

Social implications of post partum insertion of intrauterine contraceptive device insertion

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Abstract

Background: Intrauterine devices (IUDs) are an effective and increasingly popular form of reversible contraception and are the most cost-effective method of long-term contraception. Post partum insertion of IUCD includes, immediate post partum insertion where the IUCD is inserted within 10mins of expulsion of placenta, delayed IUCD insertion where the IUCD is inserted within 48hrs of delivery and intra caesarean insertion of IUCD. **Aim:** To study the social implications of PPIUCD **Objectives:** Understanding the awareness of PPIUCD with respect to other methods of contraception, to study maternal compliance to the device, To Assess safety of post placental IUCD and to understand the Reasons for non acceptance or discontinuation. **Materials and Methods:** Study design: Prospective longitudinal Observational Study, Study period: September 2016 – September 2018. Place of study: Department of OBGY MGM medical college and research centre, Aurangabad. Sample size: 100. **Study population:** Women counselled for post placental insertion of Cu-T who opt for the method were included in the study. **Results:** Total of 174 patients were counselled for post placental insertion of IUCD from out of which 105 patients were willing for insertion of PPIUCD and 69 patients were not willing for the same. None of the patients in our study were aware of PPIUCD. The most common reason for acceptance of insertion of PPIUCD was because it is long term contraception (32.3%). The most common reason for refusal in our study was non compliance from the spouse (40.5%). **Conclusion:** The post partum period is the time when women are highly motivated for contraception. This period is an ideal time to counsel a woman for contraception as the chances of a woman coming to a health care professional only for the purpose of contraception is slight. PPIUCD is an effective and safe method of post partum family planning as it is cost effective, long term and does not affect lactation. **Key Word:** PPIUCD, immediate PPIUCD, Kelly's forceps.

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INTRODUCTION

Family planning is central not only to population stabilization but also in improvement of maternal and neonatal health and survival. India was the first nation where the government of India launched a Family Planning Programme, with the objective to stabilize the population with regards to the potential of the economy

(1951)¹ Intrauterine devices (IUDs) are an effective and increasingly popular form of reversible contraception and are the most cost-effective method of long-term contraception. PPIUCD is Safe as pregnancy is ruled out at the time of insertion, Convenient, it is a onetime procedure, provides Long term contraception, Provided free of cost by the government, The mother is highly motivated during the immediate postpartum period for contraception, Perception of the usual side effects of IUCD (bleeding, cramping) are less due to normal puerperal changes, There is no effect on lactation, No risk of uterine perforation due to thick wall of uterus, Reduced possibility of heavy bleeding as the mother is experiencing lactation amenorrhea and Doesn't require 'loading' as in the conventional IUCDs and hence doesn't lose 'memory'.

Failure rate of IUCD: 0.8% (7). According to UN 1997, CuT 380 A provides contraceptive protection similar to

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that of tubal ligation.⁸ PPIUCD is an effective and safe method of post partum family planning

MATERIALS AND METHODS

Study design: Prospective longitudinal Observational Study

Study period: September 2016–September 2018. Place of study: Department of OBGY MGM medical college and research centre, Aurangabad. Sample size: 100

Study population: Women counselled for post placental insertion of Cu-T who opt for the method were included in the study.

RESULTS

Table 1: Distribution of patients

Number of patients accepted insertion of PPIUCD	105	60%
No of patients inserted	101	58%
Number of patients refused	69	39.6%
Number of patients deferred	04	2.2%
Total no of patients counselled	174	100%

Rate of acceptance increases with proper counselling

Table 2: Socio-demographic profile

Socio demographic characteristics	Accepted N=105		Declined N=69		Chi-square value	P-value
	No.	%	No.	%		
AGE						
Less than 19	2	1.9%	01	1.4%	0.586	0.746 NS
20-29	92	87.6%	63	91.3%		
29-39	11	10.4%	05	7.2%		
>=40	0	-	-	-		
EDUCATION						
No formal education	0	-	09	13.0%	44.2	<0.0001 S
Primary	50	47.6%	54	78.3%		
Secondary	34	32.3%	06	8.7%		
Graduate	21	20.0%	-	-		
Postgraduate	0	-	-	-		
PARITY						
Primipara	35	33.3%	27	39.1%	0.610	0.435 NS
Multipara	70	66.6%	42	60.9%		

Age does not affect acceptance of PPIUCD; Higher the level of education, more the acceptance; Parity did not have any effect on acceptance of PPIUCD

Table 3: Reasons for acceptance of PPIUCD

Reason for acceptance	Number N=105	%
Long term contraception	34	32.3%
Reversible	8	7.6%
Safe contraception during breastfeeding	33	31.4%
One time procedure	05	4.7%
Could not pin point the exact reason of acceptance	38	36.1%

The most common reason for acceptance was because it's a long term method of contraception.

