

Antenatal Counselling: Does it Boost the Uptake of Post Placental Intrauterine Contraceptive Device?

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Abstract

Objective: To evaluate antenatal counselling increases the uptake of post-placental intrauterine contraceptive devices in women delivering at a tertiary level obstetric unit.

Methodology: A quasi-experimental study was conducted in the Department of Obstetrics & Gynaecology, Maternal and Child Health Center (MCHC), Pakistan Institute of Medical Sciences (PIMS), Islamabad from Nov 2016 to Oct 2017. The intervention group (A) included 125 women fulfilling the inclusion criteria. They were given repeated sessions of structured antenatal counselling regarding uptake of post-placental intrauterine contraceptive device (PPIUCD). These were women of 18-40 years of age, with at least one alive child, a structurally normal, singleton fetus, with no history of preterm labour, pelvic infections or menstrual irregularity. Also, women who sustained miscarriage, PROM>18 hours. Pregnancy termination or stillbirth were to be subsequently excluded from the study. The comparative group (B) were 125 consenting women who fulfilled the inclusion criterion but were offered routine counselling in early labour and immediate post-placental period. After delivery (caesarean section or vaginal delivery), women opting for PPIUCD were fitted with copper IUCD in both groups. A Chi-square test was applied to compare both groups. P value of <0.05 was taken as significant.

Results: Out of the 125 women enrolled in-group A, 02 were excluded due to PPRM. The number of women who had PPIUCD inserted in group A was 66/123 (53.6%) while that in group B was 46/125(36.8%). The result was significantly significant p<0.03.

Conclusion: Repeated antenatal counselling results in significantly higher uptake of post placental IUCD.

Keywords: Post placental Intrauterine Contraceptive Device, Counselling, c

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Introduction

Interpregnancy intervals of more than 2 years can decrease maternal mortality by one-third and Child mortality by 10%-12%.³ According to the Pakistan demographic health survey (PDHS 2017–2018), 17% of the currently married women have unmet needs of family planning in the first year postpartum. The contraceptive prevalence rate (CPR), according to the PDHS 2018, is 34.2% compared with 35.4% in 2013, showing a declining trend.⁴ these demands to create awareness regarding contraception. Different family planning

methods, such as barrier and hormonal methods, are recommended as the most effective. They include injections and intrauterine devices (IUCDs) that are all reversible methods and are associated with better continuation rates.⁵ Intrauterine device is a small flexible apparatus that is widely used for family planning as it offers a safe, effective, long-term, cost-effective, and coitus independent method. Among IUCDs, copper bearing IUDs are most commonly used. IUCDs are more effective than barrier methods of contraception and they

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are found to be as effective as injectables, implants, and voluntary sterilization.⁵⁻⁸ WHO recommends the use of post-placental intrauterine contraceptive device (PPIUCD), that is the insertion of an IUCD immediately after delivery within 10 min of placental delivery.⁹ It offers a safe, immediate and effective method of reversible contraception and is compatible with lactation.^{8,9} In the immediate post delivery period, the women are greatly motivated and in need of an effective method for contraception. If they are made to wait to initiate an effective contraception, they may inadvertently conceive or might not return for contraception. This is more applicable to our country where childbirth may be the only instance where healthy lady contacts health care personnel.^{10,11} Insertion of an IUD after delivery avoids the pain related to interval insertion, and any bleeding is disguised by lochia. Similarly, in the event of cesarean delivery, PPIUCD insertion does not result in additional pain.^{11,12}

In most busy tertiary level units, the counselling of post partum contraception uptake is usually done after delivery as woman having undergone labour and delivery is often keen on contraception. Despite this, the uptake of IUCD in the postpartum period is low.¹² This study aimed at finding out if structured counselling of woman done in the antenatal period and repeated sessions to address her and her family's concerns resulted in better uptake of Cu-IUCD as post placental contraception.

