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**E-ISSN**: 2958-3683 | **P-ISSN**: 2958-3675 **Available on**: https://ijmpr.in/

ORGINAL ARTICLE OPEN ACCESS

# A Clinical Study of Acceptability & Safety of PPIUCD and Interval IUCD In RMC, Aimer (Raisthan)

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Received: 07-07-2025 Accepted: 16-08-2025 Available Online: 25-08-2025



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# ABSTRACT

**Background** -A clinical prospective study in terms of acceptability, safety and complications of PPIUCD and Interval IUCD.

IUCD is most commonly used long acting reversible method of contraceptive.

 $Method-Total\,1500$  women were counselled in antenatal, early labour and post natal period . women who accepted PPIUCD , were insertd PPIUCD after excluding chorioamnionitis ,PROM >18 hrs , PPH , puerperal sepsis .Total 150 women counselled for Interval IUCD who came to family planning clinic or routine OPD out of which 30 women accepted interval IUCD . All women followed upto 6 months to see safety and complications .

**Results** – Acceptability was slightly higher for PPIUCD ( 26.60%) as compared with Interval IUCD (20%). Safety of IUCD was almost similar in both groups with minor side effects ( 52% v/s 73.30%).

Conclusion \_ IUCD is a safe , feasible and reversible method of contraception.

Key words - PPIUCD ,Interval IUCD ,Acceptibility , Safety

# INTRODUCTION

India is the most populated country in world with 1.45 billion people. Family planning with adequate spacing between the pregnancies can prevent about 32% of maternal death & 10 % child mortality. Pregnancies with less than recommended spacing can lead to obstetric complication like anaemia, spontaneous abortion, preterm labour, post partum haemorrhage & maternal mortality also. Fetal complication like SGA & fetal deaths are more till 2 years after delivery, because a women will not be ready physically to conceive & delivery. Hence practice of contraception is essential for women health. There is different types of contraception, but not all types appropriate for all situations. IUCDs are the top tier of contraceptives as they are safe, long acting, cost effective with no major side effects.

#### **AIMS & OBJECTIVES**

A clinical study of PPIUCD & Interval IUCD in terms of acceptability, safety & complications.

### **MATERIAL & METHODS**

This was a hospital based prospective study conducted in patients who delivered in RMC Ajmer or who came to family planning clinic or routine OPD & searching for long acting reversible method of contraception.

Study group: 1500 women in PPIUCD group & 150 in Interval IUCD group.

**Inclusion criteria** - All women who delivered at RMC Ajmer or who came for long acting reversible method of contraception .

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**Exclusion criteria**; Women who did not provide informed consent, H/O APH, PROM > 18 hrs, PPH, coagulation disorder, allergy to copper, genital tract infection or active STI, Chorioamnionitis, fever during labour and delivery, anomalous uterus, known uterine fibroid, HIV positive mothers taking ART.

All women who accepted this method of contraception , IUCDs were placed with proper technique under aseptic conditions . These cases are are followed up at  $15^{th}$  day ,  $6^{th}$  week  $6^{th}$  month .

#### RESULTS

Total acceptability rate of PPIUCD was 26.60% & Interval IUCD was 20 % in our study. Majority of cases who accepted IUCD belonges to 18-30 years for both groups.(Table 1 & 2).

Table No- 1 Distribution of patients according to Parameters.

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Parameter	PPIUCD	Interval IUCD		
	Group	Group		
Awareness of IUCD	58%	53.33%		
Acceptability	26.60%	20%		
Minor side effects	52%	73.30%		

This study showed that acceptability of IUCD was slightly higher in PPIUCD Group. Awareness was also higher in PPIUCD group (58%) as compared to interval IUCD (53.33%). Minor side effects (heavy menstrual bleeding, white discharge, pain etc.) was more in interval IUCD group (52% v/s 73.30%).

Table No- 2 Distribution of patients according to Age.

Age Distribution (in	PPIUCD Group		Interval IUCD Group		
years)	No. of Patients	Percentage	No. of Patients	Percentage	
18-30	337	84.25	16	53.33	
31-40	57	14.25	12	40.00	
>40	6	1.5	2	6.67	
Total	400	100	30	100.00	
Mean±SD	26.007±5.02		30.03±5.37		
P-Value	< 0.0001				

The maximum age of users of IUCD was 18-30 years in both groups. The age distribution showed that in the 18-30 years category, PPIUCD Group had 337 patients (84.25%) while Interval IUCD Group had 16 patients (53.33%). In the 31-40 years group, there were 57 patients (14.25%) in PPIUCD Group and 12 patients (40.00%) in Interval IUCD Group. Patients aged over 40 years accounted for 6 (1.5%) in PPIUCD Group and 2 (6.67%) in Interval IUCD Group. The total number of patients was 400 in PPIUCD Group and 30 in Interval IUCD Group. The mean age in PPIUCD Group was  $26.007 \pm 5.02$  years, whereas in Interval IUCD Group it was  $30.03 \pm 5.37$  years. This difference in mean age between the two groups was statistically significant, with a p-value of <0.0001.

