# Effectiveness Differences between IUD CuT 380A Post Placenta And CuT 380A IUD Postpartum / Interval In Sumbersari Health Facility in Jember Indonesia

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Abstract: Maternal Mortality and Infant Mortality in Indonesia is still high, so efforts to reduce mortality and morbidity are major health priorities. One program to reduce MMR and IMR is by suppressing the population growth rate through Family Planning Program. Family Planning Programs have a role to reduce MMR and IMR by delaying gestational age, planning the number of children and arranging the birth distance. Intra Uterine Device (IUD) is a Long Term Contraceptive Method (MKJP) that can be used as a means of regulating pregnancy, thus reducing Maternal Mortality Rate due to the effectiveness of 0.6 to 0.8 pregnancies / 100 women using IUD. The advantage of the IUD is the long-term use, only one-time installation, safe because it has no systemic effect in the body, does not interfere with milk production, quick fertility return and the price is relatively affordable. The side effects caused in the installation of IUD after menstruation are expulsion, pregnancy, infection and perforation. Whereas Post Placenta IUD is an IUD installation which is done after 10 minutes of birth placenta which has direct advantage can be accessed by mother giving birth in health service, easy to install, acceptor clearly not in pregnant condition, does not need anymore time, and patient is protected immediately after leaving the hospital. The purpose of this study is to know the difference in the effectiveness of IUD Cut 380A post placenta installation with IUD CuT 380A post partum / interval. The type of this research is survey research with cross sectional approach of Purposive sampling technique with data analysis technique using Mann Whitney U-Test with SPSS 22. The result of this research is p-value 0,022 <0,05 which mean H0  $\neg$  is rejected so that it can be concluded that between IUD Post Placenta with Post Partum / Interval IUD have significantly different effectivity, which means IUD CuT 380A has more effectiveness compared to IUD CuT 380 A Post Placenta.

Keywords: Effectiveness, IUD CuT 380 A, post placenta, post partum / Interval

### **1. Introduction**

The rate of population growth in Indonesia is currently very rapid, reaching 1.49% or an increase of 4.5 million people per year and is a major problem that must be in the search for the solution, because if not controlled then there will be a high population explosion at the next few years. Data from the World Bank population growth rate in Indonesia is 1.21% / year and in 2015 the population of Indonesia reached 252.370.792 population. One strategy to reduce the rate of population growth is by lowering the fertility rate with the use of contraceptives to prevent pregnancy.

Every pregnancy is a pregnancy should be planned so that the maintenance during pregnancy, childbirth and the postpartum should be the priorities that will impact on reducing complications during pregnancy, childbirth and the postpartum and eventually will form a healthy and prosperous family. Besides, with a good family planning by using contraception and will help lower the death rate of mother and baby are still high.

The Government of Indonesia has made a policy to suppress the population growth rate through the Family Planning (KB) program. Family planning programs have a goal to control birth rates so as to improve the quality of the population. The family planning program provides an opportunity for couples of childbearing age to plan the number of children, manage birth spacing, and foster family welfare in an effort to encourage small, happy and prosperous families using contraceptives. N Amun not all contraceptives provide a high level of effectiveness of the prevention of pregnancy. Contraceptives are highly effective in preventing pregnancy is a Long Term Contraception Method (LTM) primarily Intra U terine Device (IUD) that is 0.6 to 0.8 pregnancies / 100 women IUD users, and has k euntungan not affect milk production, does not interfere with sexual relationships, no need to remember, and does not contain hormones so as not to affect the systemic, while the adverse effects are expulsion 2.0 - 2.8 / 100 women in the first year, the failure of pregnancy 2.0 - 2, 8/100 women at 24 months and after 1 year 0.8% compared to the installation of menstrual period, infection of 0.1 - 1.1 / 100 women whereas perforation 1 incidence of population number 1150 - 3800 women. IUD CuT 380A is generation third one has power contraception to between 8 to 10 years, is made from polyathelene the vertical section in the given coil copper smooth.

