

Post-Partum Intrauterine Contraceptive Device: Experience from Tertiary Care Hospital in Sindh Province Pakistan

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ABSTRACT

OBJECTIVE: To assess the acceptability, satisfaction and safety of Postpartum Intrauterine Contraceptive Device (PPIUCD) in women at tertiary care hospital at Pakistan.

METHODOLOGY: Retrospective review of records of 2012 women who received PPIUD at Department of Obstetrics and Gynecology at Liaquat University of Medical and Health Sciences Jamshoro from August 2014 to July 2016. Sample was selected using non probability convenient sampling technique and included all the women who were offered PPIUCD during the above given period. Demographic and reproductive information was recorded. Women's satisfaction with PPIUCD and problems related to it were noted at 6 weeks follow up. Data was analyzed using SPSS v 16.

RESULTS: During given time 27,180 women were delivered and 8,003 women were counseled for PPIUCD out of which 2,012 patients agreed for PPIUCD. Acceptance rate for PPIUCD was 25.1%. The Mean age \pm SD and mean parity \pm SD 29.8 \pm 3.68 years and 3.1 \pm 2.17 respectively. PPIUCD was placed during postplacental and postpartum period in 1271(63.1) and 268 (13.3%) women respectively. Out of 1311 who returned for follow up 1238(94.4%) were satisfied and 43(3.2%) requested for removal. Expulsion of PPIUCD was noted in only 83(6.3%) of woman.

CONCLUSION: Women coming for health facility delivery were having high level of acceptance for PPIUCD. Majority of women were willing to continue it as a method of contraceptive due to fewer side effects and high level of satisfaction.

KEY WORDS: PPIUCD, Contraception, Postpartum FP.

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INTRODUCTION

Fast development in people is generating financial issues on one hand while on the diverse hand it specifically will expand the wellbeing related inconveniences uncommonly the charge of obstetrical dreariness and mortality¹. The exclusively answer for this is control of newborn child conveyance through family unit arranging. Albeit prophylactic comprehension in Pakistan is truly over the top (>90%) regardless the preventative event rate (CPR) is low i-e 30%^{2,3}. One astonishing reason for this low CPR is socio-social setup of Pakistan in which disregarding ability of conceptive age female does never again need them to achieve the medicinal services center for getting a preventative technique between two pregnancies⁴.

It is exceptionally basic to see that for some, such ladies transport is a remarkable opportunity to take-up a prophylactic strategies like intrauterine preventative units (IUCDs). IUCD is 99% magnificent in halting pregnancy⁵. Worldwide; the IUCD is most widely utilized reversible preventative methodology as it keeps an expected 60 million unwanted pregnancies for every year. The IUCD remains magnificent for 5–12 years persistently. Copper-bearing IUCDs (CuT-380A and Multiload Cu-375) and hormone-containing

IUCDs (Levonorgestrel intrauterine framework LNG-IUS) are a portion of its types⁶.

IUCDs can be embedded not long after conveyance, or deferred for about a month and a half when a woman returns for an interests baby blues care visit⁷. If embedded up to forty-eight hours (however in a perfect world inside 10 minutes) of placental conveyance then it is alluded to as post-partum IUCD (PPIUCD) while whenever embedded after fourth week baby blues or totally disconnected to the being pregnant then it is known as interim IUCD^{8,9}. Literature reported that the complications with PPIUCD are minimal and successful placement is reported in 98% women. Along with successful placement the continuation rate up to 6 months is also very high (84.3%)¹⁰⁻¹². The Expulsion rate with PPIUCD is slightly high as 16 to 24% within 6 months^{13,14}.

PPIUCD is emerging as a popular method of contraception in South Asian countries¹⁵. However Very few experiences have been reported from Pakistan. Hence it is critical to generate the evidence on safety, acceptability and satisfaction of women with PPIUCD from Pakistan

The aim of the present study was to assess the safety, acceptability and satisfaction of women for PPIUCD insertion and among women with various

demographic backgrounds. The study results will help formulate recommendations for unmet need of family planning among women in Sindh Province, Pakistan

METHODOLOGY

Retrospective review of records of 2012 women patients who received PPIUD at Department of Obstetrics and Gynecology at Liaquat University of Medical and Health Sciences Jamshoro from August 2014 to July 2016 was done. Samples were selected using non probability convenient sampling technique and included all the women who were offered PPIUCD during the above given period. Total 8,003 women were counseled for PPIUCD, total 2,012 women agreed for PPIUCD.

