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ORIGINAL ARTICLE

# **Postpartum Intrauterine Device Refusal in Delhi: Reasons Analyzed**

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#### About the Author

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### Abstract

*Aim* To assess knowledge and attitude of women toward postpartum intrauterine contraceptive device (PPIUCD) and analyze reasons of refusal.

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*Materials and Methods* 550 women were enrolled in the study. Sociodemographic characteristics, knowledge, and attitude toward contraception especially PPIUCD were noted, and the reasons for refusal of PPIUCD were analyzed.

*Statistical Analysis* SPSS version 17.0 is used. Continuous variables were reported using mean, and categorical variables were reported using percentages.

Observations PPIUCD insertion rate was 9.1 %. 78.6 % of women in the study belonged to the age group of 20–30 years, with 79.2 % having education of Class X and above. The overall contraceptive knowledge was 94.4 %.

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Although 48.4 % women were aware of Cu T as a method of contraception, only 21.9 % of 48.4 %, however, were aware of PPIUCD. None of the women had ever used it before. The commonest prevalent myths regarding Cu T were fear of malignancy (38 %) and fear of menorrhagia (36.4 %). The husband and mother-in-law played important roles in decision regarding PPIUCD insertion and refused the same in 59 % of cases.

*Conclusion* The study shows that awareness of PPIUCD is low in this region despite good education, leading to high refusal rates. The commonest reason is lack of appropriate counseling, and not only the woman but the husband and mother-in-law also must be provided the knowledge of it as they play important roles in our society.

**Keywords** Contraception · Intrauterine contraceptive device · Family planning · Postpartum

## Introduction

Family planning has been globally recognized as an important health care intervention throughout a woman's reproductive life. The concept of postpartum family planning specifically focuses on prevention of unintended pregnancies and for spacing of pregnancies. It is well documented that one third of maternal mortality and the 10 % of the child mortality can be decreased if the spacing between the two pregnancies is more than 2 years. Despite this, a majority of postpartum women do not receive the benefit of family planning services [1]. According to the National Family Health Survey 2005–2006, the unmet need for family planning in the first year of postpartum period is around 65 % in India [2]. Although 40 % of these women intend to use some form of contraception, only 26 % are actually using it [3].

According to Cochrane review 2010, postpartum intrauterine contraceptive device (PPIUCD) has been recognized as an ideal contraceptive method in postpartum period in a majority of women due to its simplicity of insertion, certainty of nonpregnant state, availability, long duration of action, reversibility, virtually no systemic side effects, especially no effect on breast feeding, high efficacy, and continuation rate [4, 5]. Despite all these advantages, the current users of the IUCDs are only 2 % in India [2].

To strengthen the postpartum family planning program, Government of India had introduced the PPIUCD services with national training center in Delhi. Despite all these efforts and advantages, rates of PPIUCD insertion are still dismal. There are many studies regarding the experience with PPIUCD, but there is hardly any study where the reasons for nonacceptance have been extrapolated. This study was done to delve into the reasons for nonacceptance of PPIUCD.

#### Aim of the Study

- To assess the knowledge, and attitude toward contraception especially PPIUCD in women delivering at Hamdard Institute of Medical Sciences and Research (HIMSR), Delhi.
- To analyze the reasons of refusal of PPIUCD.

#### **Materials and Methods**

This study is a cross-sectional study carried out in the department of obstetrics and gynecology, HIMSR, Delhi over a period of 1 year from Jan 2013 to Dec 2013. The institute caters to the urban and the semiurban population of Delhi. The study was approved by the institutional ethical committee. The PPIUCD insertion has not been used in the obstetrics department before the study.

#### **Inclusion Criteria**

All women delivering at our institute, vaginally or by cesarean section and willing to participate in the study were included in the study.

### **Exclusion Criteria for Insertion of PPIUCD**

- 1. Hb < 10 gm/dl
- 2. Fever during labor and delivery
- 3. Postpartum hemorrhage
- 4. Manual removal of placenta
- 5. Prelabor rupture of membranes >18 h
- 6. Obstructed labor
- 7. Women with fibroids or uterine malformations
- 8. Women with allergy to copper

A total of 550 women were enrolled in the study. A pretested semistructured validated questionnaire containing both Likert scale and open-ended questions was filled, to assess knowledge and attitude toward contraception including postpartum contraception. Demographic characteristics like age, parity, religion, education, and socioeconomic status were recorded.

Counseling was done regarding postpartum contraception using a standardized counseling approach on a one-toone basis, and the women were explained about different methods of postpartum contraception.

At the time of delivery, all women who accepted PPIUCD were given postplacental insertion. The reasons of refusal for women who refused PPIUCD were recorded. Data entry was done using Statistical Package for the Social Sciences (SPSS) version 17.0 for statistical analysis. Continuous variables were reported using mean (standard deviation), and categorical variables were reported using percentages.

