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Original Research Article

Knowledge attitude practice and acceptance of postpartum intrauterine devices among postpartal women in a tertiary care center

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ABSTRACT

Background: PPIUCDs are the only method for couples requesting a highly effective and reversible, yet long acting, family planning method that can be initiated during the immediate postpartum phase. World Health Organization (WHO) medical eligibility criteria state that it is generally safe for postpartum lactating women to use a PPIUCD, with the advantages outweighing the disadvantages. PPIUCDs are cost-effective and they are low-cost intervention that reduces maternal, infant, and under-five Child mortality.

Methods: After approval from the ethical committee and consent from the patients, the study was performed on 1000 postpartum women within 10 min. of delivery and up to 6 weeks of delivery at Labour Room of, M.Y. Hospital, Indore.

Results: Majority of acceptor (72.5%) belong to age group of 18-25 years and 53% belonged to urban area. Acceptance was more in those who completed their secondary school level education (33%). Working women (55.5%) accepted PPIUCD more than the non-working. Out of 1000 women counselled only 10% agreed for PPIUVD insertion. During the study of 1 year duration (3.5%) of non-acceptors become pregnant and none of the acceptors conceived. Most common reason stated for accepting PPIUCD among acceptors, was that it is a reversible method (66%). Most common reason for not accepting PPIUCD among non-acceptors, because they are interested in Other Method of Family Planning (60%).

Conclusions: Verbal acceptance is more than actual insertion of PPIUCD because of adoption of other method of family planning, family pressure, nonacceptance by partner, lack of awareness, fear of complication. Proper counselling can help to generate awareness and compliance for PPIUCD use in postpartum mother who have institutional delivery. Inserting CuT 380A within 10 min after placental delivery is safe and effective, has high retention rate. The expulsion rate was not high, and further can be reduced with practice could not be predicted.

Keywords: CuT 380 A, PPIUCD, Postpartum

INTRODUCTION

In 2012 the London Summit on Family Planning was held to bring back the focus on family planning globally. With 60% unmet need for FP in the postpartum period and JSY (conditional cash transfer scheme) bringing women to facilities, PPIUCD is a safe and effective

reversible long term birth spacing method that should be available to women. IUCDs are used by only 2% of current users of contraception in India. According to the World Health Organization Medical Eligibility Criteria, an IUCD can be inserted in the 48 hours postpartum, referred to here as a postpartum IUCD (PPIUCD), or after four weeks following a birth.

In 2005, the Government of India launched the Janani Sukraksha Yojana (JSY), a conditional cash transfer scheme, to encourage the use of facilities for care at birth.¹ Since the inception of JSY, facility-based births in the public sector have increased from 700,000 in 2005 more than 11 million in 2012.² With increasing numbers of women electing to give birth in health institutions, the Government of India decided to strengthen PPF and to introduce PPIUCD services in a phased manner, with the first batch of clinician trainings, in 2009. Previously, concerns about the PPIUCD focused on high expulsion rates. Studies published in the nineties and early 2000 reported rates of about 9-13%.³⁻⁵ However, lower expulsion rates have been reported more recently with improvements in insertion technique.^{6,7}

In our setup where number of annual deliveries exceeds 10000, it was interesting to study about the knowledge, attitude, practice and acceptance of PPIUCD insertion. It was interesting to note that people did hear about it and did not understand completely the benefits in postpartum period and they did not open heartedly accepted the idea of PPIUCD. Also family and peers played very important role in decision making.

PPIUCDs are still emerging as a relatively new contraception choice in India. While follow-up data on complications with PPIUCD insertions were available from international sources, studies from India are limited. Additionally, information related to the demographic profile of women who accept PPIUCDs, the dynamics of their decision making process, their mind set about this method of contraception have not been well characterized. Therefore, we conducted a prospective, observational study of the recent trends of women towards PPIUCD use.

METHODS

The present study was performed on 1000 postnatal women within 10 min. of delivery and up to 6 weeks of delivery conducted in the Department of Obstetrics and Gynaecology, M.G.M. Medical College and M. Y. Hospital, Indore (M.P.), India during the period from August 2015 to August 2016 after approval by the Ethics Committee. Informed consent was taken.

Inclusion criteria

Antenatal women 18 to 40-year-old, viable foetus, no Infection, Hb 8 g/dl or more.

Exclusion criteria

Fever during labour and delivery, having active STD or other lower genital tract infection or high risk for STD, ruptured membrane for more 24 hours prior to delivery, known uterine abnormalities, unresolved post-partum hemorrhage or postpartum uterine atony requiring use of additional oxytocic agent.

RESULTS

Majority of acceptor belong to age group of 18-25 years. Majority were from urban area (53%). Acceptance was more in those who completed their secondary school level education (33%). Women undergoing caesarean section were accepting PPIUCD, less frequently than those who underwent normal vaginal delivery (82%). Majority of acceptors belong to Hindu religion (90%). Working women (55.5%) accepting PPIUCD more than non-working. Majority of acceptors of primi para (49.50%).

