

How to Selecting the Installation Intrauterine Devices [IUD] Placenta Post in East Java, Indonesia?: Regression Analysis

Hamimatus Zainiyah^{1*}, Novi Anggraeni², Lelly Aprilia Vidayati³

Abstract

*Intrauterine Device [IUD] Post Placenta is an IUD that is placed within 10 minutes after the release of the placenta in labor. From observations made by researchers, it is found that the use of post placenta IUD in East Java General Hospital is still low, 15.2% of 221 mothers give birth in 2019. **Aim of The Study** is analyzing the determinants of postpartum Intrauterine Device [IUD] selection. **Materials and Methods:** A cross-sectional. The research variables were husband's support, mother's knowledge, culture, the role of health workers, and the selection of postpartum Intrauterine Device [IUD] installation with a population of 221 June 2019. Analysis by test logistic regression. **Result:** Research result Husband support variable with selection of postpartum Intrauterine Device [IUD] sig .006, OR 95%, EXP (B) 4,305, 95% CI, Lower 1,509, Upper 12,282, Postpartum maternal knowledge about postpartum Intrauterine Device [IUD] with the selection of Intrauterine Device [IUD] postpartum value sig .036, OR 95%, EXP (B) 5,934, CI 95%, Lower 1,126, Upper 31,262, Variable culture with the selection of Intrauterine Device [IUD] postpartum value sig .001, OR 95%, EXP (B) 25,320, CI 95%, Lower 3,660, Upper 175,152, Variable role of health workers by choosing Intrauterine Device [IUD] postpartum value sig .046, OR 95%, EXP (B) 3.082, CI 95 %, Lower 1,019, Upper 9,319. **Conclusion:** Culture provides the largest contribution in the selection of Intrauterine Device [IUD] in addition to husband's support, mother's knowledge, the role of health workers influences the selection of post placenta IUD contraception,*

Keywords---Husband Support, knowledge, Culture, Role of Health Workers, Post placenta Intrauterine Device [IUD]

I. Introduction

WHO recommends that a woman wait at least 24 months after live birth. However, female fertility can return as soon as 4 weeks after giving birth so that timely contraception is needed because there is a greater risk of having an unwanted pregnancy. The postpartum period started contraception because the motivation to make choices to take contraception at this time is still very high. Nearly two-thirds in the first year postpartum women have an unmet need for contraception plan because most women interact with health professionals only health during pregnancy, childbirth, or to immunize their children^{1,2,3,4}

¹ DIV Midwifery Program, STIKES Ngudia Husada, Madura, Indonesia

² DIV Midwifery Program, STIKES Ngudia Husada, Madura, Indonesia

³ DIV Midwifery Program, STIKES Ngudia Husada, Madura, Indonesia

Ideally using an Intrauterine Device [IUD] as safe and effective contraception when compared to other contraceptives so that the scope of use of an Intrauterine Device [IUD] will increase. In Ghana, the use of Intrauterine Device [IUD] is less than 20% in women of reproductive age, whereas in Nigeria only about 1% of long-term use of contraception is 0.2% for implantable contraception and 0.8 for Intrauterine Device [IUD]^{3,8}. Based on the Millennium Development Goals (MDGs) targets agreed in 2015, indicators of the success of health development in Indonesia are expected to be achieved if the percentage of acceptors of long-term contraceptive methods [MKJP] can increase by^{2,5,7}. The results of a survey of family planning participants in Indonesia in 2015 showed injecting contraception is still the first choice for fertile age couples (PUS) with a percentage of [53.80%], pills [28.30%], implants (21.99%), IUD / Intrauterine Device [IUD] (6.79%), tubectomy (5.59%), condoms (3.69%), vasectomy (0.49%) [9]. Based on the 2018 IDHS data on married women aged 15-49 years who use contraception which is a means of family planning 64%, modern methods of family planning 57%, injections 29%, Drug 12%, the implant 5%, IUD 5 %, tubectomy 4%, condom 4%, Based on a preliminary study conducted at the General Hospital East Java Indonesia by conducting interviews with postpartum mothers both normally and cesarean section in 30 postpartum mothers, it was found that 21.9% of mothers chose to participate in contraception¹⁰. Factors that cause low Intrauterine Device [IUD] selection compared to hormonal contraception are experience, fear, wrong knowledge/understanding of the IUD, low fertility age education (PUS), shame and anxiety, perceptions about the IUD, complicated IUD installation procedures, influence, and experience of other IUD acceptors, culture, economy, occupation, age, number of children, health workers, husband support, information media, insufficient counseling about IUDs, installation of illness, risk of PID and ectopic pregnancy^{6,8,11 12}. The impact of the decline in the use of Intrauterine Device [IUD] programs so that it does not use Intrauterine Device [IUD] and many Intrauterine Device [IUD] acceptors switch to other methods of contraception that cause low use of Intrauterine Devices [IUDs] such as hormonal contraception (injections, pills, implant).