In 2010 BKKBN made a breakthrough with the installation of Post Placenta IUD contraceptives. IUD contraceptive Post placenta is placed 10 minutes after delivery, post IUD contraceptive method has its own advantages besides Placeta pemasanganya more effective because it made after the placenta is born so mother still have desire high for use contraception, as well mother no will "conceded" because procrastinate IUD installation after time childbirth done. Use of this post placenta IUD more affordable by power health because mother A direct bus motivated for post I placenta post after do labor in labor health. Installation this have impact mother be quiet in breastfeeding because of installed IUDs no influence milk production, and when lochea gone

Volume 6 Issue 11, November 2017 <u>www.ijsr.net</u> Licensed Under Creative Commons Attribution CC BY and the mother feel comfortable, the mother should serve her husband without any fear of getting pregnant. Therefore this method is highly recommended by BKKBN.

Post placenta contraception method in Indonesia is still relatively new compared to other long-term methods, are also still many health workers who menlaksanakan this method because officers must go through training first. Therefore in this study the researchers wanted to know the effectivity difference of IUD CuT 380A Post Placenta with a cut 380A IUD insertion post partum / interval.

# 2. Methods

The design used in this study is an analytic comparative, the research was done by comparing the difference to find what factors and how the situation that led to a particular event. With *crosssectional* the population is all study subjects who meet the criteria specified wherewith (Nursalam, 2008). The population in this study were 380A IUD acceptors post placenta and IUD acceptors Cut 380A with the mounting post partum / intervals are in BPM in Sumbersari Jember Regional Health Center. The sample is part of a selected population with a certain sampling to meet or represent population (Nursalam, 2008). In this research the samples are IUD CuT 380A post placenta acceptor and acceptor IUD CuT380 A post partum / BPM interval PHC Sumbersari region. Sampling is the process of selecting the portion of the population to be able to represent the population, sampling technique is the way in which the sampling, in order to obtain samples really fit with subject research

(Nursalam, 2008) Sampling technique in this research is purposive sampling with a sample size of 50 respondents (IUD Cut 380 A Post Placenta and 50 respondents (IUD C uT 380 A Post Partum / intervals, so that the total number of respondents was 100 respondents. After checking the collected data or correction of data completeness, given the code - the code on each data in the same category then do tabulation. For variable testing performed Test and Test Statistics Univariate statistical difference by using non paramatrik namely the Mann Whitney Test.

# 3. Result

The general data presented in this study are the characteristics of respondents based on the number of children and IUD characteristics based on the type and time of IUD installation.

Below is k arakteristik respondents by number of children.

 Table 1: Characteristics of respondents by number of children

Installation Time	Time Number of children		Percentage
Post Placenta	1-2 children	46	46%
IUD	3-4 children	3	0.03%
	>4 children	1	0.01%
IUD Non	1-2 children	50	50%
Post Placenta	Post Placenta 3-4 children		0%
> 4 children		0	0%
	amount	100	100%

Based on Table 1 shows that the IUD group Post Placenta most respondents had children 1-2 the number of 46% of the

total number of respondents. While in the non-post placenta IUD group, all respondents had children 1-2 people a total of 50% of the total number of respondents.

The characteristics of the type of IUD used by acceptors are presented in Table 4. 1. 2 below.

 Table 2: IUDs based on the characteristics of the installation

 time

unie					
Installation Time	Type of IUD amount		Percentage		
Post Placenta IUD	CuT 380 A	50	100%		
IUD Non Post Placenta	CuT 380 A	50	100%		
	amount	100	Responden		

Based on Table 2, shows that 50 respondents use an IUD Cut 380 A Post Placenta and 50 respondents using IUD CuT 380 A Post Partum / interval .

