

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

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ABSTRACT: To study the acceptance level of PPIUCD among women attending GMCH for delivery between January 2011 to December 2014 in relation to age, parity and mode of delivery and their complaints during follow up visit.

STUDY DESIGN: Retrospective study.

METHOD: In this study data of women admitted for delivery between January 2011 to December 2014 in labour room and data of women attending the postpartum OPD for PPIUCD follow up during the same period were analyzed.

RESULTS: Acceptance of PPIUCD showed an increasing trend, acceptance was more among multipara and acceptance was more among clients undergoing caesarean section. 32% of the acceptors were in the age group of 26-30 years. The follow up of clients was less than 50% of the total acceptors in the four years study period. The main complaints at follow up were pain and bleeding which were dealt mainly by reassurance. The main causes of removal were for want of next child and secondly for dissatisfaction with PPIUCD.

CONCLUSION: The acceptance of PPIUCD was high in this study. The PPIUCD was demonstrably safe having no serious complication reported after insertion or during follow up and low rates of expulsion. The method may be particularly beneficial in our setting where women do not come for post natal contraception counseling and usage.

KEYWORDS: PPIUCD (Post-Partum Intra-Uterine Contraceptive Device); GMCH (Gauhati Medical College and Hospital); IUCD (Intra-Uterine Contraceptive Device); Acceptance; Expulsion; Removal.

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INTRODUCTION: In view of high rate of unintended pregnancy in our country, particularly in postpartum women, there is a need for reliable, effective, long term contraception such as Intrauterine Contraceptive Device (IUCD) in postpartum women. Although data are not available for all countries over the period 2000-2007, the unmet need for contraception ranged from 13% in the WHO South East Asia Region to over 24% in the WHO African Region.¹ For women with limited access to health facility, delivery time offers an opportunity to provide them contraception if delivery has occurred in a health centre and PPIUCD is the most practical method. Family planning can avert nearly one third of maternal death and 10% of child mortality when couples space their pregnancies more than two years apart.² Short intervals between births are linked to higher maternal and child mortality and morbidity.³ In India, the 2005 – 2006 National Family Health Survey (NFHS) reported that 61% of birth were spaced less than three years and 22% of married women had an unmet need for family planning.⁴

IUCDs are used by only two percent of current users of contraception in India⁴. The popularity of IUCD and its use in the immediate postpartum period in countries like China, Egypt and Mexico reflect the practicality of this approach. Worldwide IUCD is the most commonly used reversible method of contraception with about 127 million current users⁵. Insertion of an IUCD immediately after delivery is appealing as the woman is not pregnant, is motivated for contraception and the setting is convenient for both the woman and the provider and more number of clients are available.

A 2010 Cochrane review concluded that PPIUCDs were a safe and effective contraceptive method. The public health benefits from PPIUCDs stemmed from the women's increased accessibility to PPIUCDs following facility births, PPIUCD provided immediately after delivery. This in turn decreased opportunity and other cost incurred by clients who may otherwise have to return to facilities to access contraceptive services.⁶

AIM AND OBJECTIVES

1. To determine the proportion of women accepting PPIUCD.
2. To analysis the main complaints during follow up visit.
3. To analyze the main causes of removal.

MATERIALS AND METHOD: In this study data of all women admitted for delivery in Gauhati Medical College and Hospital between January 2011 and December 2014 were collected

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from the registers in labour room and caesarean section operation theatre. The record of PPIUCD was collected from the insertion register present in labour room complex. Records of follow up was collected from the postpartum Out Patient Department (OPD) register and follow up register maintained in the Postpartum OPD .Help from the record office of Gauhati Medical College and Hospital was also taken.

RESULTS:

Year	Total delivery	Total insertion	Insertion rate
2011	13534	2944	21.75%
2012	14812	5160	34.83%
2013	15695	6017	34.80%
2014	17796	8394	47.16%

Table 1: Insertion Rate of PPIUCD in GMCH

We see from Table 1 that the acceptance of PPIUCD have gone up and in 2014, 47% of the total delivery cases accepted PPIUCD.

Age in years	Acceptors (n=22515)	Percentage
18 - 25	4945	21.96
26 - 30	7290	32.38
31 - 35	6010	26.69
36 - 40	4270	18.97

Table 2: Acceptance of PPIUCD among Different Age Groups

The socio demographic analysis of data showed that 32% of acceptors were of the age group of 26 - 30 years.

Year	Total Insertion	Primipara	Multipara
2011	2944	1245(42%)	1699(58%)
2012	5160	2151(41%)	3009(59%)
2013	6017	2917(48%)	3100(52%)
2014	8394	3269(39%)	5125(61%)

Table 3: Acceptance among Primipara and Multipara

In our study acceptors of PPIUCD were more in the multipara group.