Government efforts in the Medium-Term Development Plan (RPJM) include training on post placenta IUD services and counseling to pregnant women because so far the acceptance is quite low at 10-20%^{13,14,15}. increasing access and quality of health education, promotion, movement, and family planning services in 23,500 government and non-government clinics, increasing movement partnerships in family planning services, and increasing guarantees for the availability of facilities, infrastructure, contraception and financing for family planning services, such as holding family safari programs plan to install a free Intrauterine Device [IUD], provide counseling about the effectiveness, advantages, and disadvantages of an Intrauterine Device [IUD] and provide counseling about an Intrauterine Device [IUD] to the public^{16,17} so that the community has an interest in using an Intrauterine Device [IUD], fulfillment facilities and infrastructure that are complete and easily accessible to the community⁵.

II. Materials & Methods

This study used a cross-sectional approach. The variables in this study were husband support, mother's knowledge, culture, motivation, and selection of post-copy Intrauterine Device [IUD] installation. The population of mothers was 221 in the June 2019 period. The sample in this study was 187 postpartum mothers with *simple random sampling*¹⁹. Data collection tools with questionnaires and analysis *logistic regression test* with a significant level for the test set at $p < 0.05$.

III. Result & Discussion

Table 1. Distribution of respondent demographic

data Demographic characteristic	Category	N	Percentage%
Age	20-24	68	36.4
	25-29	107	57.2
	> 30	12	6.4
maternal education	Basic	68	36.4
	Secondary	107	57.2
	College	12	6.4
Husband Education	Basic	78	41.7
	Secondary	94	50.3
	College	15	8
Antenatal care visits	<4 times	28	15.0
	≥ 4 times	159	85.0
Parity	Primipara	72	38.5
	Multipara	102	54.5
	Grande	13	7.0
Information	Never	165	88.2
	Ever	22	11.8
Total		187	

From table 1 postpartum maternal age 25-29 years 107 (57.2%), education 107 (57.2%), postpartum maternal education were mostly secondary education 94 (50.3%), visits over 3 years 159 (85%) , multipara 102 (54.5%), 165 (88.2%) never received information

Table 2. Analysis of logistic regression tests of determinants of the selection of postpartum Intrauterine Device [IUD]

Determinants of the selection of postpartum Intrauterine Device [IUD]								95 % CI For EXP (B)	
Step 1 ^a	Variabel	B	S.E	Wald	df	Sig.	Exp(B)	Lower	Upper
	Husband Support	1.460	.535	7.449	1	.006	4.305	1.509	12.282
	Knowledge	1.781	.848	4.411	1	.036	5.934	1.126	31.262
	Culture	3.232	.987	10.724	1	.001	25.320	3.660	175.152
	Role of Health Workers	1.125	.565	3.974	1	.046	3.082	1.019	9.319

a. Variable (s) entered on step 1: Husband Support, knowledge, Culture, Role of Health Workers

From table 2 it can be concluded that all variables influence the choice of postpartum Intrauterine Device [IUD]. Logistic regression test results show that: Variable husband support by choosing Intrauterine Device [IUD] postpartum value sig .006, OR 95%, EXP (B) 4,305, CI 95%, Lower 1,509, Upper 12,282, Variable knowledge of postpartum mothers about postpartum Intrauterine Device [IUD] with Intrauterine Device [IUD] postpartum selection value sig .036, OR 95%, EXP (B) 5,934, CI 95%, Lower 1,126, Upper 31,262, Cultural variables with Intrauterine Device selection [IUD]] postpartum value of sig .001, OR 95%, EXP (B) 25.320, CI 95%, Lower 3,660, Upper 175,152, Variable role of health workers by choosing Intrauterine Device [IUD] postpartum value of sig .046, OR 95%, EXP (B) 3,082, 95% CI, Lower 1,019, Upper 9,319. Budaya the largest contribution in the selection or intrauterine device [IUD].

