



Changing trend of PPIUCD acceptance: Hospital based study

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ABSTRACT

Integrating IUCD insertion with delivery services optimizes opportunities for women to obtain an appropriate long term, reversible family planning method. Aim of the study was to evaluate the acceptance of PPIUCD in the community and factors influencing it. It was a prospective, interventional study conducted over a period of one year at Department of Obs & Gynae, MLB Medical College Jhansi, comprised of 513 women in whom acceptance of PPIUCD was noted and evaluation of associated factors was done. All antenatal women between 36-42 weeks of gestation who anticipate delivery and counselled were included. Follow up was at 6 weeks. Out of 513 women counselled for PPIUCD, 306 accepted it. Acceptance was significantly high~ 60%. Multipara had significantly higher acceptance. Most common reason for acceptance was counselling. At 6 weeks 88.33% females were happy with PPIUCD and wanted to continue it. Bleeding p/v was the most common reason for removal. Key words PPIUCD, ACCEPTANCE, COUNSELLING

KEYWORDS :

Introduction

Family planning is important not only for population stabilization, but it has been increasingly realized that family planning is central to improve maternal and newborn survival and health. India accounts for more than 20% of global maternal and child deaths, most of them preventable¹. In spite of availability of wide range of contraceptives, the unmet need for family planning in India is estimated to be 21.3% by DLHS III survey². The common reasons for unmet need are unsatisfactory services, lack of information, and fear about side effects of contraceptive methods. Studies showed that pregnancies taking place within 24 months of previous birth have higher risk of adverse outcome like abortion, premature labour, postpartum haemorrhage, low birth weight babies, fetal loss, and maternal death^{3,4}. The recommended interval before attempting the next pregnancy is at least 24 months in order to reduce the risk of adverse maternal, perinatal and infant outcomes^{4,5}. Postpartum IUDs provide a high level of efficacy in the absence of systemic metabolic effects, and ongoing motivation is not required to ensure efficacy once the device has been placed⁶. The CuT380A is approved to remain in place for 10 years. With perfect use the probability of pregnancy in the first year is 0.6 percent; with typical use, the first-year pregnancy rate is 0.5 to 0.8 percent⁷. Integrating IUCD insertion with delivery services optimizes opportunities for women to obtain an appropriate long term, reversible family planning method before returning home⁸. It is also seen that women are highly motivated and receptive to accept family planning methods during the postpartum period and this is the best time when a woman is in contact with the health care facility. Appropriate times for IUCD insertion in the postpartum periods include the post-placental IUCD insertion, the immediate postpartum IUCD insertion and the transcaesarean IUCD insertion. In 2008, the Government of India took the initiative to revitalize the PPIUCD services in the country. This initiative was taken to address the high unmet need for postpartum family planning (PPFP) services beyond sterilization, and to help improve pregnancy spacing, which would contribute in improving maternal and child morbidity and mortality status throughout the country⁹. Factors like socioeconomic background, parity, educational status, communication between husband & wives, religious beliefs, son preference, awareness and access to family planning services influences the acceptance of PPIUCD¹⁰. **Material and methods** The present study is a prospective, interventional study to evaluate the