## Observations

A total of 550 women were recruited for the study, out of which 500 refused PPIUCD and 50 accepted giving the acceptance rate of 9.1 %. Data of 500 women who refused PPIUCD insertion were analyzed to know the reasons of refusal. Table 1 describes the sociodemographic profile of the study population. The majority (78.6 %) of women in the study belonged to the age group of 20–30 years, with 79.2 % having education of Class X and above. Most (70.9 %) of the women were from urban sector and belonged to upper or upper middle class (73 %) according to Modified Kuppuswamy scale. The duration of marriage was less than 4 years in 60.4 % cases, and around 78 % women had a parity of one or two. The majority of women were nonworking (60.6 %), and the incidence of nuclear families (57.8 %) was higher than joint families (42.2 %).

Table 2 shows the knowledge of contraception in the study population. The overall contraceptive knowledge of women was 94.4 %, the commonest source being relatives and friends, followed by doctors and health care workers. Male condom was known by most of the women (89.8 %), with 68.2 % having used it. 62.4 % women considered male condom as the best method of contraception.

Table 3 describes the specific opinion regarding IUCD. 48.4 % women were aware of Cu T as a method of contraception. Of these, only 21.9 % were aware of PPIUCD. None of the women had ever used it before.

Table 4 gives reasons for refusal of PPIUCD. In 41 % cases, it was refused by the patient, and in 59 % cases by other family members. The husband refusal was in 40 % cases, and mother-in-law refused in 19 % cases. The commonest myths prevalent regarding Cu T were fear of malignancy (38 %) and fear of menorrhagia (36.4 %).

## Discussion

Contraceptive needs of postpartum women are unique. Postpartum family planning services play an important role in meeting the unmet need of family planning. For breast feeding women, lactational amenorrhea method and Cubearing IUCD are best suited in the immediate postpartum period. Cu T 380A has been found to have a contraceptive protection similar to that achieved with tubal sterilization

#### Table 1 Sociodemographic characteristics

Sociodemographic characteristic	N = 500	%	
Age (years)			
Less than 20	11	2.2	
20–24	198	39.6	
25–29	195	39	
30–34	67	13.4	
More than 34	29	5.8	
Literacy status			
Illiterate	37	7.4	
Basic schooling	67	13.4	
High school	187	37.4	
Senior secondary	92	18.4	
Graduate	78	15.6	
Postgraduate	39	7.8	
Occupation			
Nonworking	303	60.6	
Working	197	39.4	
Address			
Rural	145.5	29.1	
Urban	354.5	70.9	
Religion			
Hindu	356	71.2	
Muslim	132	26.4	
Sikh	11	2.2	
Christian	01	0.2	
Type of family			
Nuclear	289	57.8	
Joint	211	42.2	
Socioeconomic class (modified Kuppu	iswamy classificatio	n)	
Upper	55	11	
Upper middle	185	37	
Middle	180	36	
Lower middle	74	14.8	
Lower	06	1.2	
Duration of marriage			
<2 years	229	45.8	
2–4 years	73	14.6	
4–6 years	70	14	
6–8 years	55	11	
8–10 years	40	08	
>10 years	33	6.6	
Average no. of children per couple			
Male	1.15		
Female	1.32		
Parity			
Para 1	220	44	
Para 2	170	34	
Para 3	80	16	
Para 4	20	04	
Parity more than 4	10	02	

Question	Answer	Ν	%
Do you have any	Yes	472	94.4
knowledge of contraception	No	28	5.6
Which type of contraception do you know	Natural	353	70.6
	Male condom	449	89.8
	Oral contraceptive pills	303	60.6
	IUCD	242	48.4
	Injectable	110	22
	Ligation	187	37.4
Which method have you	Natural	281	56.2
used	Male condom	341	68.2
	Oral contraceptive pills	53	10.6
	IUCD	79	15.8
	Injectable	6	1.2
Which is the best method according to you	Natural	261	52.2
	Male condom	312	62.4
	OCPs	36	7.2
	IUCD	42	8.4
	Injectable	24	4.8
	Ligation	22	4.4
From where did you get knowledge regarding contraception	Relative	284	56.8
	Friend	315	63
	TV	195	39
	Newspaper	195	39
	Hospital	229	45.8
	Only hosp	216	43.2

 Table 2
 Knowledge of contraception

Table 3 Knowledge of IUCD

Question	Ans	Ν	%
Are you aware of Cu T	Yes	242	48.4
	No	258	51.6
Have you ever used Cu T as a form of contraception?	Yes	79	15.8
	No	421	84.2
Are you aware of PPIUCD?	Yes	53	10.6
	No	447	89.4
Have you ever used PPIUCD?	Yes	0	0
	No	500	100

