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Original Research Article

A Hospital Based Study Evaluate the Factors That Affect the Acceptance of PPIUCD

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Abstract

Aim: The aim of the present study was to evaluate the acceptance, safety, side effects and complications and failure rate of associated with immediate post-partum intrauterine contraceptive device (PPIUCD) insertion.

Material & Methods: A Prospective Study was conducted on all Adult ANC women attending Department of Obstetrics and Gynaecology and as well as admitted in hospital wards or Labour Room who fulfil the inclusion criteria within the duration of 18 months.

Results: Out of 11,550 patients who delivered during this period, 1155 (10%) patients had agreed for PPIUCD insertion after counseling, but only 500 (43.30%) patients reported for follow up. Distribution of patients according to time of insertion of PPIUCD which shows that 48.32% patients got PPIUCD inserted post placental after normal vaginal delivery and 40% after LSCS. Most of the patients were in the age group of 25 to 35 years and with two or three parity. Out of 500 patients who came for follow up, 270 patients came with one or other complaints while 230 patients reported for routine follow up. The continuation rate of PP IUCD in our study was 90% (450/500) while 50 (10%) patients got it removed due to various reasons.

Conclusion: Immediate PPIUCD is safe and effective method of contraception with a high retention rate. Though acceptance in initial months was less but it gradually increased over time with increasing awareness, counselling of patients and training of health personnel.

Keywords: Contraception, Complications, Expulsion rate**,** Intra uterine contraceptive device, PPIUCD, CuT 380 A, CuT 375.

Introduction

Contraception methods by definition mean to prevent unwanted pregnancy by temporary or permanently. [1] Intra uterine contraceptive device (IUCD) to prevent pregnancy is one of the oldest methods of contraception. India is second largest populated country in the world with 120 million according to 2011 census. [2] It contributes 17.5% of world's population by adding around 25 million births every year. [3] Till 2 years after delivery, a woman will not be ready physically to conceive and delivery. Studies were found that conceiving within two years leads to adverse events like abortion, premature labour, postpartum haemorrhage, low birth weight babies, foetal loss sometimes maternal deaths. Hence advising and practicing contraception with in postpartum period good for women health. [4]

One of the major hurdles in the way to achieve the goal of family planning in India is unmet needs for contraception. Approximately 27% of births in India occur in less than 24 months after a previous birth, another 34% of births occur between 24 and 35 months; 61% of births in India occur at intervals that are shorter than the recommended birth-to-birth interval of approximately 36 months. Family planning can avert nearly one-third of maternal deaths and 10% of child mortality when couples space their pregnancies more than two years apart. Studies how that pregnancies taking place within 24 months of previous birth have a higher risk of adverse outcome like abortions, preterm labour, postpartum haemorrhage, low birth weight babies, foetal loss and maternal death. [5] Immediate postpartum period is an ideal time to educate and counsel women on exclusive breastfeeding, future fertility, birth spacing or limiting family size along with provision of appropriate family planning methods. Only 26% of women are using some method of family planning during the first year of postpartum. [6,7]

The modern IUCD is highly effective, safe, private, long acting, coitus independent and rapidly

reversible method of contraception with fewer side effects. It can be inserted safely, just after delivery within 10 minutes, during the first 48 hours after delivery when it is called post-partum intra uterine contraceptive device (PPIUCD), 6 weeks postpartum (extended postpartum), after an abortion (post abortal), after menstrual cycle (interval IUCD) or as an emergency contraceptive. Despite of many advantages associated with IUCD as a method of contraception, it generally suffers from disadvantage of unpopularity in India. About 1 out of 5 women in reproductive age group all over the world use IUCD while in India, it is used only by 3 in 100 women. [8] Woman on exclusive breast feeding, future fertility, birth spacing or limiting intentions and provision of appropriate family planning methods like IUCD and permanent sterilization. Postpartum period is generally considered to be an ideal time to introduce contraception since women are strongly motivated at this time. Even though expulsion rate for PPIUCD is higher, benefits of providing highly effective contraception immediately after delivery outweigh this disadvantage. [9] The Government of India provided IUCD free of cost, nonetheless, it still was largely underutilized. Hence, there is a need to identify factors that affect the acceptance of PPIUCD provided through a public health approach.

This study aims to evaluate the safety, efficacy, complications and continuation of PPIUCD in tertiary care center.

Material & Methods

A Prospective Study was conducted on all Adult ANC women attending Department Of Obstetrics And Gynaecology, NMCH, Sasaram, Bihar, India and as well as admitted in hospital wards or Labour Room who fulfil the inclusion criteria within the duration of 18 months. Out of 11,550 patients who delivered during this period, 1155 (10%) patients had agreed for PPIUCD insertion after counseling, but only 500 (43.30%) patients reported for follow up.

