

## Study Of Ppiucd In Tertiary Care Hospital, Mumbai

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### I. INTRODUCTION

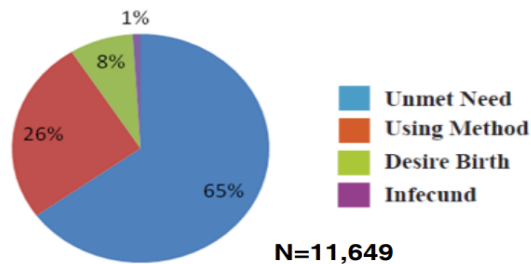
Contraception is defined as the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures. Thus, any device or act whose purpose is to prevent a woman from becoming pregnant can be considered as a contraceptive. In any social context effective contraception allows a couple to enjoy a physical relationship without fear of an unwanted pregnancy and ensures enough freedom to have children when desired. The aim is to achieve this with maximum comfort and privacy, at the same time minimum cost and side effects. Some barrier methods, like male and female condoms, also provide twin advantage of protection from sexually transmitted diseases (STDs).

A growing number of women and men of reproductive age wish to regulate their fertility and have fewer children. Between the ages of 20 and 44, a fertile, sexually-active woman is potentially capable of giving birth about 12 times, even if she breastfeeds each baby for 1 year. To avoid the need for an abortion, she has to successfully practice birth control for 16–20 of her roughly 25 childbearing years [1].

Couples are faced with conflicting goals of achieving satisfying sex life and keeping a small family, failure to do so results in unwanted pregnancy and abortions. When abortion seeking is risky, late or in the hands of unsafe providers or unhygienic conditions, it can lead to both reproductive morbidity and maternal mortality. World over, if contraception is accessible and used consistently and correctly by women wanting to avoid pregnancy, maternal deaths would decline by an estimated 25–35% [2, 3]. In India, the surveys suggest that abortions are responsible for 10–20% of all maternal deaths [4]. There is a need for awareness regarding effective contraceptive methods, their correct and consistent use.

It is seen that 27% of births in India occur in less than 24 months after a previous birth and 34% of births occur between 24 and 35 months [5]. Most of the post-partum pregnancies are due to non-use of any contraception, and among them, most are terminated by induced abortion. It was realized that 65% of women in their first-year post-partum have an unmet need of contraception. Post-partum insertion of IUCD (PPIUCD) was considered as a safe and effective method to fulfil this unmet need. Cochrane review provides evidence for its safety and feasibility [6].

**Fig. 3.1: Unmet Need among Women in the First Year Postpartum**



**Source: USAID/ACCESS. 2009. Family Planning Needs during the Extended Postpartum Period in India**

POST PARTUM PERIOD is divided into

1. Immediate Postpartum - Postplacental and within 48 hours after delivery The immediate postpartum period is an ideal time to educate and counsel a woman on exclusive breastfeeding as a contraceptive method. Counselling on future fertility, birth spacing or limiting intentions, and provision of appropriate family planning methods like IUCD, sterilization should also be provided in this period.
2. Early Postpartum - up to 7days Postpartum Sterilization can be performed within this time period. Messages on Lactational Amenorrhea Method (LAM) should be reinforced.
3. Extended Postpartum - 6 weeks to 1 year Spacing methods like IUCD and other methods as per the Medical Eligibility Criteria (MEC) can be provided. Laparoscopic/minilap tubal ligation can also be performed during this period.

Both Cu IUCD 380 A and Cu IUCD 375 are approved for PPIUCD insertion[5].

## II. OBJECTIVE

1. Acceptability of PPIUCD after counselling by trained doctor.
2. Study which method PPIUCD is better accepted.
3. Study complications associated with PPIUCD.

## III. MATERIALS & METHODS

This is Observational study of women delivering at Tertiary referral centre from period January 2017 to December 2019 for period of 3 years. Consultants and Junior resident doctors were trained at the start of study and then every yearly whenever new batch of junior doctors came. This training was conducted by Experienced Trainers and gave theory knowledge and practical hands on to trainees. Special emphasis was given to counselling part as it is important part in PPIUCD acceptability.

Patient admitted in Labour room in Latent labour or early labour were counselled after detailed history and examination. Counselling included importance of spacing, contraception, advantages, effectiveness, limitations, side effects and disadvantages of PPIUCD. PPIUCD counselling was also done for patients going for caesarean sections along with other consent and counselling. Written Informed Consent was obtained from every patient willing for PPIUCD insertion. Before procedure if patient was awake/ conscious, patient was explained the insertion procedure. Insertion was done under guidance of senior Consultant. Patient was examined for any complications within 48hrs of insertion. At discharge patient was told about warning signs, follow up and how to check Thread. Patinets were called for PPIUCD checkup after 6weeks post delivery and observed for any complications like missing PPIUCD, expulsion of PPIUCD etc.

## EXCLUSION CRITERIA

1. Fever in last 48 hours
2. Signs of puerperal sepsis
3. Unresolved Post Partum Haemorrhage
4. Prolonged ROM > 18 hrs
5. Signs of chorioamnionitis
6. Recent purulent cervicitis
7. Anaemia Hb < 8 gm%

## IV. OBSERVATIONS

Following observations were noted from the period Jan 2017 to Dec 2019 in Department of Obstetrics & Gynecology, T.N.Medical college & B.Y.L.Nair Hospital, Mumbai.