Table 4: Reason for refusal for insertion of PPIUCD

Reason for refusal N=69	Number	%
Don't want contraception immediately	22	31.9%
Prefer to use other methods	25	36.2%
Fear of complications of IUCD	16	23.2%
No compliance from partner	28	40.5%
Religious basis	08	11.6%
Non compliance from family members	09	13.0%

The most common reason for refusal was because of non compliance from the spouse.

Table 5: Awareness of different methods of PPIUCD and other contraception

Awareness of contraception	Accepted N=105		Declined N=69		Chi- square value	P-value
	No	%	No	%		
Awareness of PPIUCD	00	-	00	-	-	--
Other methods of contraception						
BARRIER METHOD	105	100%	69	100%		
OC PILLS	32	30.4%	27	39.1%	1.38	0.23 NS
TUBAL LIGATION	95	90.4%	52	75.4%	7.26	0.007 S
VASECTOMY	16	15.2%	20	28.9%	2.91	0.088 NS
IUCD	70	66.6%	50	72.5%	0.645	0.419 NS
NATURAL METHODS	18	17.1%	10	14.5%	0.217	0.642 NS

None of the patients that were a part of the study were aware of PPIUCD, and yet we had a 60% acceptance rate for insertion after proper counselling.

Table 6: Contraception used in the past

Contraception used in the past	Accepted N=105		Declined N=69	
	No	%	No	%
BARRIER METHOD	78	74%	32	46%
OC PILLS	12	11.4%	08	11.5%
IUCD	10	9.5%	02	2.8%
NATURAL METHODS	20	19%	05	7.2%

Table 7: Reasons for removal of IUCD (1st follow-up)

Reason N=60	Vaginal N=2	%	Place of removal	LSCS N=1	%	Place of removal
Social causes	-	-	-	-	-	-
Pain in abdomen	1	1.6%	OPD	-	-	-
Excessive bleeding PV	-	-	-	-	-	-
Misplaced IUCD	-	-	-	1	1.6%	DandC
Missing threads	1	1.6%	OPD	-	-	-

Rate of discontinuation at 15 day follow up was only 5%

Table 8: Reason for removal of IUCD (2nd week follow up) N=90

Reason	Vaginal N=9	%	Place of removal	LSCS N=2	%	Place of removal
Social causes	4	4.4%	OPD	-	-	-
Pain in abdomen	4	4.4%	OPD	1	1.1%	OPD
And excessive bleeding p/v	-	-	-	-	-	-
Misplaced IUCD	-	-	OPD	1	1.1%	OT (DandC)
Missing threads	1	1.1%	OPD	-	-	-

Total Rate of discontinuation at the end of 6weeks was 12.2%

Table 9: Complications

Complications (N=27) (33%)	VAGINAL (21) 78%		LSCS (6) (22%)		Chi-square test	P-value
	N	%	N	%		
Expulsion						
Within 7 days	-	-	-	-		
1week to 15days	1	4%	-	-	0.964	P=0.326
15days to 6weeks	5	23%	3	50%		NS
Bleeding	1	4%	1	16%	0.964	P=0.326 NS
Pain in abdomen	7	33%	2	33%	1.38	P=0.711

						NS
Displaced iucd	-	-	1	16%	3.63	P=0.043
Perforation	-	-	-	-		NS
Missing threads	1	4%	4	67%	12.4	P<0.0001
						S

Most of the complications were not comparable.

