**Research Article** 

# Acceptor Comment of Post-Placental Copper T380A Intrauterine Device

## Komentar Akseptor AKDR Copper T380A Pascaplasenta

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#### Abstract

**Objective**: To describe the characteristics of subjective complaints reported by post-placental inserted intrauterine device (IUD) acceptor, especially those who used Copper T380A (CU T380A) type

Methods: Seventy-two-married women whose age ranged from 19 to 44 years old and received post-placental IUD in Dr. Cipto Mangunkusumo Hospital, Jakarta, were included in this study. Subjective complaints regarding the use of CU T380A IUD were evaluated twice including during the puerperium and six months afterwards by a direct interview.

Results: Most respondents were 20-35 years old, 50% of whom were primiparous (n=36). There were 42% respondents reporting pain during insertion, 32% respondents reporting abdominal pain during the use, 22% respondents reporting menstrual disorder, 18% respondents reporting vaginal discharge, and 3% respondents complaining of having IUD repulsion.

**Conclusion**: There are variety of subjective complaints reported after post-placental IUD use. However, most of the respondents does not complain anything.

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Keywords: complication, contraception, intrauterine device (IUD) post-placental, postpartum

## Abstrak

Tujuan: Untuk mendiskripsikan keluhan subjektif akseptor alat kontrasepsi dalam rahim (AKDR), khususnya jenis Copper T380A (CU T380A) dengan insersi pascaplasenta.

Metode: Kami meneliti 72 perempuan menikah, usia 19-44 tahun, yang menerima insersi AKDR pascaplasenta di RSUPN Dr. Cipto Mangunkusumo Jakarta. Kami mencari keluhan subjektif akseptor AKDR pascaplasenta selama pascasalin dan enam bulan setelahnya dengan wawancara langsung.

Hasil: Didapatkan rerata usia responden terbanyak adalah 20-35 tahun, dengan 50% responden adalah primipara (n=36). Sebanyak 42% mengeluhkan nyeri saat pemasangan, 32% mengeluh nyeri perut selama pemakaian, dan 22% mengeluhkan gangguan mestruasi, sebanyak 18% mengeluh keputihan, serta sebanyak 3% ekspulsi.

Kesimpulan: Terdapat beberapa keluhan subjektif pada akseptor AKDR pascaplasenta. Namun, mayoritas responden tidak mengalami keluhan.

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Kata kunci: alat kontrasepsi dalam rahim (AKDR) pascaplasenta, komplikasi, kontrasepsi, pascasalin

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#### INTRODUCTION

Family planning program can reduce the maternal and infant mortality rate up to 10% if the couple join the program for a minimum of 2 years. The short interval between two adjacent labors in a woman was associated with higher maternal and infant morbidity and mortality rate.<sup>2</sup> Post-placental contraception was an attempt to prevent unwanted pregnancy or short interval between labors in 12 months after delivery. Postpartum women needed some effective but reversible contraceptive methods to prevent unplanned pregnancy.<sup>1,2</sup>

Among many available choices, Copper T380A (Cu T380A) type of intrauterine device (IUD) is one of the most effective and least expensive contraceptive method. It is a non-hormonal contraception that is very effective in preventing pregnancy and it can also be used by most women without interfering the production of breast milk. According to World Health Organization (WHO) 5<sup>th</sup> edition of Medical Eligibility Criteria, postplacental IUD can be inserted during 48-hour postpartum or 4 weeks afterwards.<sup>3-5</sup>

Intrauterine device is a long-term, reversible, and the most common contraception worldwide.

It was estimated that more than 160-million women, most of whom came from China and India, were using this contraceptive method. However, the use of Cu T380A IUD in Indonesia nowadays was decreasing. Different from in 1991, the coverage number of IUD had reached 13%, those coverage number decreased becoming only 5% in 2007.

In Indonesia, the use of post-placental IUD had been known for approximately 30 years.<sup>6</sup> Previous studies concluded that the 3-month compliance of post-placental multiload copper 250 (ML Cu250) type of IUD was 91.1%. The 12-month compliance of post-placental Cu T380A type of IUD was even higher than that of ML Cu250 (90.17% vs 87.54% respectively).<sup>7</sup> Factors influencing the number of compliance were the assumption of high expulsion rate as well as the existence of side effects, such as pain and bleeding.<sup>6,8,9</sup> Studies in many countries had shown that the average expulsion rate of postplacental IUD insertion was 11-15%. This number was smaller than those having the IUD inserted late (14-37%). In Indonesia, the expulsion rate was estimated between 6% and 10%. 10 Apart from timing of post-placental IUD insertion, expulsion event was also affected by the type of IUD and the technique of insertion. 11,12 Expulsion can be minimalized by having someone professional to insert the IUD correctly and inserting the IUD at the level of uterine fundus.<sup>13</sup>

Nowadays, postpartum contraceptive implementation care, most post-placental Cu T380A IUD became concerned from all sections. Through good counseling and informed consent, we believed that it would result good compliance for the using of a contraceptive device. Therefore, this study aims to describe the characteristics of subjective complaints reported by post-placental inserted IUD acceptor, especially those who used CU T380A type of IUD.

#### **METHODS**

A secondary data using descriptive cross sectional study was carried out in the Emergency Room of Obstetrics and Gynecology Department, Dr. Cipto Mangunkusumo Hospital - Faculty of Medicine Universitas Indonesia from July to December 2014.

Women receiving a Cu T380A type of IUD right after giving birth either vaginally or surgically

(cesarean section), being mentally healthy, and having consented were included in this study, while the unavailability of contact number on the medical records was the exclusion criteria in this study.