 Table 3: Test Effectiveness Data Normality Assumption

 IUD IUD Post Placenta and Post Partum / interval

Variables	Installation time	p-value	distribution Data
Usable	IUD Post Placenta	.200	Normal
	IUD Post P artum / interval	0,000	Abnormal

Based on the test results using the Kolmogorov-Smirnov normality, the IUD group Post Placenta obtained *p*-value of 0.200 > 0.05, which means that the data are normally distributed. While the IUD group Post Partum / interval obtained *p*-value 0.000 < 0.05, which means that the data were not normally distributed. From the above results it can be concluded that the requirement can not be dipe parametric statistical nuhi, so that different test dilakuka was done using non-parametric statistics *Mann Whitney U Test*.

Results of different test by *Mann Whitney U Test* of the effectiveness / duration of use among IUD IUD Post Placenta with Post Partum / interval can be seen in the following table.

with IUD IUD Post P artum / interval (in months)					
Observations group	n	Mean $\pm$ standard	p-value		
		deviation			
IUD Post Placenta	50	$14.66 \pm 8.41$	0022 <		
Non IUD Post Placenta	50	$26.04 \pm 19.26$			

 Table 4. 2.3: Differences Effectiveness / Old Post Placenta

 with IUD IUD Post P artum / interval (in months)

Based on the results of different test using *Mann Whitney U Test* obtained *p-value* 0.022 <0.05, which means H<sub>0 is rejected</sub> so that it can be concluded that the placenta with IUD IUD Post Post Partum / interval or the mounting post partum / interval has effectiveness / duration of use of different significantly. This means that the IUD Post Partum / interval longer be diuterus compared IUD or IUD Placenta Post Post Partum / interval was more effective than IUDs Post Placenta.

# 4. Discussion

The average length of IUD Cut 380 A Post Placenta is in the uterus in this study was 14 months. IUD Cut 380 A Post Placenta installed within 10 minutes after the placenta is born. In this study retata duration of use is 14 months, this is because the IUD Post new Placenta implemented by some

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midwives who have training. In Jember still slightly midwife training IUD Post Placenta. Of the few who attend training just a few midwives who carry out IUD in Post Placenta. So still a few who use an IUD acceptors Post Placenta and the longest time of respondents was 43 months, while the period of use of IUDs CUT 380 A is 10 years old.

From the results of the study after one year, finding postplacental IUD failure rate of 0.8%, compared with the installation afterwards. In accordance with the WHO agreement, IUD can be used for 10 years despite the effectiveness of packaging contained only 4 years (BKKBN, 2010). However, from this study of 50 respondents who use IUD Post Placenta no failure because IUD expulsion . This is consistent with the theory that failure due to expulsion of IUD insertion can be minimized if done correctly or IUD should be placed correctly in the fundus and carried out by trained personnel. Therefore, the perception that the installation is done when the cervix is still open after the postpartum period are not always going to happen when the IUD expulsion 380A cut correctly. Likewise, the process involosi uterus not be a driving force for the IUD into expulsion if the correct installation and performed by a trained person . Pe nggunaan IUD Cut 380 A Post Placenta has the advantage that can be considered by prospective acceptors, because the installation that blends with the delivery process, so that mothers do not need to specifically go to the midwife to perform the installation after completion puerperal period. Due to Post Placenta bleeding caused by IUD will blend with lochea expenditure, other than that after returning from childbirth the mother has no need to think again to perform the installation of contraception to space pregnancy or regulating the amount of puerperal selesai. But, family after the mother left the hospital / BPM directly to care for her baby in peace, breastfeeding is not disrupted for IUD Cut 380 A does not affect spending breastfeeding and postnatal mother after completion was immediately able to serve her husband without any fear of getting pregnant.

As it is known that the future use of the IUD CUT 380 A is 10 years (WHO) it is due to the respondents obtained for respondents with past IUD use Cut 380 A Post Partum / interval maximal time its use was 70 months, so that in this study there has been no respondent long use in accordance with the period of use of the IUD cut 380 A of 10 years.