Most common reason for accepting PPIUCD among acceptors, as it is a reversible method (66%). Most common reason for not accepting PPIUCD among non-acceptors, because they are interested in other method of family planning (60%).

By applying Student's T Test there is a significant difference between acceptor and non-acceptor in the knowledge score ($p < 0.05$). By applying Cross Tab Test significant difference between rural and urban acceptor and non-acceptor

Table 1: Knowledge questionnaire score.

Score	Accepters (n=200)		Non-Acceptors (n=800)	
	No	Percentage	No	Percentage
0-20	100	50	420	52.5
21-40	75	37.5	290	36.25
41-60	25	12.5	90	11.25
61-80	0	0	0	0
81-100	0	0	0	0
Total	200	100	800	100

Table 2: Age distribution.

Age group (years)	Accepters(n=200)		Non-Acceptors (n=800)	
	No	Percentage	No	Percentage
18-25	145	72.5	672	84
26-30	46	23	88	11
31-35	8	4	32	4
>35	1	0.5	8	1
Total	200	100	800	100

Table 3: Parity.

Parity	Accepters (n=200)		Non-Acceptors (n=800)	
	No.	Percentage	No.	Percentage
1	99	49.5	392	49
2	80	40	376	47
3 or more	21	10.5	32	4
Total	200	100	800	100

Table 4: Educational status.

Educational Status	Accepters (n=200)		Non-Acceptors (n=800)	
	No.	Percentage	No.	Percentage
Illiterate	27	13.5	196	24.5
Primary	16	8	132	16.5
Middle	47	23.5	232	29
Higher secondary	66	33	144	18
Senior Secondary	37	18.5	72	9
Graduation	7	3.5	24	3
Total	200	100	800	100

Table 5: Occupation

Occupation	Accepters (n=200)		Non-Acceptors (n=800)	
	No.	Percentage	No.	Percentage
Working	111	55.5	48	6
Not working	89	44.5	752	94
Total	200	100	800	100

Table 6: Mode of delivery.

Mode of Delivery	Accepters (n=200)		Non-Acceptors (n=800)	
	No.	Percentage	No.	Percentage
Normal Delivery	166	83	732	91.5
LSCS	34	17	68	8.5
Total	200	100	800	100

Table 7: Practice.

Practice	No. of cases	Percentage
Accepted	200	10
Rejected	800	90

Table 8: Age distribution.

Reasons	No. of cases	Percentage
Don't want contraception immediately	80	10
Partner not accepted	160	20
Interested in other method	480	60
Fear of complications	40	5
Religious belief	40	5
Total	800	100

DISCUSSION

After taking consent out of 1000 only 200 women accepted and 800 were declined socio demographic features and obstetrics characters and reasons for accepting and non-accepting IUCD is discussed.

Socio-demographic factors and acceptability

In our study among 1000 parturient counseled acceptance is 20% and 80% were declined. In our study majority of accepters (33%) had completed higher secondary education. Above all studies and current study reiterates that educational status has definitely high influence in acceptancy of PPIUCD. In our study working women (55.5%) accepting PPIUCD more than non-working. In a similar study by Mishra et al out of the 3209 womean counselled, only 564 (17.5%) accepted for PPIUCD insertion.⁸ In a similar study by Doley et al, total number of PPIUCD acceptance was 1217 out of 3320 counselled patients.⁹ Thus it is seen that education status directly affects the awareness and acceptability regarding PPIUCD.

Age and Parity

In our study majority of accepters (49.5%) were primi para. In a similar study by Doley et al which 43.86% were in the age group of 21-25 years followed by 37.95% accepters in the age group of <20 years (Table 1).⁹ In a study by Borthakur, Shobhasmita, et al, 32% of the accepters were in the age group of 26-30 years and 39.32% among multipara.¹⁰ Majority studies found similar results to current study this is because IUCD is temporary method that is the reason for acceptance among primi parous women. Thus during antenatal visits, women can be counselled regarding PPIUCD insertion during the immediate post placental period.

Mode of delivery

Women undergoing caesarean section were accepting PPIUCD, less frequently than those who underwent normal vaginal (90%) delivery. Manju shukla et al., found 60.87% accepters were who underwent cesarean section. It is almost equal to our study.¹¹ Vidya Ramana et al, found 83.73% of accepters were people who had cesarean section and 16.26% accepters were people underwent vaginal delivery.¹² Since the % of normal vaginal delivery are always more than the cesarean delivery, women can be taught about the advantages of the post placental insertion and also the efficacy of this method in lactating period. Many women at our setup come as pregnant in lactational amenorrhea adding to maternal morbidity. PPIUCD will not only help in spacing births but will also decrease unnecessary burden on country's health care sector.

