Analysing Barriers In Acceptance of Postpartum Intrauterine Device (PPIUCD) At Tertiary Care Hospital of Gujarat

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Abstract: Background: Indian women have more children than desired and often too closely together due to limited choice of available family planning services. Intrauterine contraceptive devices (IUCDs) have been used by women in India for decades for spacing pregnancies. Our study intended to determine acceptance of Postpartum IUCD (PPIUCD) after structured counseling in mothers delivering at our institute. We have also analyzed various barriers for not accepting PPIUCD insertion as a method of contraception. Methods: An Interventional study was carried among 210 pregnant mothers visiting antenatal outpatient department of a SSG hospital (SSGH) fulfilling the eligibility criteria. Mothers were counseled about need and choice available for post partum contraceptive method including PPIUCD. Her willingness to use PPIUCD and in case if she refuses, reasons for rejection of PPIUCD were noted. Data was entered in Microsoft Excel sheet; analyzed using Epi-Info Software and statistical inferences were drawn by applying test of significance such as Chi square test etc. Results: Acceptance for PPIUCD among the participants before counseling was 14.76%. Most common reason for rejecting PPIUCD was fear of pain in 111 women (62.01%). With the help of counseling, acceptance increased to 59.05%.Among all these women who accepted PPIUCD verbally antenataly, 82 women (39.05%) allowed post partum insertion(out of total 210 women). so the actual PPIUCD insertion rate comes to 39.05%. Interpretation and conclusion: Well structured and balanced counseling provided during antenatal period significantly increases acceptance rate of PPIUCD. Fear of side effects of IUCD was the major hurdle for rejection noted during the study. [Hardik V NJIRM 2017; 8(5):9-12]

Key Words: PPIUCD, Family planning, Postpartum Contraception.

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Introduction: India is the second most populated country in the world after China with more than a billion people and approximate 250 women having a maternal mortality rate 254/100000 live birth. India has one of the highest numbers of maternal death in the world. Indian women have more children than desired and often too closely together due to limited choice of available family planning services. As published by Zhu[1] and Rustin[2], short intervals between births are linked to higher maternal and child mortality and morbidity with negative consequences such as low birth weight and preterm birth.

Half of all pregnancies are unintended, and these pregnancies have been associated with adverse pregnancy behaviors and outcomes, including later entry into prenatal care, increased incidence of low birth weight, and decreased breast feeding as stated by Gipson et al[3].

In the past 40 years, family-planning programs have played a major part in raising the prevalence of contraceptive practice from less than 10% to 60% and reducing fertility in developing countries from six to about three births per woman. Research done by Cleland et al states that in half of the 75 larger low-income and lower-middle income countries, contraceptive practice remains low and fertility, population growth, and unmet need for family planning are high[4]. The postpartum period is a critical time to address high unmet family planning need and to reduce the risks of closely spaced pregnancies as published by Gaffield et al [5].

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. Postpartum women need a range of effective contraceptive methods to be able to prevent an unplanned pregnancy, within a short interval [2, 4].

Contraceptive methods suitable for postpartum women include sterilization, intrauterine contraceptive devices (IUCDs), barrier methods, oral contraceptives, implants, injectables, breastfeeding, and natural family planning. IUCDs are effective, reversible, and can be inserted as early as 10 minutes following placental delivery. Natural family planning requires providing women with information on fertility awareness [6].

The modern IUCD is highly effective, safe, long acting, coitus independent and rapidly reversible method of contraception with few side effects. It is most cost

effective method of contraception today. Many women also find the IUCD to be very convenient because it requires little action once it is in place [2].

Intrauterine contraceptive devices (IUCDs) have been used by women in India for decades for spacing pregnancies. In some of the health facilities, it has also been provided to women in the immediate postpartum period. Returning to health facilities for postpartum services after delivery is challenging to mothers who have competing demands. Taking advantage of the immediate postpartum period for counseling on family planning and IUCD insertion, overcomes multiple barriers to service provision. The increased institutional deliveries are the opportunity to provide women easy access to immediate PPIUCD services as stated in PPIUCD Reference Manual by Government of India [7].

Requiring only one-time motivation, the IUCD appears to be an ideal method for spacing child births. Despite the high rate of expulsion, post-partum insertion of Cu-T has a role in family planning in the rural setting where some women come to the hospital only for delivery.

Intrauterine Contraceptive device (IUCD) insertion is convenient and efficient in the post placental and immediate postpartum periods. Insertion at these times is demonstrably safe, having a low incidence of infection, few bleeding problems, and low perforation rates. IUCD expulsion rates can vary widely, and are a function of timing of insertion, type of IUCD, and insertion technique [8].

