

A Cross Sectional Study on Acceptability and Safety of IUCD among Postpartum Mothers at Tertiary Care Hospital, Telangana

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ABSTRACT

Introduction: India is world's 2nd largest populated country. It is first to introduce family planning services. IUCD is most effective, safe, long acting and do not interfere with coitus. Immediately or within 72 hours after delivery of placenta in a health care facility is convenient for those who are in outreach area, where family planning facilities are less available.

Objectives: To study the socio demographic profile of parturients attended to obstetric ward for delivery. To assess the acceptability and safety of IUCD among study population

Materials and Methods: A cross-sectional study was conducted among eligible postpartum women at Gandhi hospital secunderabad. Counseling was given about IUCD. After obtaining consent, Cu-T 380 was inserted in a 250 women,

followed up to 6 weeks. The reasons for both acceptance and decline were recorded.

Results: Mean age of acceptance was 23.70±2.95 years. Majority were from urban area (79.75%). Acceptance was more in those who completed their secondary school level education (23.3%). Women undergoing caesarean section were accepting PPIUCD, more frequently than those who underwent normal vaginal delivery. Majority (67.12%) accepters told that they accepted IUCD because it is a reversible method. Main reported complications were pain abdomen (17.14%), bleeding (14.28%). Expulsion rate was 6.8%. Most common reason (40%) for removal of IUCD was inclination to other methods.

Conclusion: Even though expulsion rate high with, acceptance was high IUCD when it is inserted in postpartum period.

Keywords: Contraception, Complications, Expulsion rate

INTRODUCTION

Contraception methods by definition mean to prevent unwanted pregnancy by temporary or permanently [1]. Initially contraception was meant for only women. Intrauterine contraceptive device like Cu T-380A provides contraception up to 10 years [1]. India is second largest populated country in the world with 120 million according to 2011 census [2]. It contributes 17.5% of world's population by adding around 25 million births every year [3].

A 65% of women are having unmet need of family planning in the first year of post partum period [3]. Till 2 years after delivery, a woman will not be ready physically to conceive and delivery. Studies were found that conceiving within two years leads to adverse events like abortion, premature labour, postpartum haemorrhage, low birth weight babies, foetal loss sometimes maternal deaths. Hence advising and practicing contraception with in postpartum period good for women health [4].

Disseminating family planning methods during postpartum period will be convenient to practice and easy to follow up for complications and adverse events. A total of 127 million women are currently using intra uterine contraceptive device [5]. Lack of information and fear of complications are the common reasons for unmet need [1].

OBJECTIVES

To study the socio demographic profile of parturients attended to obstetric ward for delivery.

To assess the acceptability and safety of IUCD among study population.

MATERIALS AND METHODS

Study Design: The study was a cross-sectional hospital based analytical study to assess acceptability and safety of PPIUCD use in women after delivery.

Study Setting: The study was conducted at the Gandhi Hospital, a tertiary care teaching hospital attached to Gandhi Medical College, Secunderabad, Telangana, India.

Study Period: Three months of period January 2015 to March 2015.

Study Population: The study population included all women who delivered at maternity ward Gandhi Hospital during the study period.

Inclusion criteria: Women delivering vaginally or by caesarean section, counselled for IUD insertion in pre-natal period or in labour and willing to participate in the study.

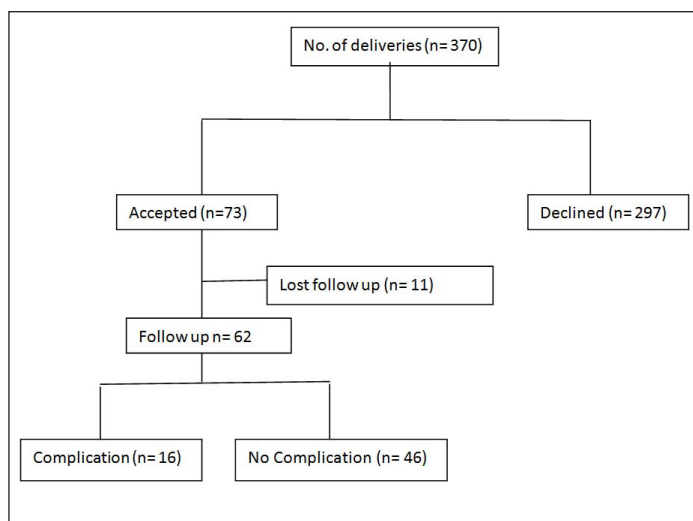
Exclusion criteria: Anaemia (haemoglobin <10 g/dl), PPH, with premature rupture of membranes >18 hours, obstructed labour, fibroid, congenital malformation of uterus, active STD, lower genital tract infection and allergy to copper [6].