acceptance of PPIUCD and factors influencing it. PPIUCD inserted within ten minutes of placental expulsion up to 48 hours after delivery in women delivered at Department of Obs & Gynae, MLB Medical College Jhansi (UP) between May 2014 to September 2015. All antenatal women between 36 to 42 weeks of gestation who anticipate delivery (vaginal / C-section) and counselled for PPIUCD were included. PPFP Counselling was done as a part of study either during their antenatal visit or while preparing for a scheduled caesarean section or early labour or post partum period (within 48 hrs). If females were willing to use PPIUCD then we used *WHO Medical Eligibility Criteria*¹ for client assessment. Table 1 about medical eligibility criteria was at the end of this article. Follow up schedule was at 6 weeks after PPIUCD insertion. Percentage and chi square test were used for statistical analysis. **Observation** Total 513 women counselled for PPIUCD and 306 women accepted it. Acceptance of PPIUCD was around 60%. After counselling only around 40% of female refused to use it. Table 2 about Acceptance of PPIUCD was at the end of this article. Most females (62.09%) were in age group 18-25 years. Hindu community contributed around 91.5% while Muslim community contributed only around 8.5%. Women accepted PPIUCD were mostly rural (77.12%) and only 22.88% were urban. Around 83% of the total study population which accepted PPIUCD belonged to low socioeconomic status. Around 55% women educated below 5th std, 16% were illiterate and 29% educated above 5th std. Around 51% women counselled prior to LSCS, 43% during early labour and only 6% counselled during their antenatal visits. Around 54% of PPIUCDs were inserted during caesarean section. Post placental insertions were 42.48% and 3.60% PPIUCDs were inserted within 48 hrs after delivery. Acceptance of PPIUCD was around 58% in multiparous women and around 42% in primiparous women. Most common reason behind acceptance of PPIUCD was PPFP counselling (~60%) whether antenatal, during early labour or prior to caesarean section. Second most common reason (22.22%) for acceptance was completed family. 11.11% were motivated by ASHA and 6.54% wanted birth spacing. Table 3 about the common reasons behind acceptance of PPIUCD was at the end of this article. 44.77% (137) women came for follow up at 6 weeks. 55.23% (169) females were lost from study during follow up. 11.67% followed up females wanted removal of PPIUCD at 6 weeks while 88.33% females were happy with PPIUCD and wanted to continue it. Bleeding per vaginam was the most common reason behind the removal of PPI-

UCD accounted for 37.5%. Second most common reason was missing strings in 25% females. Other reasons were infection, expulsion and pelvic pain together accounted for 37.5%.

Discussion

In our study acceptance of PPIUCD was around 60%. In studies done previously the acceptance ranges between 25-40%^{8, 11}. In a study in Tanzania with 369 women counselled, a total of 102 (27.6%) were accepted PPIUCD¹². In comparison to those studies the acceptance in our study was significantly high. In our study most females (62.09%) were in age group 18-25 years. Katheit G et al (2013) also found that acceptance of PPIUCD was higher in the age group of 21-25 years (50.88%)⁸. PPIUCD acceptance was significantly higher in Hindu community (91.5%). In Muslim community acceptance was only around 8.5%. This huge difference may be because they are minority population and their different cultural/religious belief. 77.12% rural and 22.88% urban population accepted PPIUCD. These differences are not statistically significant may be because urban population is less than the rural population attending the institute or may be because urban population is economically stronger than rural population and can afford better health care services than govt. medical institutions. Around 83% of women accepted PPIUCD belonged to low socioeconomic status. Reason may be that for these women, this was the best opportunity to receive information about contraception when they were in contact with healthcare providers. In our study acceptance of PPIUCD was higher among women with up to primary education or above (~84%), than those with no formal education (~16%). Similar to a study done in Egypt by Safwat et al where women with no formal education had an acceptance of 9.4% while those with formal education had 19.4%¹¹. Around 51% women counselled prior to LSCS, 43% during early labour and only 6% counselled during their antenatal visits. Glazer, A.B., Wolf, A., & Gorby, N. (2011) also concluded that prenatal visits and postpartum contact with health care providers create an opportunity to discuss family planning and contraception¹³. Around 54% of PPIUCDs were inserted PPIUCD during caesarean section. Post placental insertion was 42.48% and 3.60% PPIUCDs were inserted within 48 hrs after delivery. According to program learning for PPIUCD integration with maternal health services (MCHIP/USAID 2012) three different types of PPIUCDs were inserted in India, post placental 43%, intracaearean 36% and immediate 21%. This difference was may be because of small sample size. Acceptance of PPIUCD was around 58% in multiparous women and around 42% in primiparous women. This difference was statistically significant. Most common reason behind acceptance was PPFPP counselling (~60%). Second most common reason (22.22%) was completed family and others were motivated by ASHA (11.11%), 6.54% wanted birth spacing. Similar findings were reflected in the study done by Safwat et al in Egypt, where 16% of primiparous accepted the use of PPIUCD compared to one third of grand multiparous¹¹. At 6 weeks 55.23% (169) females were lost from study during follow up while only 44.77% (137) women came for follow up. 11.67% followed up females wanted removal of PPIUCD at 6 weeks while 88.33% females were happy with PPIUCD and wanted to continue it. Bleeding per vaginam was the most common reason behind the removal of PPIUCD accounted for 37.5%. Second most common reason was missing strings in 25% females. Other reasons were infection, expulsion and pelvic pain together accounted for 37.5%. Similar results were found in study done by Rukiya Abdulwahab Mwinyi Ali (2012), expulsion rates of the immediate PPIUCD at 4 weeks interval was 6.4%, pelvic infection 3.2% and lost strings were 5.3%¹². Expulsion rate was 10.5% in the study of Katheit G et al (2013)⁸.

