

Acceptability of Intrauterine Contraceptive Device Insertion in immediate Postpartum Period

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ABSTRACT

Background: Mostly, females seek birth space after a delivery. But usually are unaware about contraceptive method and their usage, especially during postpartum period. Controversial results have been noticed from literature regarding the acceptability of PPIUCD among females of reproductive age groups. So we conducted this study to find the acceptability in local population.

Aim: To determine the frequency of acceptability of immediate post-partum intra-uterine contraceptive device insertion in females presenting for delivery.

Methods: This cross sectional study was conducted in Gynae Unit-II, Shalamar Hospital, Lahore for a period of six months after approval of synopsis i.e. from 4th October 2016 to 4th April, 2017. 90 patients enrolled in this study. Informed consent was taken from all the patients. After delivery, IUCD implanted after taking approval from female and her husband and acceptability noted. All the collected data was entered and analyzed on SPSS version 20.

Results: The mean age of the patients was 29.52±7.38 years. The low SES patients were 41(45.6%), middle SES patients were 40(44.4%) and high SES patients were 9(10%). In this study 54(60%) patients accepted the use of IUCD.

Conclusion: In our study, the acceptability of immediate PPIUCD insertion in females presenting for delivery was 60%.

Keywords: Acceptability, Post-partum, Intra-uterine Contraceptive Device, Delivery

INTRODUCTION

Unwanted pregnancies are most common in the first year after delivery, with 10-44 percent of pregnancies being unintended.¹ In many cases, post-partum birth control is started at the 6 week visit after delivery, however by this time, most females are sexually active and ovulation can happen as early as 28th day.² There are a number of possible benefits of starting intrauterine contraception devices and implant use in the immediate postpartum period including their high efficacy and reversibility which rivals sterilizations well as the convenience of finding doctors who are skilled in their insertion³.

Acceptability of any intrauterine device depends upon ease with which it can be inserted and on the side effects which a lady may experience are bleeding, infection, perforation and spontaneous expulsion of the device. Regardless of the date or route of IUCD insertion, all investigations have revealed low incidence of adverse effects. When compared to interval iucd insertions, expulsion rates are considerably higher in cases where iucd was placed immediately after vaginal delivery. Post-partum implants appear to have the same side effects as interval insertions and there have been no evidence of a negative influence on breast milk or infant growth⁴.

The majority of international evidence-based guidelines advocate the use of the IUCD technique in the immediate post-partum period, believing that the benefits of doing so exceed the dangers⁵. Maternal and child mortality and morbidity are associated to shorter intervals between births⁶. Females who have just given birth require a variety of efficient contraceptive techniques in order to avoid an unintended pregnancy in a short period of time⁷.

The Copper T380A IUCD is one of the most cost-effective contraceptive alternatives accessible because of its multi-year cost. The Copper T380A IUCD is a highly effective, non-hormonal method that can be used safely by all women during this interval regardless of whether or not they are breastfeeding. An IUCD can be implanted in the 48 hours following delivery, referred to as a postpartum IUCD, according to the World Health Organization Medical Eligibility Criteria. Literature proposed that PPIUCDs are a safe and effective contraceptive technique⁸

Rationale of this study was to assess the frequency of acceptability of immediate post-partum intra-uterine contraceptive device insertion in females presenting for delivery. Controversial results were noticed from literature regarding the acceptability of PPIUCD among females of reproductive age groups. So we conducted this study to confirm the extent of acceptability of PPIUCD in local population. This study would also enable to advise policy makers on strategies to enhance positive factors (e.g. to establish programs that are dedicated in educating parturient and promote PPF). So as to increase contraceptive prevalence and ensure an increase in the PPF choice of methods. Finally this will also work as a tool to decide how to proceed with the PPIUCD skills training programs.

The objective of the study was to determine the frequency of acceptability of immediate post-partum intra-uterine contraceptive device insertion in females presenting for delivery

Operational Definitions:

Immediate Post-Partum Insertion: Insertion of intra-uterine device within 48 hours after delivery (either normal or caesarean section)

Acceptability: It was labeled if female and her husband agreed to place Copper IUCD within 48 hours after delivery of her baby during her counseling in antenatal check-up.

MATERIALS AND METHODS

This cross sectional study was conducted in Gynae Unit-II, Shalamar Hospital, Lahore for a period of six months after approval of synopsis i.e. from 4th October 2016 to 4th April, 2017. 90 patients enrolled in this study. Informed consent was taken from all the patients. After delivery, IUCD implanted after taking approval from female and her husband and acceptability noted. All the collected data was entered and analyzed on SPSS version 20. Sample size of 90 cases was calculated with 95% confidence level, 8% margin of error and percentage of acceptability of PPIUCD i.e. 17.6% in females presenting for delivery. Sampling technique used was non-probability, consecutive sampling.

Selection criteria: Booked pregnant females of age 15-45 years parity ≥1 presenting at gestational age>34 weeks, undergoing delivery either normal vaginal delivery or Cesarean section

Exclusion Criteria: Females with chorioamnionitis, pelvic inflammatory disease, hb<8mg/dl, intrauterine death or history of puerperal sepsis.