Research was conducted in accordance with the Declaration of Helsinki and Departmental Permission was obtained from Chairperson.

The counseling of all these women was done during antenatal period, at the time of admission in labour ward and/or at the time of cesarean section and immediately after delivery by trained counselors and doctors who were performing delivery. After getting oral consent PPIUCD placed according to the standardized procedure. The data was extracted of these women from Labour room and Operation Theater registers procedure notes and entry forms.

The information regarding basic demography including age, parity, and area of residence, the previous method of contraception and willingness for PPIUCD was noted. The time of counseling and insertion of PPIUCD was recorded. The time of counseling was divided into three categories as at the time of delivery, after delivery or during postnatal period. The time of insertion was categorized as Postplacental (immediately after delivery of placenta after normal vagina birth), trans cesarean (immediately after delivery of placenta during cesarean birth) and postpartum (within 24 hours of vaginal birth).

Information at follow up after six weeks was also recorded. The complication including hemorrhage, infection, pain and expulsion was collected. It was also noted that whether women was willing to continue or discontinue the method was noted. Data was analyzed by SPSS version 16, while the frequencies, percentages and mean ±SD was calculated.

RESULTS

During given time 27,180 women were delivered and 8,003 women were counseled for PPIUCD out of it and 2,012 women agreed for PPIUCD. Those who were counseled, acceptance rate for PPIUCD was 25.1%. The Mean age women who accepted for PPIUCD as a method of contraception was 29.8years ± SD= 3.68 (Range: 19-40 years) while mean parity ± SD parity was 3.1±2.17 children, Range (1 to 14). More than half of women were among 26-30 years, while less than 25 years were 367(18%) Likewise;

those of age >37 were 72 (3.5%).

Nearly 1441 (71%) of woman had 1-3 children while only 97(4.8%) have more than 7 children. Majority 1212(60.2%) of women belonged to urban areas. Regarding educational status of women 1007(50%) were having no formal education while the frequency of primary and secondary level education was 654 (32.5%) and 332(16.5%) respectively Table I.

Out of total 2,012 women 187(9.3%) were using contraceptive method previously while 1825 (90.7%) never practiced any contraceptive method. Regarding timing of counseling 1209(60.1%) and 727 (36%) women were counseled during antenatal and intrapartum period respectively.

In More than half 1271(63.1%) of women PPIUCD placed during post placental period (within 10 minutes of delivery) The frequency of woman who were having PPIUCD within 24 hours of delivery was 268(13.3%) while 473(23.5%) were having it during cesarean section Table II.

Seven hundred and one (34.8%) women lost on follow up after 6 weeks. Out of 1311 who returned for follow up majority 1238(94.4%) of them were satisfied with the IUCD as a contraceptive method while 73 (5.5%) were unhappy with it and 43(3.2%) requested for removal.

When we review the records regarding any problems women encountered after IUCD insertion at 4 months follow-up. Only 136(10.3%) woman reported affirmative response while 80(6.1%) complain heavy and/or irregular vaginal bleeding, 43 (3.27%) and 10 (0.7%) have complain of pain and infection respectively. 83(6.3%) also reported expulsion at 4 months post PPIUCD insertion Table III.