In India, although a number of contraceptive choices are available, the usage of contraceptive methods among postpartum women is rather low. The current study intended to determine acceptance and actual rate of PPIUCD insertion and to analyze barriers for PPIUCD insertion.

Methods: An Interventional study was carried among the pregnant mother visiting antenatal outdoor patient department of a SSG hospital (SSGH), during their 28 to 36 week of pregnancy over a period of 12 months starting from December 2015 to November 2016.

Considering Current PPIUCD acceptance rate of 3.7% in our hospital and proposed acceptance rate of 20% post intervention, the sample size for this study was decided to be 210.

Those who were known case of STI/RTI and had a history of medical diseases like heart disease ,sickle cell disease, jaundice or known case of intramural/submucosal fibroid or congenital malformation of uterus etc were excluded from the study. The study protocols were approved by Scientific Ethics and Research Committee (SERC), Medical College and SSG Hospital, Baroda.

Mothers attending antenatal OPD of SSGH were counseled about need and choice available for postpartum contraceptive, her views and opinion and reasons for rejection of a particular method were noted. Data was entered in Microsoft Excel sheet, analyzed using Epi-Info Software and statistical inferences were drawn by applying test of significance such as Chi square test etc.

Results: Result of our study are tabulated in below tables

Table I: Acceptance rate of PPIUCD

	Pre Counseling	Post Counseling (Verbal Acceptance)	Chi square 86.546 P value < 0.0001
Decision to use PPIUCD	**Number of participants (N = 210) Frequency (%)**	**Number of participants (N = 210) Frequency (%)**	
Acceptance	31 14.76	124 59.05	
Rejection	179 85.24	86 40.95	

Acceptance for PPIUCD among the participants before counseling was 14.76%. With the help of structured counseling, acceptance increased to 59.05%. This result was statistically significant with p<0.0001. (Table I) Most common reason for rejecting PPIUCD was fear of pain in 62.01%women. With the help of counseling reasons for rejection were significantly reduced. After counseling also, main reason for rejection still remained fear of pain (61 women-70.93%). (Table II)

Table II: Factors affecting women's rejection of PPIUCD

Reason For Rejection	Pre Counseling	Post Counseling
Factors affecting women's rejection	**Number of participants (N = 179) Frequency (%)**	**Number of participants (N = 86) Frequency (%)**
fear of pain	111 62.01	61 70.93
fear of heavy bleeding	43 24.02	32 37.21
Religious belief	39 21.79	15 17.44
risk of expulsion and failure of Contraception	44 24.58	15 17.44
Bad past experience	23 12.85	12 13.95
Other	83 46.37	34 39.53

Table III: Actual insertion rate of PPIUCD

	Post Counseling (Verbal Acceptance)	Post Delivary (Actual Insertion)	P value <0.0001
Decision to use PPIUCD	**Number of participants (N = 210) Frequency (%)**	**Number of participants (N = 210) Frequency (%)**	
Acceptance	124 59.05	82 39.05	
Rejection	86 40.95	128 60.95	

Table IV: Factors affecting women's refusal for insertion of PPIUCD

Reason for rejection	Number of participants (N = 42) Frequency (%)
Family members advice	06 (14.3)
Wants other method	13 (30.95)
Does not want to decide now as disturbed because of labour pain)	21 (50)
other	02 (4.76)

Among all these women who accepted PPIUCD verbally antenataly, 82 women allowed post partum insertion, so the actual PPIUCD insertion rate comes to 39.05%. (Table III)Those women who accepted PPIUCD during counseling antenataly, and rejected later on gave following reasons for their rejection: want interval IUCD they were feeling exhausted because of labour pain they had. (50%), (Table IV)

Table V. Impact of counseling on women choice of PPIUCD as a contraceptive method

	Pre Counseling	Post Counseling (Verbal Acceptance)	Post Delivary (Actual Insertion)
Decision to use PPIUCD	**Number of participants (N = 210) Frequency (%)**	**Number of participants (N = 210) Frequency (%)**	**Number of participants (N = 210) Frequency (%)**
Acceptance	31 (14.76)	124 (59.05)	82 (39.05)
Rejection	179 (85.24)	86 (40.95)	128 (60.95)

Acceptance among the participants before counseling was 14.76% .With the help of structured counseling, acceptance increased to 59.05%. This test was statistically significant with p<0.0001. Among all these women who accepted PPIUCD verbally antenataly, 82 women (39.05%) allowed post partum insertion, so the actual PPIUCD insertion rate comes to 39.05%. (Table V)

Discussion: Postpartum period is one of the critical times when both woman and newborn need a special and integrated package of health services as morbidity and mortality rates are quite high during this period Also the women are vulnerable to unintended pregnancy. Studies show that pregnancies taking place within 24months of a previous birth have a higher risk of adverse outcomes like abortions, premature labour, postpartum haemorrhage, low birth weight babies, foetal loss and maternal death. In India current use of IUCD as a method of family planning is only 2%[2].

