ISSN: 0975-5160

Available online on www.ijtpr.com

International Journal of Toxicological and Pharmacological Research 2021; 11(6);202-206

Original Research Article

A Retrospective Study to Assess the Efficacy and Patient Compliance with the Postpartum Intrauterine Device

Rashmi Raginee

Junior Resident, Department of Obstetrics and Gynecology, Darbhanga Medical College & Hospital, Laheriasarai, Darbhanga, Bihar, India

Received: 20-08-2021 / Revised: 28-09-2021 / Accepted: 06-10-2021
Corresponding author: Dr. Rashmi Raginee
Conflict of interest: Nil

Abstract

Aim: This study aims to look at the efficacy and patient compliance with the Postpartum Intrauterine Device.

Materials and Methods: This study is a retrospective study conducted in Department of Obstetrics and Gynecology, Darbhanga Medical College and Hospital, Laheriasarai, Darbhanga, Bihar, India over a period of one year.

Results: Patients fulfilling medical eligibility criteria were 1700. PPIUCD patients counseled were 900. 300 patients were the number of patients who accepted service and participated in the study. The maximum number of patients was in the age group of 21-25 years and constituted 50.0%. The majority of patients had IUCD acceptance reason of no need for 2nd visit for contraception (53.6%).

Conclusion: PPIUCD is a highly effective, non hormonal, long-acting, and reversible contraceptive method. To increase the use of this method, extreme motivation and counselling from the couple's antenatal period are required.

Keywords: Intrauterine device, postpartum, contraception.

Introduction:

Postpartum period is one of the critical times when both women and newborn need a special and integrated packaging of health services. This is the time where a woman is vulnerable to unintended pregnancies. Studies have shown that about 60 % of women resume the sexual activity in 8 weeks and almost 100 percent by the end of one year. [1]Emphasis on sexual and contraceptive education is very important in immediate postpartum period. Pregnancies taking place within 24 months of previous child birth have a higher risk of adverse outcomes like abortion, preterm labor, postpartum hemorrhage and low birth weight babies.[2-10]

Despite the many advantages of the IUCD as a method of family planning, it generally suffers from unpopularity in India.[11] In India, less than two percent of women use the

IUCD as their modern contraceptive method of choice. National program provides incentives to health care providers to promote sterilization, and very little importance is given to IUD or other temporary contraceptive methods. In this environment, it is not surprising that use of temporary contraceptive methods in the country is limited to 10.2 % and that of IUD only 1.8 % (NFHS 2006).[11]During the last 20 years, use of the IUD has remained low. Recently, however, the MOHFW has been trying to increase the use of temporary methods. Recent studies estimate that prevention of unplanned and unwanted pregnancies could help avert 20–35 % of maternal deaths and as many as 20 % of infant deaths.[12]

The term "unmet need" refers to the discrepancy between women's reproductive intentions and contraception use. Within 48 hours of childbirth, immediate postpartum occurs, while early postpartum occurs within 7 days. This study aims to look at the efficacy and patient compliance with the Postpartum Intrauterine Device.

Materials and Methods:

This study is a retrospective study conducted in Department of Obstetrics and Gynecology, Darbhanga Medical College and Hospital, Laheriasarai, Darbhanga, Bihar, India over a period of one year. A total of 300 patients were selected in the study were inserted with postpartum intrauterine contraceptive device (380 A intrauterine copper device).

Inclusion Criteria:

All women who took part in the trial had a postpartum IUCD implanted. All patients with a type of insertion described as post placental, postpartum (within 48nhrs) and intra caesarean section had their written information obtained.

Exclusion Criteria:

A severe form of antepartum bleeding established chorioamnionitis HIV + women with a CD4 count of less than 200/cmm who is not on ART, any active genital tract infection in the third trimester, heart disease, severe anemia, the patient refuses postpartum IUCD despite having a known uterine abnormality.

