

Research Paper

Medical Science

Women's Experience With Postpartum Intrauterine Contraceptive Device Use At - Tertiary Care Center

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ABSTRACT

Background and objectives: In country like India were institutional deliveries are being promoted by various government efforts, post partum period is ideal for family planning counseling. It is the time when parturient women came in contact with health care providers. The Copper T 380A intra-uterine contraceptive device (IUCD) is a highly effective,

non-hormonal method that can be safely used by all women regardless of breastfeeding status during this interval.

Methods: This is a prospective study carried out in the department of OBG, Government medical college Kota from July 2013 to June 2014.All parturient women admitted for delivery had cuT-380A insertion after counseling, post partum or with 48 hrs of delivery. Patient with complain like PPH, pre-labour rupture of membranes(PROM) > 18 hrs, fever were excluded from study. Women were followed at 6 wk.

Result: In our study 359 women accepted PPIUC. Out of these 58 lost from follow up, rest 301 followed up at 6 wk. 87 had complication (Expulsion 4, Removed 37, Continue 260).

Conclusion: PPIUCD is convenient for both women and their health care providers, is associated with less discomfort and fewer side effects than interval insertions and allows women to obtain safe, long acting highly effective contraception while already within the medical system. The government needs to develop strategies to increase public awareness of the PPIUCD through different media sources. It is also important to arrange training on PPIUCD in order to increase knowledge and skills among health care providers.

KEYWORDS: Postpartum intrauterine contraceptive device (PPIUCD), Complications, Expulsion

Introduction:

Postpartum family planning (PPFP) is the prevention of unintended and closely spaced pregnancies through the first twelve months following childbirth. Postpartum IUCD(PPIUCD) is a safe and effective contraceptive option for postpartum women who wish to either space or limit subsequent births.

The Copper T 380A intra-uterine contraceptive device (IUCD) is a highly effective, non-hormonal method that can be safely used by all women regardless of breastfeeding status during this interval. 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 [1].

In India, the 2005–2006 National Family Health Survey (NFHS) reported that 61% of births were spaced less than three years and that 22% of married women had an unmet need for family planning. A subsequent stratified analysis suggested that 65% of women in the first year postpartum had an unmet need for family planning [2]. Only 26% women are using any method of family planning during the first year of postpartum. 8% of women desired to have another child within the next two year after giving birth and are vulnerable to the risk of early pregnancy[3]. 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. 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.

Materials And Methods:

This is a prospective study carried out in the department of OBG, Government medical college Kota from July 2013 to June 2014. All women admitted in labour room and delivered were included in our study they were counseled in anti natal clinic during labour or postpartum given PPIUCD after going through inclusion and exclusion criteria which are as follows.

Inclusion criteria: All antenatal patients admitted for delivery to our hospital were counseled for PPIUCD. Consent was obtained from those, who opted for insertion; Among those who fulfilled the following criteria were considered for inclusion. \cdot 18-45 years old \cdot GA 36-40 weeks \cdot Desire to have IUCD after counseling \cdot No infections \cdot Hb e8 gl/dl.

Exclusion criteria: According to medical eligibility criteria for IUCD by WHO, · Fever during labour and delivery (Temp > 38 0c) · Having active genital tract infection or high risk for infection · Know to have ruptured membranes for >18 hrs prior to delivery. · Known uttering abnormalities ef. Bicornuate/septate uterus, uterine myomas. · Unresolved postpartum hemorrhage (PPH).

Those who counseled before delivery given PPIUCD post placentally in both normal delivery and caesarian sanction, Those who counseled in post partum period were given PPIUCD within 48 hrs at delivery. All women were asked to come for follow up at 6 wk and were assessed for level at satisfaction and any complication. They were interviewed for issue related to its continuation they were given a questionnaire so that they can give unbiased opinion regarding PPIUCD experience. Their complaints were noted and they were examined regarding involution, infection, evidence of partial expulsion, missing thread etc. USG was done if the thread was not seen and there was no history of expulsion. All cases in which women gave history of expulsion were also subjected to USG for confirmation. Some patient came late and some lost from follow-up.