DISCUSSION

Total of 174 patients were counselled for post placental insertion of IUCD from September 2016 to September 2018, out of which 105 patients were willing for insertion of PPIUCD and 69 patients were not willing for the same. Hence PPIUCD was inserted in a total of 101(58%) patients. This shows that the rate of acceptance increases with proper counselling. Most of the patients who had PPIUCD inserted were between the age group of 20-29 (87.6%) which is the reproductive age group. In a study conducted by Kittur *et al*, 77.1% of the patients that accepted PPIUCD were from the age group of 20-30 years which is similar to our study.¹⁵ All the patients that accepted insertion of PPIUCD had at least some formal education where as 13% of the patients that declined insertion of PPIUCD were illiterates, implying the importance of education in family planning. The association of education on acceptance of PPIUCD was significant. IUCD in itself is associated with a great number of misconceptions. Reiterating the importance of counselling in the use of the same. In our study, majority of the patients that accepted insertion of PPIUCD were multipara (66.6%). The focus of the study itself was to target the population of Indian women who already have a live issue, so as to provide long term contraception, and promote healthy birth spacing. PPIUCD is an ideal method of contraception, as the chances of a woman coming back to health personnel only for the purpose of contraception is bleak. In our study, the most common reason for acceptance of insertion of PPIUCD was because it is a long term contraception (32.3%). 31.4% accepted as it is safe during breast feeding. Most of the reasons why the patients in the study have accepted insertion of PPIUCD are attributed to proper counselling by trained medical personnel. Although associated with minor complications, PPIUCD is a safe method of contraception. It Confers long term contraception, doesn't affect lactation and is supplied free of cost by the Government of India and is hence cost effective as well. 53.3% of the patients that accepted insertion of PPIUCD were counselled in the intrapartum period. This is because most of patients were unbooked and are referred to us in early labour. Antepartum period is the ideal period for counselling a patient for any method of contraception and especially for PPIUCD. In our study

38% of the people that accepted PPIUCD were counselled in the Antepartum period. This is mainly because , post counselling , the patient has the time to consider her options for contraception , as well as consult with her family members for possible options as well. This is especially necessary considering the Indian society case scenario, where the family members are enormously involved in decision making. Also avoids problems like wanting to remove the IUCD shortly after a few weeks of insertion due to non compliance from relatives, thereby causing wastage of resources. The most common reason for refusal in our study was non compliance from the spouse (40.5%). Even though the consent of the husband is not required for the insertion of the IUCD post partum, women don't prefer insertion as their spouses and their family members have refused. 11% of the patients in our study have refused IUCD insertion due to religious reasons. IUCD insertion is associated in general with a lot of misconceptions. A few sections of the society consider IUCD to be an abortifacient. Hence couple's counselling plays an important role in use of contraception and acceptance of PPIUCD. None of the patients in our study were aware of PPIUCD. Through proper counselling we had a 60% acceptance rate for insertion of PPIUCD Counselling by trained medical / paramedical personnel increases the acceptance of PPIUCD. Awareness to other methods of contraception like barrier method and tubal ligation are high. This can be attributed to the promotion of the above mentioned contraceptive methods by ASHA workers, media , and health care professionals that has created a general awareness of the same in the society 29% of the patients had come for the 6th week follow up , Total discontinuation rate at the end of 6weeks was 13.8% .Main reasons associated were the spouse or husbands relatives that were not present at the time of counselling, were non compliant. Other reasons included pain in abdomen (13%), excessive bleeding pv (7%) and missing threads, all of which were removed on outpatient basis Complications were encountered in 33% of the patients. The rate of complications was more in the vaginal group than in the LSCS group. The most common complication encountered in the vaginal group was pain in abdomen (23%) and spontaneous expulsion which was most common between 15days-6weeks (23%). This is mostly be due to the fact that some patients that undergo LSCS are not given a trial of

labour because of which the cervical OS remains closed , and the threads coil up in the cervical canal and are hence not seen on followup.USG is confirmative of the same. No major complications like uterine perforation were encountered.

CONCLUSION

India is a country where there is an extremely high unmet need for contraception Women's desire for contraception, immediately post delivery is high, but most patients are not counselled for contraception immediately post delivery and some don't have access to the same. The post partum period is the time when women are highly motivated for contraception. This period is an ideal time to counsel a woman for contraception as the chances of a woman coming to a health care professional only for the purpose of contraception is slight. PPIUCD is an effective and safe method of post partum family planning as it is cost effective, long term and does not affect lactation. It has a minor reported incidence of complications, but the benefits of post partum insertion of IUCD generally outweigh its risks. Antenatal counselling and couples counselling play a very important role in the acceptance of PPIUCD. We noted that none of the patients that were part of the study were aware of PPIUCD. Education has an effect on the overall acceptance rate of PPIUCD. Counselling by trained medical and paramedical personnel is important for the acceptance of PPIUCD. A Few strategies could be made to enhance the awareness of PPIUCD, such as its promotion in mass media ,medical camps and health promotion activities. Awareness should be created about the importance of family planning and also the various government schemes and incentives created for the same. We had an encouraging acceptance rate and continuation rate, with a small discontinuation rate. However the acceptance rate could have been improved with better counselling. The complications reported in our study were minor and had no major effect on the overall health of the patient. Every patient should be counselled for post partum contraception, thereby

reducing maternal and neonatal morbidity and mortality associated with inadequate birth spacing.

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