After randomization, subjects were contacted via telephone to get explanation about the study and to be asked about the consent. After giving consent, subjects would be asked some questions according to the questionnaire. Subjects who cannot be contacted would be considered as drop out and replaced by randomizing other subjects after the target of 12 samples every month were reached.

### **RESULTS**

Seventy-two women fulfilling the inclusion and exclusion criteria and receiving post-placental IUD in the Emergency Room of Obstetrics and Gynecology Department, Dr. Cipto Mangunkusumo Hospital, were analyzed in this study. Those patients were then asked about their consent and given some questions based on the questionnaire via telephone. The demographics of those patients were displayed on Table 1.

**Table 1.** Demographic Characteristics of Subjects

Variables	n	%
Age (years old)		
< 20	4	5
20 - 35	61	85
> 35	7	10
<b>Educational status</b>		
Junior high school	19	26
Senior high school	34	47
Diploma/Associate degree	9	13
Bachelor degree	10	14
Parity status		
Primiparity	36	50
Multiparity	34	47
Grand multiparity	2	3
Method of Labor		
Vaginal delivery	34	47
Cesarean section	35	49
Vacuum extraction	4	4

	21
17/17/20	

Frequency of control (times)		
0	11	15
1	22	31
2	35	49
3	4	6
<b>Duration of IUD usage (months)</b>		
≤ 6 month	5	7
≥ 6 month	67	93

Most patients were 20-35 years old (mean age 28.7 years old) and they had the last educational background of senior high school (47%). The comparison methods of labor (vaginal delivery and cesarean section) as well as parity status (primiparity and multiparity) were almost equal. While most patients had done follow-up about the IUD usage, 15% of them did not do the follow-up.

Counselling and decision making about IUD insertion, including factors associated with them, was shown on table 2. Most of the decision making about having IUD inserted was after discussing with her family (63%). Most patients were satisfied with the choice they made (81%). Counseling at the point of insertion was done in 68% of patients and most of them agreed with the idea of IUD insertion (61%).

There were only a few patients who reported severe pain during IUD insertion (2%). The most reported complaint was abdominal pain (32%), followed by menstrual disorder (22%) and vaginal discharge (18%). Other complaints, such as sexualrelated disorder (10%) and IUD expulsion (3%) were relatively rare. There were 7% patients using IUD less than 6 months because of expulsion, having abdominal pain or vaginal discharge, and attempting to be pregnant.

Table 2. IUD Counseling and Decision Making

	n	%
Counseling at the time of insertion		
Yes	49	68
No	23	32
Decision of having IUD inserted after counseling		
Yes	44	61
No	28	39

Time of decision making		
On antenatal care	12	17
Before labor	28	39
After labor	32	44
Decision maker		
Patient's own decision	0	0
Patient and family	45	63
Husband	9	12
Parents	0	0
Others	18	25
Satisfaction of IUD insertion		
Yes	58	81
No	14	19

**Table 3.** Subjective Complaints after Insertion of Post-Placental IUD

Complaints	n	%
Pain during insertion		
No	42	58
Mild	24	33
Moderate	5	7
Severe	1	2
Expulsion		
Yes	2	3
No	70	97
Abdominal pain		
Yes	23	32
No	49	68
Menstrual disorder		
Yes	16	22
No	56	78
Sexual-related disorder		
Yes	7	10
No	65	90
Vaginal discharge		
Yes	13	18
No	59	82
Removal of IUD before 6 months		
Reason behind removal	5	7
Attempt to be pregnant	1	20
Pain	3	60
Discharge	1	20

#### **DISCUSSION**

Focusing on the use of post placental Cu T380A type of IUD at Dr. Cipto Mangunkusumo Hospital, most patients were satisfied with their contraceptive decision of using that device; even though, many pronouncements were decided right after labor. The most common complaint after IUD insertion was pain and abdominal cramp (32%). Other IUD insertion complications, such as pain during insertion, menstrual disorder, vaginal discharge, sexual-related disorder, and expulsion of IUD could still be found in a small number of women compared with abdominal pain.

In spite of many subjective complaints reported, majority of patients (81%) were satisfied with their decision of choosing IUD as the contraceptive method. This result was similar with the one studied in India where more than 90% of patients were satisfied using IUD in six-month postpartum.<sup>12</sup> In this study, infection and perforation of the uterus were not found.

Regarding the attempt of contraceptive counseling, there were 32% of patients who did not get the counseling at the point of IUD insertion. Among 68% others receiving counseling, most of them were satisfied with the counseling given. Remembering the importance of IUD counseling as well as other general contraception, counseling about contraception must have been given since antenatal care. In counseling, explanation of the importance of follow-up after the insertion of IUD was also needed as there were 15% of patients who did not have the follow-up after IUD insertion.

Expulsion rate of IUD in this study was only 3%. This number was smaller than the previous study stating that the expulsion rate of IUD in the first year was about 6-10%.<sup>10</sup>

The limitation in this study was the unobserved subjective complaints after long-term IUD insertion. This limitation was due to the short time of study, which was 6-to-12-month follow-up after the insertion of IUD. Further study using a longer follow-up time was needed to know more about the long-term subjective complaints of IUD users. Beside the short time of study, this study also only focused on Dr. Cipto Mangunkusumo patients. Multicenter studies with larger sample size were needed to strengthen the accuracy of the result so that it can be generalized in the community in Indonesia. Expansion of post-placental IUD distribution and access accompanied by counseling, right method of insertion, and regular follow-up can be useful to support the successful of postpartum family planning program and

decrease both maternal and infant mortality rate.

#### CONCLUSION

There are variety of subjective complaints reported after post-placental IUD use. However, most of the respondents does not complain anything.

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