Methodology

This quasi-experimental study was conducted at the Department of Obs & Gynae MCHC, Pakistan Institute of Medical Sciences, Islamabad from November 2016 to October 2017. After approval of Institutional Ethical Review Committee, women who fulfilled the inclusion criterion were offered to participate in the study. The study was conducted on two groups: Group A (intervention group n=125) and Group B (comparative group n=125). A non-probability consecutive sampling technique was used. These were women between 18-40 years of age, with at least one alive child, presenting at 20-22 weeks of gestation or later in second trimester with single alive fetus and no history of previous preterm birth. Women who had fibroids, uterine deformity, anomalous baby in the ongoing pregnancy, and a history of repeated vaginal infections or menstrual irregularities preceding pregnancy or who wished to undergo tubal ligation were excluded. Also women who sustained miscarriage, PROM>18 hours. pregnancy termination or

stillbirth were to be subsequently excluded from the study. Consenting women were included. One hundred and twenty five women were enrolled in the intervention group (A) between 22-24 weeks. These women were given structured antenatal counselling regarding the uptake of post-placental IUCD. For this study Copper IUCD (TCu 380) was intended to be used as PPIUCD.

Women were given information about other contraceptive choices too. They were counselled again at visit 28 weeks and at 36 weeks visit. If any woman wished, her spouse was also counselled during these sessions. Their and their familys' concerns were addressed. Consent for fitting patients with PPIUCD was taken at time of their presentation for delivery and acceptance/refusal recorded. The comparative group (B) were 125 consenting women who fulfilled the inclusion criterion but were offered counselling in early labour and immediate post placental period. After delivery (caesarean section or vaginal delivery) the ones who opted for PPIUCD were fitted with copper IUCD in both groups.

The performance recorded demographic parameters such as the number and gender of alive children, mode of delivery, uptake and refusal of PPIUCD intake. Data was entered and analyzed using SPSS 21. Frequency & proportion were recorded for qualitative data like number of women belonging to designated age groups, parity groups (less than or equal to and more than 3, occupation, education level & residence. The frequency and percentage of women who accepted or refused PPIUCD, as well as potential confounding factors such as the number and gender of children, family planning history, and mode of delivery, were calculated. Chi square test was applied to compare both groups. P-value <0.05 was taken as significant.

Results

For this study, 125 women enrolled in the intervention group, 2 were excluded for having PROM >18 hours before delivery. The demographic comparison of the patients is given in table I. Table II compares the confounding variables, such as the number of alive children, gender of alive children, history of family planning, and mode of delivery, of both groups. The number of women who had PPIUCD inserted in group A was 66/123 (53.6%) while that in group B was 46/125(36.8%). The result was significantly significant, as shown in figure 1.

Table I: Comparison of demographic variables of patients between two groups.

		Group A	Group B	P-value
		(N=123)	(N=125)	
		N (%)	N (%)	
Age (years)	18-24	09(7.3)	12(9.6)	0.091
	25-34	93(75.6)	83(66.4)	
	35≥	21(17.1)	30(24)	
Parity	≥ 3	57(46.4)	55(44)	0.080
	< 3	66(53.6)	70(56)	
Education Level	No Formal Education	13(10.5)	17(13.6)	0.092
	Primary	21(17.1)	28(22.4)	
	Secondary	22(17.9)	35(28)	
	College	38(30.9)	24(19.2)	
	University	29(23.6)	21(16.8)	
Occupation	Housewife	62(50.4)	79(63.2)	0.092
	Job	56(45.5)	45(36)	
	Business	5(4.1)	1(0.8)	
Residence	Rural	37(30.1)	43(34.4)	0.091
	Urban	86(69.9)	82(65.6)	

Table II: Comparison of confounders between the two groups.

Confounder variables	Group A	Group B	P-value
	N (%)	N (%)	
Number of alive children			
1	12 (09.8)	33 (26.4)	0.121
2	24 (19.5)	35 (28.0)	
3	33 (26.8)	22 (17.6)	
4	31 (25.0)	23 (18.4)	
>4	23 (18.7)	12 (9.60)	
Gender of alive children			
Male	31(25.2)	38(30.4)	0.091
Female	24(19.5)	30(24.0)	
Both	68(55.3)	57(45.6)	
History of Family Planning			
Yes	42(34.9)	33(26.4)	0.092
No	81(65.9)	92(73.6)	
Mode of delivery			
Spontaneous vaginal delivery	89(72.4)	87(69.6)	0.133
Caesarian section	34(27.6)	38(30.4)	

