

Women's Postpartum Intrauterine Contraceptive Device Insertion Satisfaction and Effectiveness

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ABSTRACT

Background: Preventing unplanned pregnancies within the first year following childbirth is known as postpartum family planning. These pregnancies have significant health risks for both mothers and their offspring. As a secure and reliable form of temporary contraception, the World Health Organization (WHO) advises the prompt implantation of an intrauterine contraceptive device (IUCD) following childbirth. It is imperative to begin family planning at delivery, especially in low-resource settings where women frequently neglect to return for follow-up treatment.

Objective: To evaluate women's postpartum intrauterine contraceptive device insertion satisfaction and effectiveness.

Study design: A cross-sectional study.

Place: Memon Medical Institute Hospital, Safoorah Karachi

Duration: January 2020 to January 2023

Methodology: A total of 350 women were added to the study after providing informed consent. They were counseled on birth control and contraceptive techniques at prenatal visits, in the early stages of labor, and within 48 hours of giving birth. Whether a cesarean section (CS) or spontaneous vaginal delivery (SVD) occurred, the intrauterine contraceptive device (IUCD) was inserted right away after childbirth in the recruited participants. A survey was conducted about satisfaction rates and subsequent postpartum problems.

Results: A total of 350 women were selected for this study. The mean gestational age was 38.5 weeks. After the postpartum intrauterine contraceptive device insertion, the infection rate was 2.1%, expulsion was 4.2%, irregular bleeding was present in 1.8% of women, and secondary PPH was present in 3.9% of women. The satisfaction rate at the time of insertion was 97.2%, while the overall satisfaction rate was 93.95%.

Conclusion: Women who are already enrolled in the medical system have a vital opportunity to obtain safe, long-acting, extremely effective contraception with PPIUCD implantation.

Keywords: postpartum period, intrauterine contraceptive device, complications, satisfaction.

INTRODUCTION

Preventing unplanned pregnancies within the first year following childbirth is known as postpartum family planning [1]. These pregnancies have significant health risks for both mothers and their offspring [2]. Roughly half of pregnancies in the US are unplanned, which has detrimental effects on both health and the economy [3]. According to a recent study, 86% of unplanned postpartum pregnancies resulted from not utilizing contraception, and nearly half of those pregnancies ended in induced abortions [4]. Birth spacing of at least 36 months between pregnancies can greatly lower the incidence of mother and infant death [5].

As a secure and reliable form of temporary contraception, the World Health Organization (WHO) advises the prompt implantation of an intrauterine contraceptive device (IUCD) following childbirth [6]. The contraceptive method known as the postpartum intrauterine device (PPIUCD) is considered safe for use by all nursing women [7]. Since many women do not receive family planning within the first year following childbirth, it is imperative that contraception be made available at this time. PPIUCD is an affordable, reversible, and practical method of contraception that also reduces the rate of abortions [8].

Unexpected ovulation and early postpartum sex resumes are the main causes of unintended pregnancies [9]. Due to a number of obstacles, women in developing nations frequently neglect to obtain contraception or return for postpartum examinations. During hospital deliveries, immediate postpartum family planning options that provide reliable contraception before leaving the hospital are crucial [10]. Long-acting reversible contraceptive insertions are safe and feasible, according to Cochrane studies [11].

It is imperative to begin family planning at delivery, especially in low-resource settings where women frequently neglect to return for follow-up treatment. The effective Postpartum Intrauterine Contraceptive Device promotes facility-based births [12]. Benefits of long-acting reversible contraception (LARC) include its effectiveness and suitability for nursing mothers. Multiple layers of interventions are required to improve the health of mothers and children, and governments should give priority to accessible and reasonably priced contraceptive options. Pregnancy that is not planned can be decreased by educating women about contraception throughout prenatal and postoperative care. Appropriate training is necessary for healthcare providers to insert postpartum IUCDs.

METHODOLOGY

The Institutional Review Board has approved this research. A total of 350 women were added to the study after providing informed consent. They were counseled on birth control and contraceptive techniques at prenatal visits, in the early stages of labor, and within 48 hours of giving birth.

Exclusion criteria: An intrauterine contraceptive device was not available to women with uterine abnormalities, coagulation disorders, fever or infection during labor, hemoglobin levels below 8 g/dl, prolonged rupture of membranes lasting more than 18 hours, postpartum hemorrhage, active STDs or lower genital tract infections, or needing manual placenta removal.

Whether a cesarean section (CS) or spontaneous vaginal delivery (SVD) occurred, the intrauterine contraceptive device was inserted right away after childbirth in the recruited participants. Within 48 hours following vaginal delivery, the IUCD was implanted for certain individuals who required

additional time to make a decision. All patients were to have follow-up appointments every three months, six months, and yearly for three years. A survey was conducted about satisfaction rates and subsequent postpartum problems. For three years, women were monitored to evaluate the continuation of PPIUCD. SPSS version 25.0 was used for the statistical analysis.