Year	Post placental	Postpartum	Intra caesarean section
2011	48%	4%	48%
2012	37%	4%	59%
2013	29%	7%	64%
2014	35%	4%	61%

Table 4: Timings of PPIUCD Insertion

In our study acceptors of PPIUCD was more among cases requiring caesarean section.

Year	Total insertion	Total follow up	Percentage
2011	2944	444	15%
2012	5160	1571	30.5%
2013	6017	2727	45%
2014	8394	3478	41.43%

Table 5: Follow up of Clients

Initially the follow up of PPIUCD received clients was poor but in 2013 it was 45% and in 2014 it was 41.43. But still more than 50% of clients are not coming back to this tertiary centre for follow up .Government doctors of all districts of Assam had been trained in PPIUCD in a phased manner and these doctors are doing the follow up locally also. Most of the follow up in our Hospital are clinical follow up.

Complaints	Percentage
Pain	12%
Excessive bleeding	11%
Missing thread	10.5%
Thread felt near vaginal introitus	9%
Neighbors told that it was a bad method	8.5%
Wanted removal	7.5%
Got expelled at home	6%
Pregnancy with IUCD in situ	0.24%
No complaints	34.5%

Table 6: Main Complaints at the Time of Follow Up

Most of the complaints were dealt by assurance. Few cases needed intervention. Ultrasonography was done on the same day for cases complaining of missing thread. Thread was trimmed in some cases. In cases of pregnancy with IUCD 5 cases continued their pregnancy while 15 others opted for medical termination of pregnancy.

Year	Total follow up	Removal	Removal rate
2011	444	15	3.3%
2012	1571	69	4.3%
2013	2727	165	6%
2014	3478	170	4.88%

Table 7: Data of PPIUCD removal in GMCH

In the four years study period the expulsion rate was 6%. Actual expulsion and removal rate could not be calculated as less than 50% of PPIUCD acceptors had come to Gauhati Medical College Hospital for follow up. Many attended the local Hospital. Removal of PPIUCD was not done in all cases wanting a removal. Some were counseled to retain it.

Causes	No of cases (n=419)
Wants next child	160 (38%)
Not satisfied	96 (23%)
Did tubal ligation	72
Excessive bleeding	38
Pain abdomen	25
Pregnancy with IUCD	20
Husband did vasectomy	3
Divorced	2
Husband died	2
Firmly believes it causes cancer	1

Table 8: Main causes of Removal

The main two causes of removal of PPIUCD were wanting for a next child and dissatisfaction with the contraceptive method.

DISCUSSION: Acceptance of PPIUCD was 34.8% of total delivery cases in 2013 and 47.16% of total delivery cases in 2014. In our study we found that multipara women accepted PPIUCD more than the primipara which is similar to the study by Grimes et al.⁶ where they found higher acceptance in multiparous clients(65.1%). In our study more than 50% of insertions were during caesarean section but in the study by Somesh Kumar et al.⁷ one third of the insertions were during caesarean section. Follow up was less than 50% of total acceptors in the four year period.

In the present study the expulsion rate was 6% which was comparable to the expulsion rate of 5.6% reported among 210 women in a clinic in Hubli, Karnataka state in India⁸, 5.6% among 305 women in peri urban Lusaka Zambia.⁹ and 3.6% among 2733 women who received

PPIUCD in sixteen health facilities in eight states and territory Delhi between January 2011 to December 2012.⁷ Request for removal was 7.5% in this study which is comparable to 7.6% reported in Hubli, India.⁸ and 3% among women in Zambia.⁹

In this study 904 clients (11%) of total follow up complained of excessive bleeding but in only 38 cases (0.5%), PPIUCD was removed for bleeding. This is comparable to the study of Sujnanendra Mishra conducted in District Head Quarters Hospital Balangir, Odisha.¹⁰ where 23.5% complained of bleeding and only 14.71% needed removal.

This speaks of the importance of reassurance and counseling. In our study 10.5% of total follow up complained of missing thread which is comparable to the study done in Balangir, Odisha.¹⁰ where 8.69% reported of missing thread and 11.2% cases with missing thread was reported in the study by Manju Shukla et al done in CSM Medical University from 1995 – 2000.¹¹ The limitation of this study was the lost to follow up cases, where more than 50% of the acceptors never came back even for one follow up visit. In the study by Manju Shukla et al.¹¹ the lost to follow up rate (21.38%) was also high.

CONCLUSION: The acceptance of PPIUCD was high in the present study. Post-Partum Intrauterine Contraceptive Device appears to be a safe and effective method of contraception with negligible serious complications. Women who accepted PPIUCD show a high level of satisfaction in the long run and the rate of expulsion was low enough, such that the benefit of contraception protection outweighs the expulsion rate.

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