

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20232959>

Original Research Article

Acceptance analysis of PPIUCD in tertiary care centre of north Delhi region

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Received: 20 August 2023

Revised: 14 September 2023

Accepted: 15 September 2023

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ABSTRACT

Background: IUCD is a temporary method of contraception in use for many years in India. Our main objective is to find the acceptance of (postplacental intrauterine contraceptive device) PPIUCD in recent years in the North Delhi region.

Methods: An interventional study was carried among the pregnant mothers visiting antenatal outdoor patient department Hindu Rao Hospital and NDMC Medical College during their 28 to 36 weeks of pregnancy over period of 12 months starting from March 2020 to February 2021.

Results: The acceptance of PPIUCD was high in the present study where most of the women with higher parity (57%) accepted it and acceptance rate increased from 14% to 48% after counselling the patients and her family.

Conclusions: Level of awareness for PPIUCD was poor among women of North Delhi region. PPIUCD can play a pivot role in country's family planning programme.

Keywords: Contraception, Counseling, North Delhi, PPIUCD

INTRODUCTION

IUCD is one of the most commonly used long-acting reversible method of contraception among women in India and worldwide for decades as it is highly effective, safe, rapidly reversible, long acting, coital independent method of contraception, prompt return to fertility upon removal with relatively few side effects. The acceptance of a PPIUCD can help women to achieve a healthy birth spacing interval, thus reducing the morbidity and mortality of mother and new born.¹⁻⁵ It does not require daily action on the part of user or repeated follow ups.

The couples should be provided with all the information about all the options available for contraception and they reach the informed decision on their own, this is called 'Cafeteria Approach'. Lack of adequate knowledge or

wrong information and beliefs are common hurdles in acceptance of contraception.^{6,7} The postpartum period is critical time to address high unmet family planning need and to reduce the risks of closely spaced pregnancies as published by Graffield et al when couples space their pregnancies more than two years apart, nearly one third of maternal death and 10% of infant mortality can be prevented.⁸

METHODS

An interventional study was carried among the pregnant mothers visiting antenatal outdoor patient department Hindu Rao Hospital and NDMC Medical College during their 28 to 36 weeks of pregnancy over period of 12 months starting from March 2020 to February 2021. The sample size for this study was 210. Those who were known case of STI/RTI and had history of medical diseases like

heart disease, jaundice or known case of intramural/submucous fibroid or congenital malformation of uterus etc. were excluded from the study. The study protocols were approved by the Ethics Committee, Hindu Rao Hospital and NDMC Medical College. Mothers attending ANC clinic of Hindu Rao Hospital and NDMC Medical College were counselled about needed choice available for postpartum contraceptive, her views and opinion and reason for rejection were noted.

Statistical analysis

To analyse the data, relevant tests and appropriate software was employed (SPSS version 21).

RESULTS

Table 1 depicts that in pre-counselling phase out of 200 patients only 28 gave acceptance to PPIUCD (14%). This figure increased drastically to 96 (48%) after they were given counselling.

Table 2 depicts that the main reason for refusal of PPIUCD are refusal by partner/family member (71.1%), fear of complications (67.3%) and they were satisfied with previous method (63.4%).

Table 1: Acceptance rate of PPIUCD.

Decision to use PPIUCD	Pre-counselling		Post-counselling (verbal acceptance)	
	Number of participants (N=200)	Frequency (%)	Number of participant (N=200)	Frequency (%)
Acceptance	28	14	96	48
Rejection	172	86	104	52

Table 2: Refusal of PPIUCD.

Reasons	n=104	%
Partner and family refusal	74	71.1
Fear of complications	70	67.3
Satisfied with previous method	66	63.4
Want to use another method	58	55.7
Not ready yet/no reason	36	34.6

Table 3 depicts actual insertion rate of PPIUCD. Among 96 cases (48%) who agreed for acceptance of PPIUCD

post counselling, actual insertion were done in 78 cases (39%).

Table 4 depicts baseline socio-demographic profile of women with acceptability of PPIUCD. The highest acceptance was seen in women in the age group ranging from 20-30 years (68.2%), those with having secondary level of education (40.6%), women coming from urban areas (58.3%), Hindus (70.8%) and those with lower socioeconomic status (43.7%). A higher acceptance rate was also observed among multipara (57.2%) and those who had a desire for future pregnancy after an interval of more than 2 years (78.1%).