Methodology

The IUCD is inserted quickly after the placenta is expelled, even before the episiotomy is sutured. Before inserting a post placental IUCD, active management of the third stage of labor is required. Kelley's forceps, which are devoid of lock and have a particular curvature at the proximal end to facilitate the angulation while entering the uterus, is used. The 380A IUCD was used and was inserted at the fundus after pulling the fundus up and straightening the uterine axis. In Postpartum IUCD, the IUCD is introduced into the fundus within 48 hours following birth and during LSCS IUCD is introduced into the uterine cavity by using Ring forceps. The IUCD thread is directed towards the cervical canal. All patients are issued a PPIUCD client card with their information such as name, age, registration number, address, phone number, and any complaints. After one and a half months, patients are followed up. The patient's complaints are recorded. Appropriate antibiotics and tranexamic acid were used to treat excessive bleeding. The patients were followed up on phone and after 6 months.

Results:

Patients fulfilling medical eligibility criteria were 1700. PPIUCD patients counselled were 900. 300 patients were the number of patients who accepted service and participated in the study.

Table 1: Distribution based on the age of patients

Age (Years)	Number of patients	Percentage
14-20	43	14.3
21-25	150	50.0
26-30	75	25.0
31-36	22	7.3
>36	10	3.3
Total	300	100

Table 1 shows that the maximum number of patients were in the age group of 21-25 years and constituted 50.0%.

Table 2: Distribution based on parity

Parity	Number of patients	Percentage
Primi	71	23.6
Second	163	54.3
Third	60	20.0
Fourth	6	2.0
Total	300	100

Table 2 shows that the highest number of patients were in the second parity (53.4%).

Table 3: Distribution based on education

Education	Number of patients	Percentage
Uneducated	42	14.0
Up to 10^{th} standard	177	59.0
Up to 12th standard	43	14.3
Graduation	27	9.0
Post-graduation	11	3.6

Table 3 shows that majority of patients were educated up to the 10^{th} standard (57.4%).

Table 4: IUCD acceptance reasons

Reasons	Number of patients	Percentage
Start with immediate contraception	20	6.6
No need for 2^{nd} visit for contraception	151	50.3
Least compliance required	33	11.0
Faith in doctor	31	10.3
Previous use of IUCD	24	8.0
Previous use of other contraception that failed	13	4.3
Knowledge gained from media, neighborhood	6	2.0
Cost-effective	12	4.0

Table 4 shows that the majority of patients had IUCD acceptance reason of no need for 2^{nd} visit for contraception (53.6%).

Table 5: PPIUCD not accepting reasons despite counseling

Reasons	Number of patients	Percentage
Not able to take the decision	530	88.3
Fear	251	41.8
Risk of perforation	263	87.6
The belief in sex interference	81	13.5
The myth that it is a permanent method	42	7.0
Want permanent contraception later	51	17.0
Not happy with previous IUCD	36	6.0
Could not define	62	10.3
Never heard of PPIUCD ever	44	7.3

Table 5 shows that majority of patients were not able to make decisions (48%).

Discussion:

Services for postpartum family planning are an excellent way to reorient family planning. It has been demonstrated that the vast majority of women are not ready to have another child for at least two years [13]. The provision of high-quality family planning services in the postpartum period has the potential to reduce the voluntary termination of unwanted pregnancies, as well as maternal and child mortality and morbidity resulting from unsafe abortions and insufficient birth spacing, respectively [14,15].

Advancing age or parity has more impact on using a permanent method instead of a temporary method. The acceptance rate increases with at least one living issue (31.5%) and with second issue (55%.) We had 62.5% patients from urban area and 37.5 % from rural area.86.5% patients were educated. This shows that urbanization and education in females definitely improve the access and knowledge about contraception. Indian study carried out by Dr Srivastav R. concludes the same.[16]

A randomized prospective study conducted by Smith et al in antenatal clinics in China, Scotland and South Africa in which some women received information on contraception in antenatal care and some did not, found no difference in subsequent contraceptive use[9]. Mohammed et al observed that acceptance rate was the same during antenatal and postpartum counselling, 26.4 and 31.8%, respectively. [17]

In Projestine S. Muganyizi *et al*. [18]study, in the program-affiliated clinics, there were 40 470 births, 2347 (5.8%) PPIUD insertions, and 1013 (43.2%) women who had a PPIUD who returned for a follow-up visit. Midwives were involved in 596 (58.8%) of the follow-up cases, whereas doctors were involved in 417 (41.2%). All midwives' PPIUD insertions were transvaginal, and 43 (7.2%) of them reported PPIUD-related problems at the end of the sixth week. 16 (2.7%) occurrences of uterine infection, 14 (2.3%) IUD expulsions, 26 (4.4%) IUD removals, and 33 (5.5%) cases of overall method discontinuation were among the problems. Only one case had a severe enough uterine infection to necessitate hospitalization.