[6, 7]. With a life span of 10 years, Cu T 380A is especially suited for multiparous women who have two or more children and do not want sterilization. This is the reason that, in recent years, we have witnessed a resurgence of interest in PPIUCDs. They remain the only postpartum family planning method for those wanting a highly effective, reversible, and long-acting family planning method

#### Table 4 Refusal for PPIUCD-reasons

Reason of refusal	Ν	%
Patient not willing	205	41
Others not willing	295	59
Husband not willing	200	40
Mother-in-law not willing	95	19
Religious reasons	42	8.4
Ligation done	18	3.6
Want some other method		
Condom	10	2
OCPs	8	1.6
Ligation later	24	4.8
Fears associated with IUCD		
Menorrhagia	182	36.4
Infertility	18	3.6
Pain	03	0.6
Malignancy	190	38

that can be initiated in the immediate postpartum period in lactating women.

A demographic and health survey (DHS) conducted in 52 developing countries revealed that there was one to two times (1.1–2.3) higher risk of infant mortality in second baby when spacing between children was less than 24 months compared to 36–47 months [8]. In our study, majority of women were young (20–30 years), with half of them having a parity of two or three. These were potential candidates who would have been benefitted by PPIUCD insertion in view of complete families.

Contraceptive knowledge in Indian population has been found to have a great variation, ranging from 45 to 97 % [9]. The overall knowledge of women in our survey was on the higher side of the range probably due to predominance of urban and semiurban population and having a good education.

At our hospital, a PPIUCD insertion rate of 9.1 % was achieved in a period of 1 year (50/550). The PPIUCD insertion rate in Delhi is between 5 and 10 % (unpublished data). Although there are no published data on PPIUCD acceptance rate or current users in India, the very low PPIUCD insertion rate, however, can be evidenced by the fact that a recent study from India regarding experience with PPIUCD had a sample size of only 2733 from 18 centers in eight large states over 1-year time [10]. In a study from Egypt, the acceptance rate of PPIUCD was 28.9 %, and the rate was higher in women with secondary education compared to those with no formal education [11]. In our study, although majority of women had at least a primary level of education, still the acceptance rate was low which indicates there are other reasons which are playing roles in the PPIUCD acceptance.

The reasons for refusal of PPIUCD also included the prevalence of myths regarding the role of Cu T in causing cancer of female genital tract (38 %) and fear of menorrhagia (36.4 %). These myths were also prevalent 20 years back in India [12], which depicts that the counseling methods should be changed with the active involvement of each level of health care provider to improve the percentage of current user IUCD.

In our study, women refused PPIUCD in 41 % cases, and husband and mother-in-law did so in 59 % cases. This underlines the role of other family members in taking decisions on contraceptive choices in the Indian context. Studies have found the attitude of husband as being an important predictor for contraception usage especially in rural areas. As the dominant member of the family, he plays a pivotal role in approving the family size and contraception practices [13] Therefore, counseling of husband along with woman will achieve goal better. We found the influence of mother-in-law (19 %) to be important after husband (40 %). Therefore, we emphasize on counseling of all decision makers in the family besides the woman in question.

As lack of appropriate counseling remains the main reason behind high rates of PPIUCD refusal, the best time of counseling is in the antenatal period when the woman is most receptive to advice of her antenatal care provider. Therefore, doctors need to be reminded that just as other routine antenatal advices on nutrition, exercise, and iron and calcium supplements, contraceptive advice with emphasis on PPIUCD must also be given. To supplement this, specialized counseling in the OPD complex can be given by trained counselors. This will ensure that after a word of advice from the care provider, the women are given ample time to discuss the options with a trained personnel.

For a large section of women in developing countries, probably the only opportunity to receive information about contraception is at the time of delivery when they come in contact with medical personnel and when the motivational levels and receptiveness to family planning methods is high [14]. Therefore, it is suggested that a comprehensive approach be adopted wherein family planning services are integrated with maternal and child health care services. This enables service provider to administer a longterm, reversible family planning method to these women.

## Conclusion

This study highlights the importance of counseling these women, dissemination of correct information, and busting myths associated with Cu T. The commonest reason behind PPIUCD refusal is lack of awareness and appropriate counseling. A proper counseling is essential regardless of parity. As a woman is not the sole deciding force, counseling of the couple should be done. At times, keeping in mind the prevalent norms of society, other family members especially husband and mother-in-law should also be involved in counseling. There is a pressing need to discuss and dispel the myths surrounding IUCD.

**Compliance with Ethical Requirements and Conflict of Interests** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all the individual participants included in the study. Aruna Nigam, Ayesha Ahmad, Anshu Sharma, Poonam Saith, and Swaraj Batra declare that they have no conflicts of interest.

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