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Data Collection Procedure: 90 females fulfilled the selection criteria were selected through OPD. After taking all ethical considerations and explaining the procedure, the patient and her husband asked to sign written informed consent regarding the placement of PPIUCD. A performa having demographic details was also recorded. Patients in the study were educated regarding contraceptive techniques and asked for PPIUCD. Then females followed-up till delivery. All deliveries conducted by researcher herself. After delivery, IUCD implanted after taking approval from female and her husband and acceptability noted. Structured proforma regarding acceptability of PPIUCD filled by the patient.

Data analysis: Data was analyzed using SPSS version 20.0. The quantitative variables like age and gestational age was presented as mean and standard deviation. The qualitative variables like parity, education, socioeconomic status and acceptance of PPIUCD was presented by frequency and percentage.

RESULTS

The mean age of the patients was 29.52 ± 7.38 years. The mean gestational age at delivery was 37.98 ± 1.42 weeks. There were 39(43.33%) patients who were primiparous, 21 (23.33%) patients had parity two, 17(18.89%) patients had parity three and 13 (14.44%) patients had parity four. There were 28(31.1%) females who were illiterate, 17(18.9%) had education up to primary level, 18 (20%) were matric pass, 13(14.4%) were intermediate pass while 14(15.6%) were graduate or above. There were 15(16.7%) husbands who were illiterate, 21(23.3%) had education up to primary level, 14(15.6%) were middle pass, 20 (22.2%) were matric pass while 20 (22.2%) were graduate or above. Out of 90 cases, 41(45.6%) belong to low socioeconomic status, 40 (44.4%) belong to middle class while 9 (10%) belong to low socioeconomic status. Out of 90 patients, 43(47.8%) patients had normal vaginal while 47(52.2%) patients had cesarean section (Table 1).

Table 1: Demographic characteristics of patients

n	90
Age (years)	29.52 ± 7.38
Gestational age (weeks)	37.98 ± 1.42
Parity	
Primiparous	39 (43.3%)
Parity 2	21 (23.3%)
Parity 3	17 (18.9%)
Parity 4	13 (14.4%)
Female's Education	
Illiterate	28 (31.1%)
Primary	17 (18.9%)
Matric	18 (20.0%)
Intermediate	13 (14.4%)
Graduate or above	14 (15.6%)
Husband Education	
Illiterate	15 (16.7%)
Primary	21 (23.3%)
Middle	14 (15.6%)
Matric	20 (22.2%)
Graduate or above	20 (22.2%)
Socioeconomic status	
Low	41 (45.6%)
Middle	40 (44.4%)
High	(9 (10.0%))
Mode of delivery	
Normal Vaginal Delivery	43 (47.8%)
Cesarean section	47 (52.2%)

In this study 54(60%) patients accepted the use of IUCD and 36(40%) patients not accepted the use of IUCD (Fig 1).

Fig 1: Distribution of acceptance of IUCD



DISCUSSION

Counselling of females for IUCD has become an important aspect of prenatal and postpartum programmes because pregnant and postpartum women are often very motivated to control their fertility, either by spacing out their children or by completely ceasing their fertility. The IUCD is widely regarded as one of the most effective, low-cost, nonhormonal, and reversible contraceptive treatments for nursing mothers. PPIUCD is now widely recognised as a safe and effective method of contraception due to its multiple benefits⁹.

In our study out of 90 patients the normal vaginal delivery done in 43(47.8%) patients and CS was done in 47(52.2%) patients. 54(60%) patients accepted the use of IUCD and 36(40%) patients not accepted the use of IUCD. A review at Chiang Mai University Hospital, Thailand reveals the overall acceptance rate of postpartum contraception is 97.6%¹⁰.

According to a recent study in India, nearly all women are satisfied with their choice of IUCD at the time of insertion, and 90% of women are satisfied with IUCD six weeks after insertion.¹¹ Females' acceptance rate for PPIUCD was just 17.6% within 10 minutes of placenta delivery, according to an Indian study¹². Another Indian study found that after delivery of the placenta, only 36% of females accepted the PPIUCD procedure¹³. According to an Egyptian study, females accepted PPIUCD at a rate of only 28.9% after delivery of the placenta¹⁴.

In a research conducted by Poovathi M et al., a total of 3046 women were involved in the study. 1966 Insertions were performed after vaginal delivery, 450 following caesarean section, and 630 within 48 hours. The six-week follow-up rate was 70%, while the six-month follow-up rate was 40%. There were no difficulties. At six weeks, the expulsion rate is 6%, and at six months, it is 5%. At 6 weeks, the removal rate was 5%, and at 6 months, it was 6%. At 6 weeks, the continuation rate was 90%, and at 6 months, it was 80%¹⁵.

Scheduled follow-up was observed in 65.2 percent of cases in a recent prospective study of PPIUCD follow-up from an Indian peripheral health centre. In a prospective longitudinal trial, Shukla et al. reported a follow-up rate of 78.7%¹⁶.

Hooda et al. found that inserting an IUCD in the early postpartum period is a safe, effective, and convenient contraceptive intervention in both caesarean and vaginal deliveries. Despite the fact that expulsions are more common following vaginal PPIUCD insertions, they should be encouraged because of the benefits they provide¹⁷. Welkovic et al., found no difference in infection rates between women with and without a postpartum IUD.¹⁸ Few other researches also reported no infection after insertion of IUCD in postpartum period^{16,19,20}

CONCLUSION

In our study setup acceptability of immediate post-partum PPIUCD insertion in females presenting for delivery was 60%.

Conflict of interest: Nil

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