Besides the installation of IUD Cut 380 A with a method of mounting post partum / interval has been done long before the mounting method is Post Placenta, so that respondents who use the method of Post Partum / longer time interval than the use of Post Placenta. Therefore, the average duration of use of IUD Cut 380 A Post Partum / interval does not reflect the excess of the effectiveness of the cut 380A IUD use post partum, since the use of this method is longer.

IUD use Cut 380 A Post Partum / interval is done at least 30 days post partum, so often women experience a pregnancy before the mother's use of contraception, but it sometimes - sometimes mother postpone installation of the I UD because of some things, so that mothers do not have protection when having skesual with her husband resulting in pregnancy.

Based on the results of different test using *Mann Whitney U Test* obtained *p-value 0.022 <0.05*, which means H<sub>0 is rejected</sub> so that it can be concluded that the placenta with IUD IUD Post Partum / Interval has a significantly different effectiveness. Meaning IUD fitted cut 380 A current post partum has efetivitas (IUD is in the uterus) is longer than the effective use of IUDs Cut 380 A mounted Post Placentan.

Hartanto in 2004 suggested that the IUD can be used at any time in the reproductive period, i.e, in the period of delay pregnancy, time interval, within 24 hours after delivery, and post-abortion. IUD post placenta is an IUD fitted within 10 minutes after the release of the placenta in vaginal deliveries. IUD insertion after delivery of the placenta is best done within 10 minutes after delivery of the placenta .

Effectiveness hany IUD is not a dependent of the time factor installation tool alone but factor (IUD), acceptor, installation techniques and skills of the install (Hartanto, 200 4). Many perceptions of health workers utamnay midwife who assumed that post placental IUD has the disadvantage that expulsion figures (apart) is still high. Expulsion Symptoms include cramping, expenditure per vaginal spotting or bleeding. But the correct installation by placing IUD Cut 380 A in the fundus area to minimize failure of installation and this can only be done by trained personnel.

According Handayani (2010) that the success rate is determined by the time of installation, the health workers who install and the installation technique. Installation time within 10 minutes after delivery of the placenta allows the expulsion of a smaller number. The incidence of IUD expulsion at around 2-8 per 100 women in the first year after installation.

The incidence of placental expulsion after birth are more likely due to the IUD pemsangan *post placental* frequent expulsion because the cervix is still open (not close completely) plus because there are many post-partum blood which decays. But in this study of 50 respondents Yag use an IUD Cut 380 A Post Placenta none having expulsion after the use of up to 43 months. Likewise, respondents who use an IUD Cut 380 A Post Partum / Interval also nothing experienced expulsion with the use of up to 70 months, so that in this study there is a difference long existence of IUD Cut 380 A in the uterus, namely the installation of Post Partum / interval longer.

IUD expulsion is one of the problems on the failure konrasepsi tool, wherein the tool expenditure of the uterus, usually in the first trimester after installation. IUD expulsion usually occurs during menstruation and also influenced by several factors, the causes of which are age and parity, duration of use IUDs, previous expulsion incident, the type and size of IUD use, as well as psychological and sociocultural factors. (Hand, 2010).

Although in this study IUD Cut 380 Post Partum / Interval is more effective, but to consider the use of IUDs cut 380A Post Placenta for very precise installation time is the time of delivery so that mothers do not need to do IUD after childbirth period. So the purpose of the use of contraceptives will be reached, after bleeding (lochea) stop mother to the marital relationship couples whenever it wants.

### 5. Conclusions

The conclusions of this research are:

Effectiveness (long IUD is in the uterus) Placenta Post 380A IUD has average 14.66 months

Effectiveness (long IUD is in the uterus ) IUD Cut 380 A Post Partum has a mean 17 months.

There are differences in effectiveness between IUD IUD Post Placenta with Post Partum / Interval significantly. Means IUD Post Partum / Interval is more durable than the IUD in the uterus Placenta Post.

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