Reasons for not accepting IUCD

Most common reason for not accepting PPIUCD among non-accepters, because they are interested in other method of family planning (60%) and partner not accepted (20%). In study by Niam, Aruna et al the commonest prevalent myths regarding Cu T were fear of malignancy (38%) and fear of menorrhagia (36.4%). The husband and mother-in-law played important roles in

decision regarding PPIUCD insertion and refused the same in 59 % of cases.¹³ Satyavathi et al, found in their study, majority were preferred another family planning method (46.68%), followed by fear of complications (32.89%) and due to family refusal (20.42%).¹⁴ Anjali et al., found 32% want another method of contraception, 18% had fear of complication, 8% not specified any reason to refusal of IUCD.¹⁵ Priya et al, found husband was the main reason for not accepting IUCD.¹⁶ In all studies, one of the major factors in women's refusal of PPIUCD is family pressure. Somehow there is a stigma associated with the name IUCD. Husbands have outlook that it might affect their marital life. Despite continuous counseling and motivation, they refused. While in multiparous patients, they were more inclined towards permanent methods of sterilization. Thus, PPIUCD seems to be a safe long acting highly effective, easily accessible, reversible and cost effective contraceptive method for most postpartum women specially lactating women. According to UN 1997, Cu-T380A confers contraceptive protection similar to that achieved with tubal sterilization.¹⁷ Counseling should be done in antenatal period itself regarding possible methods of postpartum contraception and benefits of PPIUCD in lactational period should be explained. Also education status and occupation play a direct role in women's decision regarding her health so more awareness should be spread regarding PPIUCD.

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REFERENCES

1. Lim SS, Dandona L, Hoisington JA, James SL, Hogan MC, Gakidou E. India's Janani Suraksha Yojana, a conditional cash transfer programme to increase births in health facilities: an impact evaluation. *Lancet.* 2010;375:2009-23.
2. Government of India: All India Summary of National Rural Health Mission Program, 2012. In Accessed at <http://www.nrhm.gov.in/monitoring/progress-of-nrhm.html> on 8 March 2013.
3. Chi IC, Wilkens L, Rogers S. Expulsions in immediate postpartum insertions of Lippes Loop D and Copper T IUDs and their counterpart Delta devices - an epidemiological analysis. *Contracep.* 1985;32:19-134.
4. Tatum HJ, Beltran RS, Ramos R, Van Kets H, Sivin I, Schmidt FH. Immediate postplacental insertion of GYNE-T 380 and GYNE-T 380 postpartum intrauterine contraceptive devices: randomized study. *Am J Obstet Gynecol.* 1996;175:1231-5.
5. Celen S, Mdroy P, Sucak A, Aktulay A, Danisman N. Clinical outcomes of early postplacental insertion of intrauterine contraceptive devices. *Contracep.* 2004;69:279-82.
6. Araujo VB, Ortiz L, Smith J: Postpartum IUD in Paraguay: a case series of 3000 cases. *Contracep.* 2012;86:173-86.
7. Blumenthal P, Shiliya N, Neukom J, Chilambwe J, Vwalika B, Prager B et al. Expulsion rates and satisfaction levels among immediate postpartum IUD users in peri-urban Lusaka, Zambia. *Contracep.* 2011;84:320.
8. Mishra S. Evaluation of safety, efficacy, and expulsion of post-placental and intra-cesarean insertion of intrauterine contraceptive devices (PPIUCD). *J Obstet Gynecol India.* 2014;64:337-43.
9. Doley R, Pegu B. A retrospective study on acceptability and complications of PPIUCD insertion. *J Evolution Med Dent Sci.* 2016;5(31):1631-4.
10. Borthakur S, Sarma A, Alakananda, Bhattacharjee AK, Deka N. Acceptance of post partum intra-uterine contraceptive device (ppiucd) among women attending gauhati medical college and hospital (gmch) for delivery between January 2011 to December 2014 and their follow up. *J Evol Med Dent Sci.* 2015;4:2278-4748.
11. Shukla M, Qureshi S, Chandrawati. Post-placental intrauterine device insertion - a five year experience at a tertiary care centre in North India. *Indian J Med Res.* 2012;136(3):432-35.
12. Vidyarama R, Nagamani T, Usha P. PPIUCD as a long acting reversible contraceptive (larc)-an experience at a tertiary care centre. *Int J Scienti Res.* 2015;4:5-7.
13. Nigam A, Ahmad A, Sharma A. Postpartum intrauterine device refusal in delhi: reasons analyzed. *J Obstet Gynecol India.* 2015:1-6.
14. Maluchuru S, Aruna V. Post partum- intrauterine device insertion – 2yr experience at a tertiary care center in Guntur Medical College /Govt. General Hospital, Guntur. *IOSR.* 2015;14(7):2279-861.
15. Kanhere A, Pateriya P, Jain M. Acceptability and Feasibility of Immediate post-partum IUCD insertion in a tertiary care centre in Central India. *Int J Reprod Contracept Obstet Gynecol.* 2015;4(1):1.
16. Jha P. Compendium of sessions addressing south Asian health at the 2012 APHA meeting. In: Priya Jha, eds. *SAPHA Compendium.* India: Compiled by the South Asian Public Health Association (SAPHA). 2012:8-72.
17. United Nations Development Programme/UN Population Fund/WHO/World Bank, Special Programme of Research, Development and Research Training in human Reproduction. Long-term reversible contraception. Twelve years of experience with the TCu380A and TCu220C. *Contracep.* 1997;56:341-52.

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