Table no.1 Socio demographic characteristic of the parturient included in the study.

	Total	ĺ			
Characteristics		Accepted		Declined	
	N= 12356	N=359	N (%)	N=11997	N (%)
Age					
< 19	729	36	10.0	693	5.8
20 - 30	6983	305	85.0	6678	55.7
31 - 40	4644	18	5.0	4626	38.6
Education					
No formal education	519	50	13.9	469	3.9
Primary	3620	67	18.7	3553	29.6
Secondary	7426	207	57.7	7219	60.2
Higher education	791	35	9.7	756	6.3
Economic statu	S				
Low	8191	168	46.8	8023	66.9
Medium	3613	125	34.8	3488	29.1
High	552	66	18.4	486	4.1

Table no.2 Obstetric charecteristic of the parturient included in the study.

Parity	Accepted	
	N=359	N (%)
1	111	30.9
2	154	42.9
3	60	16.7
4	25	7.0
5	9	2.5

Table no. 3 Distribution of clients according to knowledge about PPIUCD.

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Knowledge about PPIUCD	No. Of patients	%		
Yes	93	25.9		
No	266	74.1		
Total clients	359	100		

Table no. 4 Source of knowledge about PPIUCD.

Source of knowledge	No.of patient accepted PPIUCD	%
Health worker at periphery	83	23.1
Councellor at centre	172	47.9
Mouth to mouth publicity	54	15.0
Media	50	13.9
Total	359	100.0

Table no. 5 Reason for acceptability for PPIUCD.

Reason	No.	%
Long term	212	59.1
Less clinical visit	94	26.2
Fewer clinical visit	53	14.8
Total	359	100.0

Table no. 6 Complications N= 87 (24.2 %)

Complication	No.	%
Bleeding	39	44.8
Pain abdomen	25	28.7
Thread not visible	10	11.5
White discharge	9	10.3
Expulsion	4	4.6
Total	87	100.0

Table no. 7 Distribution of PPIUCD on followup visit, N=359.

Distribution of client according to	No.	%
Complication	87	24.2
Lost from followup	58	16.2
No complications	214	59.6
Total	359	100.0

Table no. 8 Reason for removal of PPIUCD, N= 37.

Reason for removal	No.	%
String not visible	6	16.2
Bleedding	20	54.1
Pain abdomen	7	18.9
White discharge	2	5.4
No reason	2	5.4
Total	37	100.0

Table no. 9 Continuation rate of PPIUCD.

Continuation rate	No.	%
Total insertion	359	
Total follow-up	301	
Expulsion	4	1.3
Removal	37	12.3
Continuation	260	86.4

Table no. 10 Continuation rate in both group of client having and not having complication.

Status	No.	Remov- al	%	Continua- tion	%
Having complica- tion as Bleeding	39	20	51.3	19	48.7
String problem	10	6	60.0	4	40.0
Pain abdomen	25	7	28.0	18	72.0
White discharge	9	2	22.2	7	77.8
No complication	214	2	0.9	212	99.1

Discussion:

In our study most of patient were age group 20-30 year and were at low socioeconomic back-ground.

Maximum no. of client were educated up to secondary level, education has a positive effect on contraceptive use. Women who completed secondary education were more likely to use modern contraceptive method. A study in Zimbabwe states that women who completed secondary school were about twice as likely to use modern contraceptive methods as women who did complete primary education[4].

Acceptance of PPIUCD was higher in para two women than in primigravida same finding was their in study by Grimes et al[5] where they found higher acceptance in multiparous clients (65.1%).

In our study 25.9% of clients were aware of PPIUCD before admission. Which is comparable to study by Rukiya Abdulwahab Mwinyi ali [6] who found that only 26% parturients were aware of PPIUCD before counseling. Although study by Somesh kumar et al showing that 54% women had heard of IUCD before they received PPIUCD counseling[7].