TABLE I: DEMOGRAPHIC CHARACTERISTICS OF WOMEN HAVING PPIUCD (n=2012)

Age in Years	Number	Percentage
20-25	367	18.2
26-30	1212	60.2
31-36	361	17.9
>36	72	3.5
Parity		
1-3	1441	71.6
4-7	474	23.6
>7	97	4.8
Educational status		
No formal education	1007	50
Primary	654	32.5
Secondary	332	16.5
Higher Secondary	19	0.9
Residential status		
Urban	1212	60.2
Rural	800	39.7

TABLE II. TIMING OF COUNSELING AND INSERTION OF PPIUCD (n=2012)

Timing of counseling for PPIUCD	Antenatal Period	At the time of admission	After delivery
	1209(60.1)	727 (36)	49(2.4)
Time of PPIUCD Insertion	Postplacental	Transcesarean	Postpartum
	1271(63.1)	473(23.5)	268(13.3)

TABLE III: POST INSERTION FOLLOW UP AND PROBLEMS RELATED TO PPIUCD

Post insertion follow up	Number	Percentage
Came for follow up	1311	65.1
Lost Follow up	701	34.8
Post insertion Problems (n= 1311)		
Expulsion	83	6.3
Pain	43	3.2
Infection	10	0.7
Menstrual irregularities	06	0.2
Patient came for removal (n=2012)		
Yes		
No	1969	97.8

DISCUSSION

Post-Partum Family Planning that comprises of PPIUCDs has been utilized to explicitly in mellow of the wellness advantages to baby and mother when the couple maintains a strategic distance from a cautiously separated unintended pregnancy. Worldwide endeavors are urging the mother to go to wellness office for conveyance. This exertion copies a probability for PPIUD¹¹.

Post postpartum IUCD (PPIUCD) insertion is the strategy for setting an IUCD (up to 48 hours ideally) inside 10 minutes of placental delivery^{16,17}. In Pakistan; waste number of the women live in provincial region and have controlled access to logical offices. In this situation, they reach to tertiary consideration association for transport and around then they are provided with an extraordinary plausibility of rehearsing a protracted term prophylactic system for example the PPIUCD. This will dependably lead a large portion of them to acknowledge the offer.

In the event that these women are proper proposed for this contraception technique and are managed well then it will be good for them as pleasantly with respect to the wellness of their family. In modern day study we noted that suggested age of girls used to be about 29.8 years which shows that the majority of female were in extraordinarily fertile years of age. The current study additionally cited that about half of the study participants were in their third decade of existence

comparable tendencies suggested in literature that the majority of ladies had been in the third decade of life & only small number were in the 4th decade of life¹². These women have been the perfect candidates for this approach of contraception. The acceptability of PPIUCD was 25.1% similar to literature^{18,19}.

The reason for high rate of acceptance may be the timing of counseling as 1209 (60.1%) has been counseled during antenatal period similar trend has been observed in the literature^{20,21}.

Present study showed that majority of women were having 1-3 children similar results reported in literature^{22,23}. This study showed that only 1311 (65.1%)women returned for follow up. Kanhere AV 2015²² and Katheit G 2013²³ reported that 72% and 83.4% of their participants returned for follow up in their study. These findings emphasize the provision of integrated program of family planning at all levels of health care so that women can be provided follow up care at her door step.

The current study has found that the expulsion rates are higher (6.3%). Celen S 2004²⁴ reported that in their study 17% PPIUCD expulsion occurred while Katheit G 2013²² reported that expulsion rate with PPIUCD was about 10.5%. Post insertion pain was reported by 43(4.3%) of women in present study. The frequency of infection and menstrual irregularities was reported by 19(0.7%) and 6 (0.2%) women almost similar frequency was reported in literature²³⁻²⁸.

In present study 43(2.1%) women came for removal of PPIUCD while 1968(97.8%) were willing to continue it as observed in in literature. This short, smaller scope learn about alongside with all its boundaries like, shorter length of follow-up has provided the suitable piece of evidence that postpartum IUCD insertion is a beneficial technique. It is the quality method to streamline the viable family planning.

Definitely; the method will assist and increase the contraceptive incidence rate and put positive outcomes over the health of mother and the newborn.

CONCLUSION

Women who came for health facility delivery have high level of acceptance for PPIUCD. Though the follow up of these women can also be difficult but the rate of expulsion and post insertion troubles was low ample such that the benefits of contraception protection outweigh the desiring to return for follow up.

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AUTHORS CONTRIBUTIONS

NN: Concept Idea, Write-up
SD: Data Collection

SA: Literature Search

FJ: Data Analysis & interpretation

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