

Research Article

## Relationship of the Role of Counselor, Knowledge, Trust, Values, and Social Relationship in Contraception Acceptors' Decision of Using Intrauterine Device (IUD)

### *Hubungan Faktor Peran Konselor, Pengetahuan, Kepercayaan, Nilai, dan Keekerabatan terhadap Keputusan Akseptor KB untuk Menggunakan Kontrasepsi Intrauterine Device (IUD)*

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#### Abstract

**Objective:** to assess the relationship of the role of counsellor, knowledge, trust, values, and social relationship regarding acceptors' decision in using intrauterine device at Dr. Mohammad Hoesin Hospital Palembang.

**Methods :** A cross-sectional study carried out on June 2017 until September 2017 in the Department of Obstetrics and Gynecology Dr. Mohammad Hoesin General Hospital. Forty subjects were included. The frequency and distribution data were described in table form, bivariate analysis was performed to assess the relationship between independent and dependent variables statistically using Chi-square/Fisher Exact test. Multivariate analysis using logistic regression test was performed to assess which independent variable affects acceptors' decision the most. Data analysis was performed using SPSS 18.0 version.

**Results :** There were no statistical differences in age, duration of marriage, parity, number of children born alive, abortion, education, and jobs between the two groups ( $p < 0.05$ ). There was a statistically significant relationship between knowledge, social relationship, and the role of counsellor with contraception acceptors' decision ( $p < 0.005$ ), but there was no significant relationship between trust and values with contraception acceptors' decision ( $p > 0.05$ ). Meanwhile, the logistic regression analysis showed that the role of counsellor significantly affects contraception acceptors' decision ( $PR = 108.989$ ,  $p \text{ value} = 0.002$ ).

**Conclusions :** The role of the counsellor is a factor that affects contraception acceptors' decision in using IUD.

**Keywords :** IUD, knowledge, role of counsellor, social relationship, trust, values

#### Abstrak

**Tujuan :** untuk mengetahui hubungan faktor peran konselor, pengetahuan, kepercayaan, nilai, dan keekerabatan terhadap keputusan akseptor KB untuk menggunakan alat kontrasepsi IUD di Rumah Sakit Mohammad Hoesin Palembang.

**Metode :** Penelitian analitik observasional rancangan potong lintang ini dilakukan di Departemen Obstetri dan Ginekologi Rumah Sakit Dr. Mohammad Hoesin/Fakultas Kedokteran Universitas Sriwijaya Palembang sejak bulan Juni sampai September 2017. Didapatkan sampel sebanyak 40 perempuan melahirkan memenuhi kriteria inklusi. Frekuensi dan distribusi data dijelaskan dalam bentuk tabel, analisa bivariat untuk mengetahui ada tidaknya hubungan secara statistik antara variabel bebas dan dengan variabel terikat menggunakan uji Chi Square/Fisher Exact dan analisis multivariat untuk mengetahui variabel independen mana yang paling besar pengaruhnya terhadap keputusan akseptor KB untuk menggunakan alat kontrasepsi IUD menggunakan uji Regresi Logistik. Analisa data menggunakan SPSS versi 18.0.

**Hasil :** Tidak terdapat perbedaan karakteristik pasien baik usia, lama pernikahan, paritas, jumlah anak hidup, abortus, pendidikan dan pekerjaan antara kedua kelompok ( $p < 0,05$ ). Terdapat hubungan yang signifikan antara pengetahuan, keekerabatan, dan peran konselor dengan keputusan akseptor KB IUD ( $p < 0,05$ ), namun tidak terdapat hubungan yang signifikan antara kepercayaan dan nilai dengan keputusan akseptor KB IUD ( $p > 0,05$ ). Pada analisis regresi logistik didapatkan hasil peran konselor berpengaruh secara signifikan terhadap keputusan akseptor KB IUD ( $PR = 108,989$ ,  $p \text{ value} = 0,002$ ).

**Kesimpulan :** Peran konselor merupakan faktor yang mempengaruhi keputusan akseptor KB untuk menggunakan alat kontrasepsi IUD.

**Kata kunci:** IUD, keekerabatan, kepercayaan nilai, pengetahuan, peran konselor

## INTRODUCTION

Health development is an effort implemented by all components of the Indonesian nation to realise the highest degree of public health. National Population and Family Planning Agency (BKKBN) realises its seriousness to improve Family Planning (KB) health services.<sup>1,2</sup>

One effort to form a quality small family with long-term contraception method (MKJP). The types of methods included in this group are the established methods of contraception, implants, and intrauterine contraception or Intrauterine Device (IUD).<sup>3,4</sup>

Based on data of Indonesia Demographic and Health Survey (SDKI) in South Sumatera Province 2012, the use of IUD contraception is smallest compared to other methods of contraception, that is 6.25%.<sup>4,5</sup>

In the selection of contraception, in addition to considering the effectiveness, side effects, advantages and limitations of method contraception, there are individual and external factors that influence the decision of the acceptor candidate.<sup>6</sup>

In the Department of Obstetrics and Gynecology Faculty of Medicine UNSRI RSMH Palembang in 2013 conducted research on the factors that affect the scope of use of IUD in Family Planning acceptor. Knowledge of effectiveness is a major factor in determining IUDs in addition to counselling, affordability and parity costs.