The results show that the husband's support influences the selection of postpartum Intrauterine Device [IUD]. Support from husband tends not to choose postpartum Intrauterine Device because of disrupting sexual intercourse 52%, IUD gives a negative impact on maternal reproductive health 86%. Mothers get support 4,305 times more likely to choose a post placenta Intrauterine Device [IUD]. This is related to her husband's secondary education, so her husband's knowledge about postpartum Intrauterine Device [IUD] and her husband do not allow and do not encourage mothers to use Intrauterine Device [IUD] so that the mother has no interest and desire to choose an Intrauterine Device [IUD] postpartum, husband's support tends to have a low interest in using an Intrauterine Device [IUD], even though the husband is willing to finance the mother still does not want to use the IUD because the family still has some beliefs that are the sin of using an Intrauterine Device [IUD]. The results of this study are by the theory that the ease of obtaining information can accelerate someone to acquire new knowledge, information obtained by someone will stimulate one's mind and ability to add knowledge^{18,20}. Using contraception based on a joint decision between husband and wife. Also, the acceptance of post placental IUDs in this study is likely to be related to the driving factor^{15,21}. It shows that there are still many women who have a negative culture and stigma against post placenta IUDs, because of their belief that the

Intrauterine Device [IUD] is sinful, afraid of missing threads if the mother dies so that she feels stressed when imagining an Intrauterine Device [IUD] inserted into her genitals, this because people, in general, follow the customs and traditions that have long been formed to preserve their own lives or the survival of their tribes, besides that as social creatures, human life cannot be separated from culture and can even be influenced by the culture in which it lives, the use of contraceptives is also influenced by cultural factors considering their use of living in a cultural environment^{22,31,32}. As it is known that the installation of an Intrauterine Device [IUD] for example, the installation of this tool through the female genitalia is unacceptable to people in certain cultural environments^{22,23,24}.

Community culture is quite strong, and health workers conduct family planning program socialization to the community regularly, but support from religious and community leaders is still an obstacle for fertile age couples in determining appropriate contraceptive methods and by the needs of^{24,34,35}. This relates to the socio-cultural beliefs and communities that still do not understand the importance of contraception in arranging pregnancy distances and planning families. The data above shows that the community is not fully aware of family planning even though the government has tried various programs to attract public sympathy in participating in the success of the family planning program^{23,25}. This is similar to another theory states that affect the election or intrauterine device [IUD] is: people feel the benefits and disadvantages perceived of methods of contraception itself, acceptance of contraception by religion and culture, the stigma of the disease around the pelvis due to IUD insertion and counseling so that the community is confident and increases self-esteem in using the Intrauterine Device [IUD]^{24,35}.

Regression Logistic test shows that the mother's knowledge influences the selection of Intrauterine Device post partum[IUD]. Good knowledge tends to use Intrauterine Device [IUD] as much as 78%. Knowledge is the result of finding out before someone adopts new behavior or norm, they first look for what the meaning and benefits of the behavior for themselves and their families^{25,31,32,33}. Knowledge of Intrauterine Device [IUD] includes definition, availability, myths, stress on infection and infertility, the burden of installation in buying contraceptives, discomfort with installation, limitations of malefactors, and lack of availability of this contraceptive methods¹². Other research shows there is a relationship between knowledge with the choice of contraception Intrauterine Device [IUD] for family planning acceptors. Mothers with good knowledge are 2,971 times more likely to choose an Intrauterine Device [IUD] than those with less knowledge²⁶.

The results showed that the role of health workers was influential in the selection of contraception post placental IUD. Mothers who get detailed information from health professionals about 3082 post placental IUDs to choose post placenta IUD contraception. The attitudes and behavior of health workers and other workers are the drivers or reinforcement of healthy behavior in the community to achieve health, so health workers must receive special training education on health or health education and behavioral science²⁷. The implementation of providing information and counseling about post placenta Intrauterine Device [IUD] by health workers can begin at the time of antenatal care or be carried out Antenatal care integrated through the mandate of childbirth and delivery of information to the class of pregnant women and reminded at each subsequent pregnancy checkup visit. The role of health workers is likely to be related to the quite large frequency of Antenatal Care in this study, which is 72.6% of respondents examined pregnancy four to nine times. The frequency of antenatal care in this study has exceeded the frequency recommended by WHO, which is at least 4 times during pregnancy. The high frequency of antenatal care will provide opportunities for health workers to provide information and counseling related to the use of postpartum family planning, especially Intrauterine Device [IUD] post placenta. Women who have sufficient antenatal care will get information on contraceptive use²⁸. Research shows that there is a significant relationship between the role of health workers and the use of Intrauterine Devices [IUD] Also, this study is in line with prospective studies conducted in Kenya and Zambia with the result that

the provision of information during pregnancy care by health workers will motivate women to use contraception after giving birth^{21,29}.

IV. Conclusion

This study shows Culture gives the biggest contribution in the selection of Intrauterine Device [IUD] besides the support of husband, mother's knowledge, the role of health workers influences the selection of post placenta IUD contraception. His advice: health workers increase counseling about contraception on an ongoing basis, both individually, groups, and families, especially husbands, about various types of contraceptives to increase knowledge.

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