

# Evaluation of Post Placental Trans Caesarean/Vaginal Delivery Intrauterine Device (PPIUCD) in Terms of Awareness, Acceptance and Expulsion in Services Hospital, Lahore

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## ABSTRACT

**Aim:** To assess the awareness, acceptance rate at the time of delivery either by vagina route or trans caesarean section. Expulsion rate of PPIUCD at 6 weeks follow up in vaginal deliveries and trans caesarean section is also assessed.

**Method:** Prospective longitudinal study.

**Setting:** Department of Obstetrics & Gynaecology, SIMS/ Services Hospital, Lahore.

**Duration of Study:** Six months from 1<sup>st</sup> January 2015 to 30<sup>th</sup> June 2015.

**Result:** - Awareness about PPIUCD was 74%. Acceptance rate of PPIUCD was 30%. Expulsion at 6 weeks follow up was 5.4%.

**Conclusion:** PPIUCD is a safe, highly effective, long acting and cost effective method of contraception. Awareness about PPIUCD has been gradually increasing in both health professionals and patients.

**Keywords:** PPIUCD, awareness, acceptance, expulsion.

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## INTRODUCTION

Approximately 61% of births in the developing countries occur at interval that is shorter than recommended birth to birth interval of the approximately 36 months. More than 100 million women in developing countries would preferred to avoid a pregnancy but they may not be using any form of contraception.<sup>1</sup> This may be due to poor knowledge of contraceptive methods, fear of side effects and inability to return for a contraceptive advise.

A woman who becomes pregnant too quickly following a previous birth faces risk of anemia, abortion, premature rupture of membranes and maternal mortality. A baby born after short interval has increased chances of being born preterm, small for gestational age and death during early neonatal period<sup>2</sup>.

In developing countries delivery may be the only time when a healthy woman comes in contact with health care provider and the chances of the returning for contraceptive advice are uncertain.<sup>3</sup> Recommencement of ovulation is unpredictable after delivery so she many conceive during or immediate after purperium. Cu T provides exceedingly useful contraception during purperium and afterward<sup>4</sup>.

Most of studies included in the Cochrane review in 2001 were conducted more than two decades ago, many of these ICUD's are no longer widely use and

two of devices were never marketed. Nonetheless upto now, these trials provide the available evidence on the safety and feasibility of inserting IUCD immediately after child birth. More research is needed in this area in order to enhance the acceptance rate in developing countries. This is especially true since there are advances and new understanding about IUCD's in term of awareness acceptability, safety and risk of expulsion<sup>5</sup>.

This study is conducted to assess the awareness and acceptance rate of post placental intra uterine contraceptive device at vaginal delivery and trans caesarean section and to continue/discontinue and expulsion rate at 6 weeks follow up.

## MATERIAL AND METHOD

This prospective longitudinal study was conducted in the Department of Obstetrics and Gynaecology, Services Hospital, Lahore during 6 months from 1<sup>st</sup> January 2015 to 30<sup>th</sup> June 2015. Total 4809 pregnant women were included in this study. The sampling technique was purposive non probability sampling.

**Inclusion Criteria:** All women coming to antennal clinic or labour room in early labour were counsel for post placental insertion of Cu T either at vaginal delivery or lower caesarean section.

**Exclusion Criteria:** All women with choroamniosis, puerperal sepsis, PROM > 18 Hours, potentially infected dai handled cases and unresolved PPH.

**Data Collection:** Study participants were recruited through hospital antenatal clinic. Post partum contraception was routinely discussed at prenatal

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visit. All antenatal patients irrespective of maternal age, risk factor and proposed mode of delivery at antenatal clinic of Services Hospital, Lahore were counseled about contraceptive option. The knowledge about IUCD was given in last trimester. Those willing for immediate post partum insertion of Cu T 380A within 10 minutes of placental expulsion were included in the study group. Informed and written consent was obtained at the time of delivery from patient and husband.

Follow up scheduled at 6 weeks post insertion, following were assessed.

- Willingness to continue the Cu IUCD as the method of contraception.
- The patients wishing for removal of Cu IUCD were considered as discontinuation.
- Expulsion rate at 6 weeks follow up were recorded.

## RESULTS

Awareness of PPIUCD in our study is 24%.

Total births in Study Period	Aware of PPIUCD		Not Aware of PPIUCD	
4809	n=3609	75%	n=1200	24%

The total acceptance rate of PPIUC in our study is 30%

No. of Deliveries	No. of Insertion	%age
998	268	27
896	285	32
701	266	38
681	202	30
693	227	33
840	223	27
n=4809	1471	30

**Follow up visit at 6 weeks:** At 6 weeks follow up 471 patients were lost in 1000 were followed.

Lost for follow up	471	32%
Presented at 6 weeks	1000	67%
Willingness to continue	905	90.5
Expulsion	45	3.5%
IUCD Removed	50	4%

## DISCUSSION

The PPIUCD is highly effective, long acting, reversible cost effective and easily accessible family planning method. It is safe for use by most post partum women and has no adverse impact on breast feeding. According to our study 3609 (75%) of patients out of 4809 were aware of post placental intra uterine contraception device. 1200(24%) of patients were not aware of this method. The total acceptance rate in our study is 30%. Which is comparable with study conducted in 2003 by S. Karger AG and Basel. The acceptance in their study was 28.9%. but actual insertions of IUCD were low probably because the use of IUCD was a new

concept in the community.<sup>6</sup> In the study conducted by Geeta Katheit Juhi Agarwal in 2013 the total acceptance rate was 18.8% and majority belong to age group 21-25 (50.8%)<sup>6</sup>.

Alvarez Peyalo et al (1996) also found that average rate of PPIUCD acceptance rate was 20.6%. In our study the total acceptance and insertion rate is high as compared to the previous study which shows rising trends in awareness and willingness to use this method and the patient had the added advantages of an effective and safe contraceptive method at the time of delivery. The willingness to continue this method is 90.5% in our study which is high as compared to the study conducted by Abilasha Gupta Aruma Verma in 2013<sup>7</sup>. This is because of good awareness of this method in health professional and patients and better safety profile.

The expulsion rate in our study is 4.5% which were comparable with study conducted by Abilasha Gupta in 2013 where expulsion rate was 2% in trans caesarean section and 6.6% in vaginal deliveries<sup>7</sup>.

The patients who demand removal of IUCD were 50(5%). Which is comparable with study conducted by Sahaja Kittur. YM Kabadi in 2012<sup>8</sup>.

## CONCLUSION

Post partum insertion of IUCD is effective, feasible and reversible method of contraception.

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