Inclusion Criteria:

a) Women willing for post placental (within 10 mints removal of placenta) or intracaesarean /transcaesarean IUCD insertion following delivery and follow up.
b) Women meeting all the eligibility criteria for immediate postpartum IUCD insertion.

Exclusion Criteria: Women having –

a) Chorioamnionitis or puerperal sepsis
b) Prolonged rupture of membrane>18hrs
c) Extensive genital trauma.
d) Unresolved PPH
e) Any abnormality of Uterus or a large Fibroid distorting its Cavity.
f) Pelvic inflammatory disease
g) Malignant or benign Trophoblastic disease
h) HIV/AIDS
i) Refuse to participate
j) Allergy to copper.

Statistical analysis

Appropriate statistical software Appropriate statistical technique was applied using available standard statistical software. To compare means T test or Mean Whitney U test was used depending on distributions pattern of the Observations Chi-square Test or its variant was considered to compare different proportions.

Results

Table 1: Follow up of patients

Total PPIUCD Insertion	**1155 (10%)**
Not came for follow up	350
Reported for follow up	500
Reported < 6 weeks	10
Reported between 6 weeks to 6 months	155
Reported between 6 months to 1 year	130
Reported >1 year	60

Out of 11,550 patients who delivered during this period, 1155 (10%) patients had agreed for PPIUCD insertion after counselling, but only 500 (43.30%) patients reported for follow up.

Table 2: Distribution of patients according to time of insertion of PPIUCD

Time of insertion of PPIUCD	**Number of patients**	**% of patients**
Post placental after normal vaginal delivery	462	40
Within 48 hours of delivery	135	11.68
Post placental after LSCS	558	48.32
Total	1155	100

Distribution of patients according to time of insertion of PPIUCD which shows that 48.32% patients got PPIUCD inserted post placental after normal vaginal delivery and 40% after LSCS.

Table 3: Demographic profile of patients with PPIUCD insertion

Age in years	Number of women (500)	Percentage
20-24	100	20
25-30	150	30
30-34	170	34
>35	80	16
Parity status		
P1	75	15
P2	155	31
P3	175	35
>P4	95	19
Status of education		
Illiterate	120	24
Up to high class	210	42
Graduate	168	33.6
Post graduate	2	0.4

Most of the patients were in the age group of 25 to 35 years and with two or three parity.

Table 4: Distribution of patients according to complaints at follow up

Total patients for follow up	N	Percentage
Routine follow up	230	46
Patients with complaints	270	54
Missed thread	130	26
Bleeding P/V	50	10
Pain abdomen	40	8
Spontaneous expulsion	25	5
Cu T failure	4	0.80

Out of 500 patients who came for follow up, 270 patients came with one or other complaints while 230 patients reported for routine follow up.

Table 5: Distribution of patients according to reasons for removal

Reasons for removal	Number (50)	%
Bleeding Per vaginum	17	34
Misplaced IUCD/partial expulsion	7	14
Pain abdomen	14	28
Cu T failure	3	6
Infection	2	4
Want to conceive	5	10
Needing another method of contraception	2	4

The continuation rate of PP IUCD in our study was 90% (450/500) while 50 (10%) patients got it removed due to various reasons.

Discussion

The immediate postpartum period is particularly a favourable time for IUCD or implant insertion as women at this time are highly motivated to use contraception. They are known not to be pregnant at this time and the hospital setting also offers convenience and provision for both the patient and the health care provider to avail the facility. Also, the women are at risk of an unintended pregnancy in the period immediately after delivery. [10]

Out of 11,550 patients who delivered during this period, 1155 (10%) patients had agreed for PPIUCD insertion after counseling, but only 500 (43.30%) patients reported for follow up. Distribution of patients according to time of insertion of PPIUCD which shows that 48.32% patients got PPIUCD inserted post placental after normal vaginal delivery and 40% after LSCS. Most of the patients were in the age group of 25 to 35 years and with two or three parity. Misha S et al [11] found high acceptancy among women who completed their primary and secondary school education. Kanhere A et al[4] found women who completed primary and secondary school level had high acceptancy 25% & 38%) compared to illiterates(13%). Gunjan goswamy et al [12], also found more acceptors were women who completed secondary school education (49%) followed by primary school (23%), compared to illiterates (13%). Vidyaramana et al [13] found more

literacy will lead to acceptancy (15.7%) compared to illiteracy (5.3%). Above all studies and current study reiterates that educational status has definitely high influence in acceptancy of PPIUCD.