48% women who accepted PPIUCD were counseled by councilor at our center, signifies the importance of counseling in antenatal period before delivery. Health worker at periphery also played important role and by proper education of these health worker more patient can be benefited.

Majority of women (59.1%) reported the acceptance of PPIUCD as a

contraceptive method due to the fact that it is long acting method. Some about 14.8% also stated that they were at least partially influenced by the infrequent follow up visits to the facility when choosing the PPIUCD. 26% women accepted PPIUCD because it is easily reversible. Women who came for delivery felt the need for a long acting and reliable methods of contraception. In a report released by WHO in 2006, better family planning and birth spacing services resulted in better maternal and neonatal outcome. When promoted in countries with high birth rates, 32% of all maternal deaths and over one million deaths of children under 5 yrs could be prevented. Healthy timing and spacing of pregnancies have a positive effect on maternal health and new born outcomes [8]. This finding in the study indicates towards a positive maternal health in future. PPIUCD has distinct advantage. It is free from systemic side effects and does not affect breast feeding as seen with hormonal methods. It is a reversible method. PPIUCD does not require regular user compliance. It is also not coital dependent and there is no pain on insertion when used post-placen-

Some women in our study refused for PPIUCD due to family pressure this reveals the importance of partner involvement during counseling and decision making many studies have shown that when the partner is involved in contraceptive counseling and decision making, the acceptance and continuation rates were higher. Therefore it is most important to include proper counseling of the couple together to choose a contraceptive method which will in turn increase the compliance .

Like other studies [9] bleeding [(44.8%)n=39] out numbers other complications. But only [n= 20 (51.3%)] insisted on removal, rest retained IUCD with reassurance only [n=19(48%)], Ten patients (11.5%) among those inserted with PPIUCD had lost string during first follow up at 4-6 wk. These cases needed ultrasound confirmed that the IUCD was in situ. Six of then insisted for removal. There was no case of perforation or misplaced IUCD in our study.

Expulsion rate of PPIUCD has [n=4(1.3%)] this was different study done in Belgium, Chile and Phillippines which showed the rate of expulsion at 1 month ranging from 4.6 to 16 % [10]. A study of 3000 women in a hospital in Paraguay [7], states expulsion in 1.6%.

25 patients (28.7%) complained of pain abdomen and 9(10.3%) complained of white discharge. This rate is higher than the rate of 0.1% reported among women in Paraguay [11]. A limitation of the present study is that infection was based upon self-report and was not corroborated by medical records or microbiological confirmation. But more than 70% of patients with these complains continued PPIUCD. Women most commonly reported expected side effects of IUCDs as the reasons for the removal, including bleeding and abdominal pain. These findings suggest that there is room for strengthening PPIUCD counseling services, particularly regarding normal side effects and complications that arise from method use.

The present study is limited in that long-term expulsion rates could not be determined since follow-up was only conducted at six weeks following birth. Further studies could be conducted that involved one or two year follow-up assessments. Expansion of access to PPIUDs in India may provide an opportunity to address the high proportion of births with short intervals and improve maternal and child health outcomes. More study is needed to assess the effects of PPIUD on continuation and birth spacing in the future.

Conclusion

Women who receive PPIUCD show a high level of satisfaction with this choice of contraception, and the rates of expulsion were low enough such that the benefits of contraceptive protection outweigh the potential inconvenience of needing to return for care for that subset of women.

Acceptance of PPIUCD was not so high in our institute because programme was in its primary phase during this period but with availability of more staff and through literacy and awareness in population and health worker number of beneficiary can be increased.

PPIUCD is convenient for both womem and their health care providers, is associated with less discomfort and fewer side effects than in-

terval insertions and allows women to obtain safe, long acting highly effective contraception while already within the medical system.

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