



## STUDY OF KNOWLEDGE ATTITUDE AND ACCEPTANCE OF PPIUCD IN ANTENATAL PATIENTS

Dr. Bharti  
Maheshwari

Dr. Anam Zuberi\*

\*Corresponding Author

### ABSTRACT

**Objectives:** To find out the knowledge, attitude and acceptance of postpartum intrauterine contraceptive devices (PPIUCD) among antenatal mothers.

**Methodology:** This is an observational study conducted in MMCH medical college Muzaffarnagar to assess knowledge, attitude and acceptance regarding PPIUCD by antenatal mothers with family members by pre counseling and post counseling questionnaire.

**Results:** A total of 120 antenatal mothers were studied from September 2020 to December 2020. Number of primi and multigravida were almost same in the study. Prior acceptance regarding PPIUCD was only in 15.0%. About 44.16% accepted for PPIUCD after counseling. Most common reason in 50.74% for non acceptance was fear of complications.

**Conclusion:** Knowledge on PPIUCD of our antenatal mothers is poor. Counseling of antenatal women and their families is helpful for high acceptance of PPIUCD. For these women, the only opportunity to receive information about contraceptives is during childbirth when they are in contact with medical personnel. Hence, it is suggested that family planning should be integrated with maternal and child-care services in order to effectively promote the use of contraceptive devices in these women who otherwise would not seek the use of such a device.

### KEYWORDS :

#### INTRODUCTION

In the current scenario population explosion is a most important problem in India. Recent study showed that almost 48.1 million pregnancies in India were unintended [1]. To control unwanted pregnancies postpartum IUCD insertion is an excellent method as it helps in spacing and avoiding unplanned pregnancies. In India 65% women in the first year after delivery have an unmet need for family planning [2]. Contraceptive counseling has become an integral part of antenatal and postpartum programs as pregnant and postpartum women are generally highly motivated toward controlling their fertility either in spacing out their children or in stopping their fertility altogether. The time during pregnancy and that immediately after delivery may be the only time for the physician to connect with women who are poorly motivated to obtain routine health care, best described as 'crisis-oriented' [3]. The postpartum period is potentially an ideal time to begin contraception as women are more strongly motivated to do so at this time, which also has the advantage of being convenient for both patients and health-care providers [4].

The intrauterine contraceptive device (IUCD) is considered one of the most reliable, inexpensive, nonhormonal and reversible contraceptive methods suitable for a lactating mother [5] because it has no negative effects on lactation and does not affect the quality of the breast milk [5,6]. Nowadays, postpartum IUCD (PPIUCD) has been established as an effective and reliable method of contraception as it offers numerous advantages: ease of insertion, minimal adverse impacts on breast-feeding, cost-effectiveness, relief of overcrowded outpatient facilities and protection against unwanted pregnancy and consequent abortion [7]. In addition, insertion complaints caused by lochial blood and cramping are masked [8]. PPIUCD is a long term reversible safe, feasible and cost effective method of contraception which avoids unintended pregnancies [9]. Spacing of pregnancies reduces abortion rate, preterm births, low birth weight babies, intrauterine deaths, and postpartum hemorrhage, which in turn decrease in the maternal morbidity and mortality and infant mortality rate [10].

The Ministry of health and family welfare, Government of India launched provision of PPIUCD for women in 2010, and

several training programmers and camps were conducted for its awareness [11]. But still PPIUCD insertion is not accepted widely as a method of temporary contraception. This study was undertaken to evaluate factors for knowledge, attitude and acceptance of post partum IUCD in antenatal mothers at Muzaffarnagar medical college and hospital.

#### METHODOLOGY

This was an observational study conducted in Muzaffarnagar medical college & hospital from September 2020 to December 2020. All antenatal COVID negative mothers visiting obs & gynae opd in MMCH Muzaffarnagar, who were in third trimester were included in the study. Pre counseling and post counseling questionnaire was given to assess knowledge, attitude and acceptance of PPIUCD. Questionnaire was given to antenatal mothers along with their family (husband, mother in law). Questionnaire was printed in English / local language. Study was analyzed by appropriate statistical analysis.