Out of 500 patients who came for follow up, 270 patients came with one or other complaints while 230 patients reported for routine follow up. Mishra S et al [11] where 59.98% women visited for follow up. The continuation rate of PP IUCD in our study was 90% (450/500) while 50 (10%) patients got it removed due to various reasons while in a study done by Ahuja et al [14] bleeding per vaginum was the main complaint by the patients (23.5%).8 Excessive bleeding settled with hemostatics within 1 - 3 months and option of removal was given to them when it did not settle with usual treatment. It is similar to the study conducted by Yousef et al in Jordan and also Sharma M et al where they had discontinuation of PPIUCD in the range of 16.79% in the first year of their study. [15,16] While discontinuation rate was higher 28% in a study conducted in Egypt by Mahdy et al. [17]

Conclusion

Immediate PPIUCD is safe and effective method of contraception with a high retention rate. Though acceptance in initial months was less but it gradually increased over time with increasing awareness, counselling of patients and training of health personnel. Proper counseling of patients in antenatal period and further reinforcing counseling during early labour and even further during early post-partum period can increase the acceptability PPIUCD (Post placental and within 48 hours of delivery). Acceptance can be further increased by creating awareness among people through various media resources and by training health personnel to obtain necessary skills so as to decrease expulsion rate and complications. Thus postpartum IUCD after normal vaginal delivery and after lower segment caesarean section seems a good option for women for prevention of unplanned and unwanted pregnancies as it is safe, convenient, long acting, requiring one time motivation, does not interfere with lactation, provides adequate birth spacing, immediately reversible and does not need repeated health care visits for contraceptive refills. Excessive bleeding being the most common cause for removal but hemostatics, hematinics and timely treatment of infection can reduce it further.

References

1. Park K. social and preventive medicine. 23rd ed. Jabalpur: Banarsidas bhanot; 2015.
2. India at Glance - Population census 2011. Census organization of India, 2011.
3. Post-partum. IUCD reference manual. New Delhi: Family Planning Division, Ministry of Health and Family Welfare, Government of India; 2010.
4. Kanhere A, Pateriya P, Jain M. Acceptability and Feasibility of Immediate postpartum IUCD insertion in a tertiary care centre in Central India. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. [Internet]. 2015;4(1):1.
5. Arup Kumar Majhi; Importance of PPIUCD in perspective of present Indian Population Scenerio; Indian Journal of Perinatology & Reproductive Biology. March 2012; Vol 2; No. 2;)
6. Singal S, Bharti R, Dewan R. Clinical outcome of post placental copper T 380 A insertion in women delivering by caesarean section. J Clin Diagn Res. 2014;8(9):04.
7. Ross JA, Winfrey WL. Contraceptive use, intention to use and unmet need during the extended postpartum period international family planning perspectives. Int Fam Plann Persp. 2001;27(1):20-7.
8. IUD guidelines for family planning service programme by Piiego JH. USAID; 2006.
9. Kumar S, Sethi R, Balasubramaniam S, Charurat E, Lalchandani K, Semba R, et al. Women's experience with postpartum intrauterine contraceptive device use in India. Reprod Health 2014;11:32.
10. Vernon R. Meeting the family planning needs of postpartum women. Studd Fam Plann. 2009; 40(3):235-45.
11. Mishra S. Evaluation of Safety, Efficacy, and Expulsion of Post-Placental and Intra-Cesarean Insertion of Intrauterine Contraceptive Devices (PPIUCD). J Obstet Gynaecol India. 2014; 64 (5):337-43.
12. Goswami G, Yadav K, Patel A. A prospective study to evaluate safety, efficacy and expulsion rate of post placental insertion of intra uterine device. Journal of Evolution of Medical and Dental Sciences. 2015 Jul 13;4(56):9770-5.
13. Vidyarama R, Nagamani T, Ppiucd K. Ppiucd As A Long Acting Reversible Contraceptive (Larc) – an Experience at A Tertiary care Centre. 2015. pp. 5–7.
14. Ahuja R, Rathore A. Continuation rates of postpartum intrauterine device (IUCD) insertion: randomized trial of post placental versus immediate postpartum insertion. BJOG Int J Obstet Gynaecol. 2014;121(2):9-117.
15. Khader YS, EL Quaderi S, Khader M. Intrauterine contraceptive device disconti-nuation among Jordanian women rate, causes and determinants. J Fam Plan Repro Health Care. 2006;32(3):16.
16. Mahdy NH, El Zeiny NA. Probability of contraceptive continuation and its determinants. EMHJ-Eastern Mediterranean Health Journal, 5 (3), 526-539, 1999. 1999.
17. Sharma M, Joshi S, Nagar O, Sharma A. Determinants of intrauterine contraceptive device discontinuation among Indian women. The Journal of Obstetrics and Gynecology of India. 2014 Jun;64:208-11.