The immediate postpartum period is a particularly favorable time for IUCD or implant insertion. Women who have recently given birth are often highly motivated to use contraception, they are known not to be pregnant, and the hospital setting offers convenience for both the patient and the health care provider. In addition, women are at risk of an unintended pregnancy in the period immediately after delivery. In a study by Brito et al [9], women were

instructed to abstain from sexual intercourse until 6 weeks postpartum, 45% of participants reported unprotected sex before that time. This study explored the impact of a counseling session on post partum contraceptive choices made by women. The session was provided during antenatal visits. The changes in views or opinion in pre and post counseling session was measured and various factors affecting their decisions were noted.

Counseling helped women to understand many benefits of PPIUCD over other methods. A large number of women, who have chosen this method post counseling, did so as it was not interfering with their breast feeding practice. Other reasons reported by women for choosing PPIUCD were its immediate reversibility and long term protection. They were also convinced that PPIUCD is having fewer side effects compared to interval IUCD. With help of counseling, we were able to achieve statistically significant change in percentage of women having positive attitude towards use of PPIUCD (p value <0.0001). No other study so far has evaluated women's knowledge of PPIUCD in such a way. Most common reason for not choosing IUCD was fear of side effects leading on top and other reasons were family member's advice, religious belief, risk of expulsion and previous bad experience. This is consistent with cross sectional study conducted by Bhasin et al.[10] in Delhi.

As per our study, PPIUCD acceptance rate was increased from 14.76% to 59% in a post counseling session during antenatal period. All these women were followed up during and after their delivery and out of these, only 82 women actually consented post delivery for PPIUCD insertion. Rest of the women who accepted it conceptually, refuse it later. Most of them (50%) were trying to postpone insertion procedure as they were feeling exhausted because of labour pain they had. It was also noticed that ASHA and other primary health care workers were the main source of knowledge regarding contraception for these women. So we can strengthen this bond further to increase acceptance rate of post partum contraception. antenatal period is the preferred time for contraception counseling with 71% women opted for it. Most of them also opted for personal counseling sessions with preferably involvement of their husband.

Conclusion: Findings from the study provide evidence that well structured and balanced counseling provided during antenatal period significantly increase acceptance rate of PPIUCD.Fear of side effects of IUCD was the major hurdle which if addressed carefully, can convince women to use PPIUCD as their preferred postpartum contraception.

References:

1. Zhu BP. Effect of interpregnancy interval on birth outcomes: findings from three recent US studies. International Journal of Gynecology & Obstetrics. 2005 Apr 30;89:S25-33
2. Rutstein SO. Further evidence of the effects of preceding birth intervals on neonatal infant and under-five-years mortality and nutritional status in developing countries: Evidence from the Demographic and Health Surveys.
3. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. Studies in family planning. 2008 Mar 1;39(1):18-38.
4. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. The Lancet. 2006 Nov 24;368(9549):1810-27.
5. Gaffield ME, Egan S, Temmerman M. It's about time: WHO and partners release programming strategies for postpartum family planning. Global Health: Science and Practice. 2014 Feb 1;2(1):4-9.
6. Postpartum contraceptive methods. Network (Research Triangle Park, NC). 1990;11(3):10-1.
7. Division FP, Welfare F. Postpartum IUCD Reference Manual. 2010;(November).
8. O'Hanley K, Huber DH. Postpartum IUDS: keys for success. Contraception. 1992 Apr;45(4):351–61.
9. Brito MB, Ferriani RA, Quintana SM, Yazlle MEHD, Silva de Sa MF, Vieira CS. Safety of the etonogestrel-releasing implant during the immediate postpartum period: a pilot study. Contraception. 2009 Dec;80(6):519–26.
10. Bhasin SK, Pant M, Metha M, Kumar S. Prevalence of Usage of Different Contraceptive Methods in East Delhi- A Cross Sectional Study. Indian J Community Med. 2005;30(2):25–7.

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