Table 3: Actual insertion rate of PPIUCD.

Decision to use PPIUCD	Post Counselling (verbal acceptance)		Post Delivery (actual insertion)		P value <0.001
	Number of participant (N=200)	Frequency (%)	Number of participant (N=200)	Frequency (%)	
Acceptance	96	48	78	39	
Rejection	104	52	122	61	

Table 4: Baseline socio-demographic profile of women with acceptability of PPIUCD.

Variable	No of women (n=96)		%
Age in years	<20	11	10.5
	20-30	71	68.2
	>30	14	13.4
Educational status	No formal education	16	16.6
	Primary	31	32.2
	Secondary	39	40.6
	Higher	10	10.4
Residence	Rural	40	41.7
	Urban	56	58.3

Continued.

Variable	No of women (n=96)	%	
Religion	Hindu	68	70.8
	Muslim	19	19.7
	Others	9	0.09
Socio economic status	Upper	5	.05
	Upper middle	11	11.4
	Lower middle	38	39.5
	Lower	42	43.7
Parity	P1	30	31.2
	P2-P4	55	57.2
	>P4	11	11.4
Desire for future pregnancy	Interval >2 years	75	78.1
	Not sure	13	13.5
	Not more	8	0.08

DISCUSSION

Gunjan et al study showed 41% women declined PPIUCD due to fear of complications, 35% as not accepted by their partners, 22% wanted to use other methods of complications, 5% refused without any reasons, 1% refused on religious grounds.⁹

Sangeetha et al study found 63.97% refused PPIUCD as they preferred other methods, 17.17% of refusal was due to partner refusal, 4% refused on religious grounds, 1% due to fear of complications.¹⁰ Anjali et al study showed 32% women preferred another method of contraception, 18% refused due to fear of complication, 8% had no reasons yet refused PPIUCD.¹¹

The immediate postpartum period is a particularly favourable time for IUCD insertion as women are highly motivated to use contraception who have just given birth.

As highest acceptance was seen in women with higher degree of education, it is obvious that educational status of these mothers was found to play an important role in making women accept PPIUCD.

Similarly educating the partners and family members can help in improving the rates of PPIUCD acceptance. Counseling helped women to make a clear choice and busting their doubts about PPIUCD and statistically significant rise in percentage of women having positive attitude towards PPIUCD can be seen from from 14% to 48%.

In the present study, the highest acceptance was seen in women in the age group ranging from 21-30 years (68.2%), those with secondary level of education (40.6%), women coming from urban areas (58.3%), Hindus (70.8%) and those with middle socioeconomic status (50.9%). A higher acceptance rate was also observed among multipara (57.2%) and those who had a desire for future pregnancy after an interval of more than 2 years (78.1%). These findings are similar as results observed by Deshpande et al

and Gujju et al.^{12,13} Most common reason for not choosing IUCD was fear of side effects, bleeding and other reasons were family member's advice, risk of expulsion and previous bad experience.

There are some limitations of the study. Acceptance was high in patient with formal education¹⁸. But awareness regarding PPIUCD is still low which needs to be increased in order to increase the acceptance of PPIUCD.

CONCLUSION

The acceptance of PPIUCD was high in the present study where most of the women with higher parity accepted it and mostly when counselled during early antenatal period. Most accepted timing among the women was the postplacental insertion. This present study may develop possible references for accepting immediate post partum intrauterine contraceptive device (IUCD) insertion in post partum family planning programme, which in turn will help to motivate the pregnant women attending hospital at any time of their pregnancy. PPIUCD can play a pivot role in country's family planning programme.

Level of awareness for PPIUCD was poor among women of North Delhi region. Fear of side effect was the major hurdle, which if addressed carefully, can convince women to use PPIUCD as their preferred post-partum contraception.

ACKNOWLEDGMENTS

Authors would like to thank medical superintendent and HOD, Department of Obstetrics and Genecology, Hindu Rao Hospital and NDMC Medical College.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Sweta, Anjum S, Mendiratta SL. Acceptance analysis of PPIUCD in tertiary care centre of north Delhi region. *Int J Reprod Contracept Obstet Gynecol* 2023;12:3124-7.