Counselling of the patients: Women were sensitized about advantages and importance of family planning methods during ANC visits and at the time admission that is before delivery. Advantages of PPIUCD and complications were explained. Pretested questionnaire was filled to know acceptance and rejection, reasons to inclination to other methods were also recorded.

Procedure of insertion of PPIUCD

Post placental: After obtaining written consent form from acceptors, IUCD was inserted after 3rd stage labour management that is after placental removal. IUCD was inserted cautiously and aseptically into the uterine fundus.

Intra caesarean: IUCD was inserted directly into uterine fundus after delivery of placenta, then incision was closed.



[Table/Fig-1]: Showing comparative data of different clinical and functional parameters

Follow up [Table/Fig-1]

Follow up was done at 6 weeks in outpatient. Symptoms and signs of adverse effects due to IUCD insertion were noted like discharge, bleeding and pain abdomen. Inspected for threads, if threads were not found pelvic ultrasound and x-ray pelvis was done. Women who came for follow up and want to remove IUCD, reasons were meticulously filled in the questionnaire.

variables	Accepted (N=73)	Declined (N=297)	Total (N=370)	p-value
Locality				
Urban	66(22.4%)	229(77.6%)	295(79.7%)	<0.05
Rural	7(9.3%)	68(90.7%)	75(20.3%)	
Education				
No formal education	10(13.2%)	66 (86.8%)	76(20.5%)	>0.05
Primary	12(15.4%)	66 (84.6%)	78 (21.1%)	
Secondary	38 (23.3%)	125 (76.7%)	163(44.1%)	
College	13 (27.1%)	35 (72.9%)	48 (13%)	
University	0 (0%)	5 (100%)	5(1.4%)	
Occupation				
Un employed	60(18.1%)	271(81.9%)	331(89.5%)	<0.05
Employed	13(33.3%)	26(66.7%)	39(10.5%)	
Socio Economic Status				
Upper Class	1(5.3%)	18(94.7%)	19(5.1%)	<0.05
Upper middle class	36(27.5%)	95(72.5%)	131(35.4%)	
Lower middle class	14(11.8%)	105(88.2%)	119(32.2%)	
Upper lower class	19(21.1%)	71(78.9%)	90(24.3%)	
Lower class	3(27.3%)	8(72.7%)	11(3.0%)	
Religion				
Hindu	55(19.4%)	228(80.6%)	283(76.5%)	>0.05
Muslim	12(17.9%)	55(82.1%)	67(18.1%)	
Christian	6(30%)	14(70%)	20(5.4%)	
Parity				
Primi	37(25.9%)	106(74.1%)	143(38.6%)	>0.05
2 pregnancies	28(18.4%)	124(81.6%)	152(41.1%)	
≥3 pregnancies	8(11.3%)	67(88.7%)	75(19.8%)	
Number of deliveries(>28wks)				
1	39(26.9%)	106(73.1%)	145(39.2%)	>0.05
2	32(20.4%)	125(79.6%)	157(42.4%)	
≥3	2(3.1%)	63(96.9%)	68(18.4%)	

[Table/Fig-2]: Socio demographic and obstetric characteristics of the parturients included in study (N=370).

RESULTS

Mean age of acceptance was 23.70 ± 2.95 [Table/Fig-2]. Majority were from urban area (79.75%). People from urban locality more often accepted PPIUCD and that was statistically significant. Acceptance was more in those who completed their secondary school level education (23.3%). Acceptance was high in upper middle class compared with lower class and it was statistically significant. Acceptance was high among employed women

Mode of delivery	Accepted	Not accepted	Total	p-value
Normal vaginal delivery	15 (6.3%)	223(93.7%)	238(64.3%)	<0.05
Caesarean section	58(43.9%)	74(56.1%)	132(35.7%)	
Total	73(19.7%)	297(80.3%)	370(100%)	

[Table/Fig-3]: Mode of delivery vs Acceptance.

compared to unemployed women this was statistically significant. Primiparous women were high accepters than multiparous women and more acceptancy of PPIUCD was observed among women who had at least one delivery compared to > 3 deliveries previously and this was statistically significant.