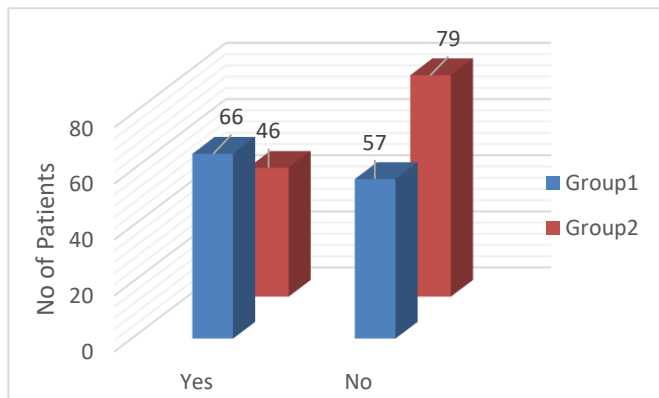


Figure 1. Uptake of PPIUCD in Group A (structured counselling) vs Group B (routine counselling).

Discussion

Our results show that antenatal structured counselling results in higher uptake of post placental IUCD. Immediate uptake of contraception in post placental period has several advantages. If a contraceptive is provided prior to discharge from the hospital then the woman or couple need not return specially for contraception. The couple has been protected before they assume sexual activity. Delay in practice of contraception by couples during post placental period can result in many unwanted/unintended pregnancies.^{10,12}

There are various barriers to uptake of contraception. These include myths regarding IUCD, previous bad experience, hearsay, and fear of subfertility.^{12,13} Despite the fact that postpartum period is the period where women are receptive to contraceptive advice, unresolved queries like these result in refusal of uptake of contraception despite contraceptives like IUCD being widely available. In our study, the group that received counselling regarding contraception only when presenting in labour or immediately postpartum, the uptake was only 36.8%. A study done in Gujrat showed only 13% uptake of PPIUCD after postpartum counselling.¹⁴ In a study done at Jamshoro, the uptake was 25%.¹⁵ In our study, the uptake was higher even in the routine counselling group. This may be due to study design as we included patients with at least one older child and live birth.

Structured antenatal counselling resulted in 53.65% of participants taking up PPIUCD as contraceptive, which was much more than the group where women were offered routine counselling. A study done in Nigeria, on the contrary did not reveal any difference between routine and intensive counselling group. However, in their intensive group, patients were counselled first time at 36 weeks whereas in our study patients were counselled from mid trimester onwards.¹⁶ Literature review revealed antenatal counselling is one of the factors that increased the uptake of postpartum contraception including PPIUCD. However most of them were cross sectional studies analyzing factors increasing uptake of postpartum contraception including PPIUCD and did not compare antenatal counselling with postpartum counselling or specifically evaluated outcome with repeated counselling sessions.^{15,17,18}

A study analyzing women’s perspectives showed that women preferred that information about their postpartum

contraception options be explained to them in short messages throughout their pregnancies.^{19,20} This enables them to make decisions on postpartum contraception on an informed basis as in our study. Structured counselling with multiple sessions gives patients opportunities to clear their doubts and get answers to their queries. They can make a much more informed choice without the feeling that the doctor is patronizing them.^{20,21,22}

Also, this gives women the opportunity to discuss issues with their spouse and with family members as in our study. Inadequate time to discuss with spouse often results in refusal.^{13,20,23} Spousal and family support results in higher uptake of contraception.^{17,23} If the spouse had any queries, we addressed them in repeat sessions. This may be a factor that further contributed to better uptake of PPIUCD in the intervention group.

If women are just counseled in the peripartum or post placental period as in many busy obstetric units,²⁵ they cannot reflect usually and refuse straightaway or feel that they have been pressured into accepting contraception, and they may seek removal of the method soon.^{14,22} Furthermore, their request to involve their spouse or family members cannot be met at all times, resulting in missed opportunity to use a cost-effective and readily available contraceptive method.

Conclusion

Structured & multiple counseling sessions spread through course of pregnancy results in better uptake of PPIUCD in women.

Strengths & Limitations: The study compared efficacy of multiple, brief structured antenatal counselling versus counselling in peripartum and postnatal period.

The limitation of the study is that subsequent continuation or removal of PPIUCD was not evaluated.

Due to study design and intervention being counselling, blinding of patients & researchers was not possible.

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