% PPIUCD coverage among women with one live child and 72% of women with two live children using temporary contraception for birth spacing. This was notably higher compared to studies indicating a more negative attitude towards family planning services, such as the 55.5% negative attitude in males and 51.5% in females reported in a study conducted in Meghalaya. In South India, awareness of family planning services was found to be higher than in northern states. For example, a study conducted in Kakinada, Andhra Pradesh, showed that 96.8% of women were aware of family planning services, with 53.8% using various contraceptive methods. In comparison, our study found that 94% of women with two live children had opted for sterilization, indicating a higher rate of adoption of family planning methods.

The effective counselling given by family planning counsellor in OG OPD to all women attending OPD and delivered in our college have brought such higher numbers and positive attitude towards family planning. Also family planning counselling is given to all postnatal woman in postnatal and post operative ward by doctors, staff nurse and family planning counsellor. Almost all women with one live child are given IUCD coverage. All women of reproductive age group getting discharged from a government hospital after maternity service is provided with one or other contraceptive coverage, which might not occur in all private institute.

Global access to sexual and reproductive health services is critical to fulfilling the 2030 Agenda for sustained development. This will require strong and sustained support for contraceptive services, with effective government policies and programs playing a central role in their implementation.

To improve the usage of temporary contraception among women with one or no live children, it is essential to provide thorough counselling and address their concerns. This will help prevent frequent switching of methods or discontinuation of contraceptive use. A study in Rwanda highlighted several strategies used by family planning providers to reduce discontinuation:

- Counselling new users about potential side effects and the possibility of switching methods.
 - Sending reminders for resupply appointments to ensure consistent use.
 - Supporting dissatisfied users by offering additional counselling and addressing their concerns.
 - Providing medication for side effects and discussing alternative methods if needed.
- On the other hand, users themselves employed the following strategies to sustain use:
- Recognizing that side effects may vary from person to person and being patient with their own experience.
 - Supporting peers in maintaining their contraceptive use.
 - Persisting with the method despite experiencing side effects, or being willing to switch to a different method when necessary.

These approaches underline the importance of both provider support and user resilience in reducing contraceptive discontinuation and improving long-term family planning outcomes.

CONCLUSION

This study reveals that among temporary contraception methods, the IUCD is the most commonly used, despite its rising disadvantages such as displacement, impingement, and the potential need for hysteroscopic removal. Given these challenges, it is crucial to raise awareness about newly introduced contraceptive options like ANTARA and CHHAYA PILLS, which are gaining popularity, particularly among postabortal women. Their usage is increasing and may offer more favourable alternatives to traditional methods.

The findings of this study also suggest that permanent sterilization, once families are complete, is far more effective than continued reliance on temporary contraception. Therefore, it is important for the government to extend its programs, such as Mission Parivar Vikas, to states like Tamil Nadu, in order to help control the population and address the unmet need for family planning services.

To improve contraceptive uptake and reduce discontinuation rates, several strategies are needed:

- Accelerating training programs for VHN (Village Health Nurses) and ASHA (Accredited Social Health Activists) workers in IUCD insertion to improve the quality and reach of family planning services.
- Increasing the frequency of family planning camps
- To provide convenient access to contraception in rural and underserved areas.
- Ensuring counselling for all women of reproductive age attending OB/GYN OPDs in government hospitals, provided by family planning counsellors and ANMs (Auxiliary Nurse Midwives). This will ensure that women are well-informed about available options and the benefits of family planning.
- Providing incentives to VHN and ASHA workers for effectively bringing women to family planning services, especially for contraceptive coverage and sterilization procedures.

By strengthening and expanding the existing healthcare infrastructure and focusing on training and incentivizing community health workers, the government can make significant strides in improving family planning uptake and reducing the unmet need for contraception, ultimately supporting long term population control efforts.

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