#### RESULTS

A total of 120 antenatal mothers attending to the outpatient department and in the third trimester during September 2020 to December 2020 were included in the study.

Patients were asked about their educational status and most of the antenatal mothers were literate. About 10% of total antenatal mothers were below 7th standard, 29.6% of antenatal mothers have completed their studies till 10th standard, 49.6% of antenatal mothers were either graduate or above 12th standard and only 11.6% were illiterate. Thus majority of antenatal mothers were literate who can read and write properly and could answer the questionnaire properly. The rest were explained about the questionnaire in their local language and their opinion was taken.

**Table 1: Distribution of educational status of antenatal mothers.**

EDUCATION	ANTENATAL MOTHERS (120)
1-7 class	12 (10%)
8-10 class	35 (29.16%)
> 10 class	59 (49.16%)
ILLITERATE	14 (11.66%)

Patients were also distributed among 4 different age groups in

which only 3 out of 120 were above 40 years of age, 20 females were below 20 years of age ( mainly primigravida), majority (68 out of 120) of antenatal mothers were in the age group of 20-30 years (constituting equally by primigravida & multigravida) and 29 out of 120 were in age group 31-40 years who were mainly multigravida.

**Table 2: distribution of age of antenatal mothers.**

AGE	ANTENATAL MOTHERS (120)
< 20 years	20 (16.66%)
20-30 years	68 (56.66%)
31-40 years	29 (24.16%)
>40 years	03 (2.5 %)

Antenatal mothers were asked about their knowledge regarding IUCD and its insertion immediately following delivery and about interval iucd. Most of the antenatal mothers were aware about iucd constituting about 64.16% of the total, but there was no thorough knowledge regarding its advantages, timing of insertion, duration etc. Only about 15% of total antenatal mothers were ready to accept PPIUCD. Almost 35.84% of antenatal mothers were unaware of the iucd as method for postpartum insertion. Most of them were among illiterate group or who are below 10th standard. Also the females who were unaware of PPIUCD were mostly primigravida as compared to multigravida.

**Table 3: Knowledge regarding PPIUCD.**

KNOWLEDGE	ANTENATAL MOTHERS (120)
Prior knowledge regarding ppiucd	77 (64.16%)
Ready to accept ppiucd	18 (15.0%)
No prior knowledge regarding ppiucd	43 (35.84%)

After inquiring about the knowledge regarding ppiucd, antenatal mothers were convinced about the use of PPIUCD and the benefits and side effects were explained. Following which only 53 antenatal mothers (44.16%) were ready to accept PPIUCD as their method for contraception rest 67 (55.83%) were still not ready to use PPIUCD.

**Table 4 : Acceptance of PPIUCD after counseling.**

ACCEPTANCE	ANTENATAL MOTHERS (120)
Accepted PPIUCD	53 (44.16%)
Not accepted PPIUCD	67 (55.83%)

The antenatal mothers were inquired about the reason for not accepting PPIUCD. 9 antenatal mothers told that their husband were not ready for the same, 22 out of 67 were having different myths regarding use of PPIUCD such as - it will migrate to other parts of the body including brain, or it will cause permanent infertility, it will lead to cancer etc. Majority (34 out of 67) of antenatal mothers were having fear about complications such as bleeding, perforation, pain etc. Rest of the antenatal mothers were not accepting the PPIUCD because of some social or religious factors.

**Table 5 : Reasons for non acceptance of PPIUCD**

Reason for non acceptance	ANTENATAL MOTHERS (67) (Who didn't accept PPIUCD)
Husband not willing	9 (13.43%)
Myths	22 (32.83%)
Fear of complications	34 (50.74%)
Others	2 (2.98%)

Antenatal mothers were inquired about the method of contraception they would prefer in comparison to PPIUCD and majority of them (44.77%) preferred the barrier method (condom) as their contraceptive of choice. About 35.82% antenatal mothers preferred to use DMPA which will be repeated after every 3 months. Oral contraceptives were the method of choice for 11.94% antenatal mothers and 7.46% of antenatal mothers preferred to have permanent sterilization in the form of tubal ligation. These mothers were mostly 3rd or

4th gravida.