Conclusion:

This study concluded that it takes motivation from the start of pregnancy and counseling for the entire family, not just the patient. There is a need for numerous seminars to be held even at the peripheral to improve patient access and acceptability.

References:

1. Postpartum resumption of sexual activity, sexual morbidity and use of modern

contraceptive among Nigerian women in JOS (an of medical and health science research 2014 march April 4 (2) 210-216
2. Zhu BP, Rolfs RT, Nangle BE, Horan JM. Effect of the interval between pregnancies on perinatal outcomes. The New England Journal of Medicine. 1999; 340(8):589– 594.
3. Zhu BP, Haines KM, Le T, McGrath-Miller K, Boulton ML. Effect of the interval between pregnancies on perinatal outcomes among white and black women. American Journal of Obstetrics and Gynecology. 2001; 185(6):1403–1410.
4. Khoshnood B, Lee KS, Wall S, Hsieh HL, Mittendorf R. Short interpregnancy intervals and the risk of adverse birth outcomes among five racial/ethnic groups in the United States. Am J Epid. 1998; 148(8):798–805.
5. Shults RA, Arndt V, Olshan AF, Martin CF, Royce RA. Effects of short interpregnancy intervals on small-forgestational age and preterm births. Epidemiology. 1999; 10(3):250–254
6. Fuentes-Afflick E, Hessol NA. Interpregnancy interval and the risk of premature infants. Obstetrics and Gynecology. 2000; 95(3):383–390.
7. DeFranco EA, Stamilio DM, Boslaugh SE, Gross GA, Muglia LJ. A short interpregnancy interval is a risk factor for preterm birth and its recurrence. Am J Obstet Gynecol. 2007;197(3):264.e1–264.e6.
8. Shults RA, Arndt V, Olshan AF, Martin CF, Royce RA. Effects of short interpregnancy intervals on small-forgestational age and preterm births. Epidemiology. 1999;10(3):250–254.
9. Smith GC, Pell JP, Dobbie R. Interpregnancy interval and risk of preterm birth and neonatal death: retrospective cohort study. BMJ (British Medical Journal) 2003; 327(7410):313.
10. Klerman LV, Cliver S, Goldenberg RL. The impact of short interpregnancy intervals on pregnancy outcomes in a low-income population. American Journal of Public Health. 1998; 88(8):1182–1185.
11. National Family Health Survey (NFHS-3) 2005–06.
12. IIPS (International Institute for Population Sciences), Mumbai, India; 2007.
13. Fuentes-Afflick E, Hessol NA. Interpregnancy interval and the risk of premature infants. Obstetrics and Gynecology. 2000; 95(3):383-390.
14. DeFranco EA, Stamilio DM, Boslaugh SE, Gross GA, Muglia LJ. A short interpregnancy interval is a risk factor for preterm birth and its recurrence. Am J Obstet Gynecol. 2007;197(3):264.e1-264.e6.
15. Shults RA, Arndt V, Olshan AF, Martin CF, Royce RA. Effects of short inter pregnancy intervals on small-for-gestational age preterm births. Epidemiology. 1999;10(3):250-254.
16. Srivastav. R, Srivastav D. K., Jina R. Contraceptive knowledge attitude and practice (KAP survey) J.Obstetric Gynaecol. India 2005:55 (546-550)
17. Evaluation of Safety, Efficacy, and Expulsion of Post- Placental and Intra-Cesarean Insertion of Intrauterine Contraceptive Devices (PPIUCD) 2014 Oct; 64(5): 337–343.
18. Projestine Muganyizi S, Grasiana Kimario Patrick Ponsian, Kate Howard, Maya Sethi, Anita Makins; Clinical outcomes of postpartum intrauterine devices inserted by midwives in Tanzania; Int. J Gynecol Obstet. 2018;143(Suppl. 1):38-42.