Table No- 3 Distribution of patients according to Parity -

Parity	PPIUCD Group		Interval IUCD Group		P-Value
	No. of Patients	Percentage	No. of Patients	Percenta ge	
Primipara	185	46.25	4	13.33	0.0004
Multipara	215	53.75	26	86.67	
Total	400	100	30	100.00	

Most of women who accepted IUCD were multipara (53.75 % v/s 86.67 %) in both groups .( Table 3).

Table No- 4 Distribution of patients according to cause of Acceptance.

Cause of Acceptance	PPIUCD Group		Interval IUCD Group		P-
	No. of	Percentage	No. of	Percenta ge	Value
	Patients		Patients		
Fewer Clinical	16	4	4	13.33	0.02
Visits					
Long term	108	27	12	40.00	
Reversible	256	64	12	40.00	
Safe	20	5	2	6.67	
Total	400	100	30	100.00	

Regarding the cause of acceptability of IUCD most common cause in PPIUCD was reversibility (64%) and for Interval IUCD were long term use and reversibility (40% each (Table 4)

Table 5 -Distribution of patients according to complications -

Complication	PPIUCD Group		Interval IUCD Group		P-Value
	No. of Patients	Percentage	No. of Patients	Percentage	
Pregnancy	1	0.25	0	0.00	0.78
Expulsion	14	3.5	3	10.00	0.07
Missing of thread	15	3.75	6	20.00	0.0001
НМВ	35	8.75	5	16.67	0.15
Abdominal cramps	91	22.75	8	26.67	0.62
White Discharge	52	13	0	0.00	0.03
No Complications	53	13.25	0	0.00	0.03

Regarding complications, pregnancy occurred in 1 patient (0.25%) in PPIUCD Group and none in Interval IUCD Group (p=0.78). Expulsion was reported in 14 patients (3.5%) in PPIUCD Group and 3 patients (10%) in Interval IUCD Group (p=0.07). Missing strings were significantly more common in Interval IUCD Group, with 6 patients (20%) affected compared to 15 patients (3.75%) in PPIUCD Group (p=0.0001). Heavy menstrual bleeding (HMB) occurred in 35 patients (8.75%) in PPIUCD Group and 5 patients (16.67%) in Interval IUCD Group (p=0.15). Abdominal cramps was reported by 91 patients (22.75%) in PPIUCD Group and 8 patients (26.67%) in Interval IUCD Group (p=0.62). White discharge was present in 5.

#### DISCUSSION

A 30% reduction in maternal deaths and 10% reduction in child deaths was observed in females who used family planning methods with the intention to create interval of at least 3 years apart between births. Short intervals among births are associated with greater mother and child morbidity as well as mortality. Despite of these facts, only 26% of postpartum women are using contraceptive methods and more than 60% of births follow a track with an interval of less than 3 years. The intrauterine contraceptive devices (IUCD) are one of the commonest methods for contraception. CuT 380A is a little coil, usually in the form of T- shape letter that is placed into a womb to prevent pregnancy. The IUCD is a highly effective, long acting, reversible, cost effective and easily accessible family planning method that is safe for used by most postpartum women including those who are breast feeding or any time during reproductive age. Awareness and removing the stigma about the use of IUCD especially in the postpartum period holds importance since it may help in reducing morbidity and mortality of mother and fetes, which is due to high India that is presently having population crisis.

This study aims to determine proportion of women accepting PPIUCD & Inerval IUCD Insertion.

#### **CONCLUSIONS**

Our study showed that Intra uterine contraceptive devise is a safe, effective and long acting reversible method contraceptive. Women are highly motivated during the postpartum period and receptive to family planning advise & no additional visits are required for contraception.

#### ADDITIONAL INFORMATIO

**Auther Contributions** 

All authers have reviewed the final version to be published and agreed to be accountable for all aspects of the work .

Concept and design - Navita kumawat, Renu meena

Acquistion, analysis or interpretation of data – Navita k, Sandhya choudhary, Suchitra Narayan Drafting of manuscript – Navita Kumawat, Arjun Singh

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