**Table 6 : Acceptance of other methods of contraception**

Methods of contraception	ANTENATAL MOTHERS (67) (Who didn't accept PPIUCD)
Barrier method ( condom)	30 (44.77%)
Injectable contraceptives (DMPA)	24 (35.82%)
oral contraceptives	8 (11.94%)
Permanent Method ( tubal ligation)	05 (7.46%)

**DISCUSSION**

In our study 120 antenatal mothers with their families were involved regarding pre and post counseling session of PPIUCD insertion. All of them were young and eligible couples, only 64.16% of them were having prior knowledge about PPIUCD. Among these antenatal mothers only 15% were ready to accept PPIUCD as their contraceptive method of choice. After effective counseling 44.16% accepted for PPIUCD insertion immediately after delivery. This significant rise in acceptance rate is observed with effective counseling to antenatal mothers and their families. Acceptance is almost same in primi and multigravida respectively in our study. A significant rise of 44.16% from 15.0% in acceptance rate of PPIUCD was observed after effective counseling with antenatal mothers and their families in our study. Even after effective counseling by doctor and counselor, most common reason for non acceptance of PPIUCD is because of fear of complications from PPIUCD. This shows that a lot of publicity from Television, radio, news paper, ASHA (accredited social health activist) workers, and educational campaign is needed to accept this method in large. On the other hand our study showed that majority of antenatal mothers preferred condom as post partum contraceptive method of choice, others preferred injectable (DMPA) as method of contraception & multigravida were inclined towards permanent sterilization.

**CONCLUSION**

Knowledge on PPIUCD of our antenatal mothers is poor. Counseling of antenatal women and their families is helpful for high acceptance of PPIUCD. Even after effective counseling, the common reason for non acceptance of PPIUCD is because of fear of complications. Repeated counseling and a lot of publicity from media like Television, radio, newspaper, ASHA workers, and educational campaign regarding PPIUCD is needed to remove the fear of PPIUCD and for its acceptance.

**REFERENCES**

- Singh S, Shekar C, Acharya R, Moore AM, Stillman M, Pradhan M, et al. Incidence of abortion and unintended pregnancy in India - 2015. *Lancet Glob Health*. 2018; 6: e111-20.
- Ministry of Health and Family Welfare. Postpartum IUCD reference manual. New Delhi: Family planning division ministry of health and family welfare; 2010.
- Darnel L, Jones MD, David R, Helbert MD: Postpartum contraception. *Clin Med* 1975; 82: 20-22.
- Xu JX, Reusche C, Burdan A: Immediate postplacental insertion of intrauterine device: A review of Chinese and world experiences. *Adv Contracept* 1994; 10: 71-82.
- Gomez-Rogers C, Ibarra-Polo AA, Faundes A, Guiloff E: Effect of IUCD and another contraceptive methods on lactation. *Proc 8th Int Conf Int Planned Parenthood Fed*, Santiago, April 1967, pp 328-334.
- Chi IC, Farr G: Postpartum IUCD contraception: A review of international experience. *Adv Contracept* 1989; 5: 127-146.
- Tatum HJ, Beltran RS, Ramos R, Van Kets H, Sivin I, Schmidt FH: Immediate postplacental insertion of GYNE-T 380 and GYNE-T 380 postpartum intrauterine contraceptive devices: Randomized study. *Am J Obstet Gynecol* 1996; 175: 1231-1235.
- Cordero CF, Grinvs S, Henr JT, Herper PB, Gulhane TG, Tweedy S, Kurica A: AVSC Postpartum IUCD Curriculum Trainer's Guide. New York, AVSC International, 1997, pp 211.
- Bedi PK, Guliani MS, Bala S. A prospective study of assess the safety and explosion rate of cuT380A in immediate post partum period during cesarean section. *Int J Reprod Contracept Obstet Gynecol*. 2016 Sept; 5(9): 319295
- Majhi AK. Importance of PPIUCD in the perspective of present Indian population scenario. *Indian Journal of perinatology and reproductive Biology*. 2012; 2(2): 5-7.
- Gadre SS, Ahirwar R. Level of acceptance of IUCD insertion in Indian women - a cross sectional mixed research from central India. *Int J Reprod Contracept Obstet Gynecol*. 2015; 4(4): 1079-85