Conclusion

In India for last few years acceptance of PPIUCD was significantly increased. Most common reason behind this increased acceptance was PPFPP counselling.

Abbreviations

PPIUCD-Postpartum intrauterine contraceptive device, PPFPP- Postpartum family planning, DLHS-District Level Household and Facility Survey, ASHA-Accredited social health activist

Table 1: WHO Medical eligibility criteria for client assessment

Category 1	Condition for which there is no restriction for the use of the contraceptive method. Safely use.
Category 2	Condition where the advantages of using the method generally outweigh the theoretical or proven risks. Generally use.
Category 3	Condition where the theoretical or proven risks usually outweigh the advantages of using the method. Generally do not use.
Category 4	Condition which represents an unacceptable health risk if the contraceptive method is used. Do not use

Table 2: Acceptance of PPIUCD

Total no of females	513	Percentage
Accepted PPIUCD	306	59.64%
Not Accepted PPIUCD	207	40.36%

Table 3: Common reasons behind acceptance of PPIUCD

Reasons	No of females
Counselling	184 (60.13%)
Family completed	68 (22.22%)
Motivated by ASHA	34 (11.11%)
Wanted birth spacing	20 (6.54%)
Total	306

REFERENCES

- IUCD Reference Manual for Medical Officers and Nursing Personnel September, 2013 2. District level household and facility survey III 2007-08 (DLHS III). Ministry of health and family welfare, Government of India. 3. Conde-Agudelo, A, Belizan, JM, et al Maternal morbidity and mortality associated with interpregnancy interval: cross sectional study. *Br Med J*, 2000, 321(7271): 1255-9 4. Agustin Conde-Agudelo, et al, "Birth Spacing and the Risk of Adverse Perinatal Outcomes: A Meta-Analysis," *The Journal of the American Medical Association* 29 (April 19, 2006): 1809-1923. 5. World Health Organization, 2006 Report of a WHO Technical Consultation on Birth Spacing, 1 6. Janet E.Hall, The female reproductive system, infertility and contraception, Harrison's principles of internal medicine, 18th edition, chapter 347, p 3037-38 7. WHO Report. Mechanism of action, safety and efficacy of intrauterine devices. World Health Organ Tech Rep Ser 1987; 753:1. 8. Katheit G et al. *Int J Reprod Contracept Obstet Gynecol*. 2013 Dec;2(4):539-543 9. Scaling up of PPFPP/PPIUCD services in 16 States of India Fact Sheet – May 2012 10. Priya et al, *New Indian Journal of Surgery*: Oct 2011, Vol. 2 Issue 4, p246 11. Mohamed Safwat et al, Acceptability for the use of postpartum intrauterine contraceptive devices: The Assiut experience. *Medical Principles and Practice*, 2003, 12(3), 170-175 12. Rukiya Abdulwahab Mwinyi Ali, Dept of Obstetrics and Gynaecology, Muhimbili University of Health and Allied Sciences, Tanzania, November 2012 13. Glazer, A.B., Wolf, A., & Gorby, N. (2011). Postpartum contraception: needs vs. reality. *Contraception*, 83(3), 238-41. Epub 2010 Aug