	YEAR 2019	YEAR 2018	YEAR 2017
Number of women counselled in PPIUCD	2577	2462	3219
Number of women delivered	2652	2568	3577
Number of PPIUCD insertions	237	376	581
Number of IPP insertions	32	23	46
Number of IC insertions	205	299	428
Number of PP insertions	0	54	107

PPIUCD = Post Partum IntraUterine Contraceptive Device  
 IPP = Immediate PostPartum following vaginal < 48hrs  
 IC = IntraCaesarian  
 PP = PostPlacental (10mins after placenta)

During follow up at 6 weeks all the patients were observed for following and observations noted.

	YEAR 2019	YEAR 2018	YEAR 2017
Number of CuT <b>Removed</b>	7	8	51
Number of CuT <b>Expelled</b>	5	26	19
Number of women who came with <b>Complications</b>	0	0	0

## V. RESULTS

Following Results obtained

Counselling for PPIUCD over 3 years was observed in terms of how many eligible women opted for PPIUCD.

	YEAR 2019	YEAR 2018	YEAR 2017
Counselling	97.17%	95.87%	89.99%

So we can say that counselling for PPIUCD is seen to be increasing over 3 years period from 89.9% to 97.1% .

In year 2017, 18.04% counselled women opted for PPIUCD. In year 2018, 15.27% women opted for PPIUCD post counselling, while in 2019, only 9.1% women opted for PPIUCD post counselling. Thus even though counselling is increased, a steady decline in acceptance of PPIUCD seen over 3 years.

Percentage of women accepting PPIUCD is also seen to be decreasing over 3 years, highest being in 2017 of 16.2% which fell to 14.64% in year 2018 and to 8.93% in year 2019.

Total 1194 PPIUCD were inserted during this period of 3 years, of which 932 were intraCaesarean CuT constituting 78.05% of total PPIUCD insertions. Second most common method being PostPlacental PPIUCD which were 161 in toto i.e. 13.48%. While least popular method was Immediate PostPartum 101(8.45%).

IntraCaesarean CuT insertions went on increasing from 73.6% in 2017 to 86.49% in 2019. However PostPlacental insertions decreased from 18.41% in 2017 to 14.36% to zero in 2019. Immediate PostPartum CuT insertions were 7.91% to begin with in 2017, 6.12% in year 2018 and 13.50% in 2019. Thus IPP CuT insertion were increased by the end of study.

Removal was highest in first year of study i.e. 2017 of 8.7% after which a constant removal rate of 2.12% in 2018 and 2.9% in 2019 was observed.

Expulsion of CuT was noticed more in 2018 of 6.9% but rest of the time it remained below 3%. No other complication like infection, perforations, abnormal vaginal discharge, abnormal bleeding, fever post insertion etc was noticed.

## VI. DISCUSSION

This study was performed at Tertiary Referral centre where referral are due to obstetric complications and non availability of emergency caesarean section facility. Hence our centre has high caesarean rate but well within accepted norms.

In the Study Reetu Huda et al [7] reported abnormal vaginal discharge in 12.3% and acute infection in 1.75%. B Sood et al [8] showed overall infection rate of 4.5% post PPIUCD insertions.

This study excluded any women with infection or likely to have PostPartum Haemorrhage so infections following insertions or abnormal bleeding following insertions were not observed. Also insertion were done with aseptic precaution. All delivered patient receive prophylactic antibiotics making infections less likely post insertions.

Singh et al. reported acceptance of PPIUCD in literate grp. 80% [9]. Kant et al. also stated that acceptance of postpartum IUCD was more in literate women [10]. Our being Tertiary referral centre in Urban Population acceptance rate is comparable i.e. 78.05%

According to Cochrane Database Systemic Review, expulsion rates appeared to be higher in postpartum group than interval group [11]. a study done by Lucksom et al. reported no case of spontaneous expulsion in postpartum group [12]. Our expulsion rate in 4.18% as 50 expulsions were noticed in these 3 years.

In a study, Mohan et al. found almost cumulative rate of removal of PPIUCD of 7% [13]. Our study removal rate is 5.52% which is comparable.

## VII. CONCLUSION

PPIUCD is preferred method of contraception post counselling especially for women undergoing Caesarean delivery. It is safe, acceptable method thus needs to be used more.

## VIII. Acknowledgement

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## IX. BIOGRAPHY



Author Dr Rajashri Tayshete Bhasale is Consultant Gynecologist, Laparoscopic Surgeon & Obstetrician working in Mumbai. She is University Recognised UG & PG Teacher and Guide. She has special interest in Laparoscopy and known to advocate 3 Port Surgeries.

### Conflict of interest

The authors declare that they have no conflict of interest.

### Ethical Approval

For this type of study formal consent is not required.

### Footnotes

This work was performed at Topiwala National Medical College & B.Y.L.NairHospital, Mumbai. Both authors were deputy coordinator for PPIUCD program and lead the Team under guidance of seniors. Team PPIUCD Nair Hospital has received 'Good Practice Award' by FIGO 10 Nov 2017.

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