In this study, women undergoing caesarean section were more accepting PPIUCD than those who delivered by normal vaginal delivery and this difference was statistically significant [Table/Fig-3].

Reasons	Frequency	Percentage
Don't want contraception immediately	31	10.43%
Partner not accepted	51	17.17%
Interested in other method	190	63.97%
Fear of complications	13	4.37%
Religious belief	12	4.04%
Total	297	100%

[Table/Fig-4]: Reasons for not accepting IUCD.

After counselling majority 63.97% told that they were interested in other family planning methods available in the health facility. A 10.43% reported that they don't want any contraception immediately, 17.17% were told they need to take consent or acceptance from their spouse, 4.37% reported they are worried about complications [Table/Fig-4].

Methods	Frequency	Percentage
Contraceptive pills	275	92.59%
Tubectomy	5	1.67%
Coitus interruptus	3	1.01%
Male condom	14	4.71%
Total	297	100%

[Table/Fig-5] Preferred other family planning methods.

Reasons	Frequency	Percentage
Safe	5	6.8%
Long acting	14	19.17%
Reversible Method	49	67.12%
Less repeatability	4	5.47%
Non hormonal	1	1.3%
Total	73	100%

[Table/Fig-6] Reasons for accepting PPIUCD.

Almost all non accepters (92.59%) told they were interested in oral contraceptive pills. A 4.71% people preferred male condom for contraception [Table/Fig-5].

Majority (67.12%) of accepters told that they accepted IUCD because it is a reversible method. A 19.17% accepted because it is long acting temporary contraceptive method [Table/Fig-6].

Out of 73 accepted women 11 were lost to follow up after 6 weeks. Sixteen were reported complications. Main reported complications were pain abdomen (17.15%), bleeding (17.15%). Expulsion rate

Reasons	Frequency	Percentage
Bleeding/ Discharge	6	17.15%
Pain abdomen	6	17.15%
Family pressure	4	11.42%
Inclination to other forms contraception	14	40%
Expulsion	5	14.28%
Total	35	100%

[Table/Fig-7]: Reasons for removal of PPIUCD.

was 6.8%. Most common reason (40%) for removal of IUCD is inclination to other methods [Table/Fig-7].

DISCUSSION

Present study was conducted among 370 parturients to assess their acceptability, feasibility and complications at tertiary care hospital towards postpartum insertion of IUCD. After taking consent out of 370, 73 women were accepted and 297 were declined. Socio-demographic features, obstetric characters and reasons for accepting the IUCD discussed here onwards.

Socio-demographic and obstetrics features:

Acceptability

Mishra S et al., conducted a study in Odisha district head quarters hospital found 17.17% of acceptance and 82.42% were declined for postpartum IUCD insertion [7]. Anjali et al., found 36% acceptance [4]. Gunjan goswamy et al., found 66.6% acceptance [8]. Vidyaramana et al., found 8.55% acceptance [9]. So much of variation in acceptance was found across country may be due to different study settings, locality and diversity in socio-demographic characteristics.

Education

Misha S et al., found high acceptancy among women who completed their primary and secondary school education [7]. Anjali et al., found women who completed primary and secondary school level had high acceptancy (25% & 38%) compared to illiterates (13%) [4]. Gunjan goswamy et al., also found more acceptors were women who completed secondary school education (49%) followed by primary school (23%), compared to illiterates (13%) [8]. Vidyaramana et al., found more literacy will lead to acceptancy (15.7%) compared to illiteracy (5.3%) [9]. Above all studies and current study reiterates that educational status has definitely high influence in acceptancy of PPIUCD.

Occupation: Vidyaramana et al., found employed women high acceptancy (27.47%) compared to unemployed [9].

Socio-Economic status: Satyavathi et al., found acceptance was high among low socioeconomic women had high acceptance (67%) [10].

Gunjan goswamy found lower income people were high acceptors (62%) [8].

Current study also found similar results. It may be because study was conducted in government tertiary care hospital where majority service receivers are low socio economic people.

Parity: Mishra S et al., found high acceptance among primi gravida women (20.7%) [7].