RESULTS

A total of 350 women were selected for this study. The mean gestational age was 38.5 weeks. Table 1 shows the distribution of women according to the type of delivery.

INTRODUCTION

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A survey was conducted about satisfaction rates and subsequent postpartum problems. For three years, women were monitored to evaluate the continuation of PPIUCD.

SPSS version 25.0 was used for the statistical analysis

RESULTS

There were a total of 350 women selected who were a part of this study. The mean gestational age was 38.5 weeks. Table number 1 shows the distribution of women according to the type of delivery.

Table No. 1: distribution of women according to the type of delivery.

Type of delivery	n	%
• Vaginal	179	51.1
• C-section	171	48.5

Table number 2 shows the complications of postpartum intrauterine contraceptive devices.

Table No. 2: complications of postpartum intrauterine contraceptive devices

Complications	%
• Infection	2.1
• Expulsion	4.2
• Irregular bleeding	1.8
• Secondary PPH	3.9

Table number 3 shows the satisfaction rate of postpartum intrauterine contraceptive devices.

Table No. 3: satisfaction rate of postpartum intrauterine contraceptive devices.

Satisfaction rate at different times	%
• At time of insertion	97.2
• At 6 weeks postpartum	95
• At 6 months postpartum	94.5
• At 1 year postpartum	93
• At 2 years postpartum	93
• At 3 years postpartum	91
• Overall satisfaction rate	93.95

DISCUSSION

Among the safest and most traditional ways of contraception is long-acting reversible contraception (LARC) [13]. The current intrauterine contraceptive device is easy to use, inconspicuous, safe, long-lasting, and does not interfere with sexual activity [14]. It also has few adverse effects and is readily reversible. It is now the most affordable type of birth control, and many women find it to be convenient and minimal maintenance once implanted. The IUCD is regarded as a dependable, reasonably priced, hormone-free, and reversible solution [15]. It is especially helpful for nursing mothers because it doesn't impede lactation and, in certain situations, may even prolong it while preserving the quality of breast milk.

There is a major global drive to promote long-acting reversible contraceptive techniques, such as PPIUCD, during the postpartum period, particularly in underdeveloped nations [16]. Six weeks after giving birth is when most women start having sex again, with women who had cesarean sections often starting earlier than those who delivered vaginally. Women are extremely motivated during the postpartum period, which makes starting contraception at this time convenient for both patients and healthcare professionals. By placing an IUD after birth, you can also avoid the pain of interval insertion and cover up any lochia-related insertion hemorrhage.

In this study after the postpartum intrauterine contraceptive device insertion, infection rate was 2.1%, expulsion was 4.2%, irregular bleeding was present in 1.8% women, and secondary PPH was present in 3.9% women. The satisfaction rate at the time of insertion was 97.2, while the overall satisfaction rate was 93.95%

According to a research by Shukla et al., 3.9% of women reported having secondary PPH following PPIUCD implantation, whereas 27.2% of women suffered menorrhagia [17]. Following post-

placental IUCD insertion, Welkovic et al. found no difference in the incidence of infection or postpartum hemorrhage [18]. This trial, which included 350 women, sought to evaluate the safety and effectiveness of rapid PPIUCD insertion in women giving birth vaginally or by cesarean section.

Similar to our study's 2.1% infection rate, a study conducted across 13 nations examined infection rates (PID) owing to IUCD and discovered a 2.4% infection incidence with both immediate and interval insertion [19]. According to a study conducted by Ross and Winfrey in 27 countries, 39% of women who gave birth in the previous year had unmet contraceptive needs, and 65% of women wanted to delay getting pregnant but were not utilizing it [20]. With 97.2% during insertion and 95% at the six-week postpartum visit, overall satisfaction rates were high. But delaying the start of birth control until the six-week checkup increases the chance of unwanted pregnancies and short pregnancy intervals for susceptible women, who are less likely to attend their appointments.

Since childbirth may be the only time a healthy woman contacts healthcare practitioners, postpartum IUCD insertion offers a valuable opportunity, with unknown returns for contraceptive counseling. Within the healthcare system, it offers women very effective, long-lasting, and safe contraception. With its easy insertion, minimum interference with breastfeeding, affordability, reduction of outpatient facility traffic, and defense against unwanted pregnancies and consequent abortions, PPIUCD has become a popular and successful method of contraception.

CONCLUSION

Women who are already enrolled in the medical system have a vital opportunity to obtain safe, long-acting, extremely effective contraception with PPIUCD implantation.

Funding source

This study was conducted without receiving financial support from any external source.

Conflict in the interest

The authors had no conflict of interest related to the execution of this study.

Permission

Prior to initiating the study, approval from the ethical committee was obtained to ensure adherence to ethical standards and guidelines.

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