Vidya ramana et al., found 15.47% acceptors were primi gravida women [9].

Study conducted by Anjali et al., found 48% primi gravida women are acceptors compared to multiparous (27%) women [4].

Gunjan goswamy et al., found women with second gravida were high acceptors (48%) [8].

Satyavathi et al., also found primi gravida women were high acceptors [10].

Majority studies found similar results to current study this is because IUCD is temporary method that is the reason for acceptancy among primi parous women.

Deliveries: We further analysed about live births and acceptancy of PPIUCD. People who had at least one delivery has high acceptancy to IUCD compared two and more. Who had more delivers were inclined to permanent methods. Mishra S et al., found women who had at least one delivery were preferred temporary methods [7]. Satyavathi et al., also found similar results [10].

Mode of delivery: Manju shukla et al., found 60.87% acceptors were who underwent cesarean section. It is almost equal to our study [11]. Vidya ramana et al., found 83.73% of acceptors were people who had cesarean section and 16.26% acceptors were people underwent vaginal delivery [9].

Reasons for not accepting IUCD: 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%) [10]. Reasons for refusal in Gunjan goswamy et al., study were fear of complications (41%), not accepted by partner (35%), 22% were inclined to other methods, 5% not had any reason and 1% declined on religion basis [8].

Anjali et al., found 32% want another method of contraception, 18% had fear of complication, 8% not specified any reason to refusal of IUCD [4]. Priya et al., found husband was the main reason for not accepting IUCD [12]. In our study, we found majority (63.97%) were not accepting because they are interested in other methods followed by 17.17% were told partner was not interested. On religious base 4% were declined IUCD just 1% had fear of complications. Partner or family members are playing important role in the decision making. Educating family members may increase the acceptancy.

Reasons for acceptancy: Satyavathi et al., found reasons for accepting IUCD were long acting (55.28%), 20.73% thought it is safe [10]. Study done by Anjali et al., found 28% accepted because people it is long acting, 20% accepted because IUCD needs few follow up visits, 17% because it is reversible, 10% accepted by stating that safe & non hormonal and 11% accepted because attention needed to check [4]. In our study, we found majority (67%) people accepted because it is a reversible method, 19.17% thought it is long acting. Different views found in different study but majority studies stated that people accepting IUCD because it is long acting and safe.

Reasons for removal: Mishra S et al., found expulsion rate 6.4% at 6 weeks. A 23.05% participants were lost follow up [7]. Gunjan goswamy et al., found expulsion rate was 10% and 30% lost follow up. In their study bleeding/discharge (30%), abdominal pain (20%), family pressure (20%), just did not want to continue (5%) were the reasons they found for removal of IUCD in the follow up [8].

Anjali et al., observed 28% lost follow up. Majority (22%) were expelled, 8% had pain abdomen and 6% found menstrual irregularities [4]. Vidya ramana et al., observed high follow up (93%). Very minimal percentage expelled and went for removal due to complications like pain and discharge [9].

Satyavathi et al., found reasons for removal were bleeding (27.27%), menstrual disturbances (18.18%), pressure from family (27.27%) other problems (18.18%) and pain (9%) [10]. Majority studies including current study observed pain and discharge were the main problems for removal of IUCD.

LIMITATIONS

Follow up was done at 6 weeks only, as per literature it can be done upto 6 months. Due to logistics support we restricted to 6 weeks. Study was conducted at tertiary care centre which is located in urban area mostly covers urban slums only.

CONCLUSION

Acceptance of PPIUCD was low among uneducated, middle and higher socioeconomic group in order to meet unmet need and control of population. If health education, health promotion activities and counseling to family members including spouse vigorously done acceptance will definitely increase. Acceptance of any family planning after post partum period up to 2 years will greatly increase the physical and mental health of women.

Strategies to improve current scenario: Government needs to develop strategies to increase public awareness of the PPIUCD through different media sources. It is also important to arrange for training on PPIUCD in order to increase knowledge and skills among healthcare providers. This will also further promote PPIUCD use and aid in reduction of the expulsion rates.

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Date of Submission: **Sep 20, 2015**
Date of Peer Review: **Oct 06, 2015**
Date of Acceptance: **Nov 05, 2015**
Date of Publishing: **Jan 01, 2016**

FINANCIAL OR OTHER COMPETING INTERESTS: None.