Researchers would like to see the factors of acceptance of Family Planning acceptor to use IUD contraception which can not be separated from behaviour factor influenced by culture factor, consist of knowledge, trust, values and social relationship owned by each individual and role of the counsellor in influencing decision of Family Planning acceptor to use IUD contraception.

## METHOD

We conducted a cross-sectional study in June 2017 until September 2017 in the Department of Obstetrics and Gynecology Dr. Mohammad Hoesin Hospital/Faculty of Medicine Universitas Sriwijaya Palembang.

A sample of 40 delivered women who met the inclusion criteria. Data analysis was done by Chi-Square test and logistic regression analysis using SPSS version 18.

The inclusion criteria for this study were women who would give birth aged 15-49 years and were willing to take part in the study and had signed informed consent. The exclusion criteria for this study were women with contraindications for IUD insertion, women who would undoubtedly undergo tubectomy, postpartum haemorrhage (HPP), temperature  $\geq 380C$ , premature rupture of the membranes  $> 24$  hours, severe anaemia (Hb  $\leq 8g / dL$ ).

## RESULT

The demographic characteristics of the study subjects are shown in Table 3. 33 people (82.5%) agreed to use IUD contraception and 7 (17.5%) refused to use IUD contraception with an average age of respondents agreeing to IUD at  $26,152 \pm 5,896$  years (range 15-36 years) and those who reject IUD is  $28,429 \pm 6,241$  years (range 19-38 years). There was no significant difference of age of respondents between the two groups ( $p = 0.364$ ). In addition, the average length of the marriage of respondents who agree IUD is  $4,424 \pm 3,937$  years old (range 1-15 years) and those who reject IUD is  $8,286 \pm 8,077$  years (range 1-20 year). There was no significant difference between the length of marriage between the two groups ( $p = 0,290$ ).

The highest number of parities was one parity in which the group agreed IUD 16 people (48.5%) while in the group rejected IUD 3 people (42.9%). There was no significant difference in the number of respondents' parity between the two groups ( $p = 0.355$ ). The largest number of children live is one child wherein the group agree IUD 16 people (48,5%) and group refused IUD 3 people (42,9%). There was no significant difference in the number of children live between the two groups ( $p = 0.187$ ).

The highest incidence of abortus was never have an abortus in which the group agreed IUD 28 people (84.8%) while in the group reject IUD 5 people (71.4%). There were no significant differences in the incidence of abortion between the two groups ( $p = 0.158$ ).

The highest level of education is high school, which is 26 people in the group agree IUD (78.7%) and six people in the group refused IUD (85.7%). There was no significant difference in respondent education between the two groups ( $p = 0,595$ ). The majority of respondents work is not working (IRT) which is 30 people in the group agree IUD

(90.0%) and seven people in the group refused IUD (100%). There was no significant difference of respondent work between the two groups ( $p = 1,000$ ) (Table 1).

With Fisher Exact test, there was a non-significant relationship between trust and acceptance of IUD acceptors, in which confidence supporting 2.583 times had more effect on

**Table 1.** General Characteristics of Research Subjects

Characteristics	Groups		P value
	Agree to use IUD	Refuse to use IUD	
Age (years), mean ± standard deviation	26,152±5,896	28,429±6,241	0.364*
Length of marriage (year), mean ± standard deviation	4,424±3,937	8,286±8,077	0.290**
<b>Parity, n(%)</b>			
1	16 (48.5)	3 (42.9)	0.355***
2-3	14 (42.4)	2 (28.6)	
> 3	3 (9.1)	2 (28.6)	
<b>Number of children live, n(%)</b>			
1	16 (48.5)	3 (42.9)	0.187***
2-3	15 (45.4)	2 (28.6)	
> 3	2 (6.1)	2 (28.6)	
<b>Abortus, n (%)</b>			
0	28 (84.8)	5 (71.4)	0.158***
1	2 (6.1)	2 (28.6)	
>1	3 (9.1)	0 (0)	
<b>Education, n(%)</b>			
Primary School	3 (9.1)	1 (14.3)	0.595***
Junior High School	4 (12.1)	0 (0)	
High School	26 (78.8)	6 (85.7)	
<b>Work, n(%)</b>			
Working	3 (9.1)	0(0)	1.000***
Not working	30 (90.9)	7 (100)	

\*Independent T Test,  $p = 0.05$

\*\*Mann Whitney Test,  $p = 0.05$

\*\*\*Chi Square Test,  $p = 0.05$

The majority of the group agreed IUD had good knowledge, 31 people (93.9%), supportive trust 31 people (93.9%), good values 32 people (97%), social relationship supporting 31 (93.9%) and the role of counsellors who supported 32 people (97%). In the group that rejected IUD, the majority of respondents had poor knowledge as many as 4 people (57.1%), supportive beliefs as many as 6 people (85.7%), good values of 6 people (85.7%), social relationship supporting 4 people (57.1%) and the role of counselor who does not support 6 people (85.7%) (Table 2).

With Fisher Exact test, there is a significant correlation between knowledge with IUD acceptor decision, where good knowledge 20,667 times has more significant effect on decision of Family Planning acceptor compared to unfavourable knowledge (PR = 20,667;  $p = 0.005$ ) (Table 2).

decision of KB acceptor than unsupportive but insignificant trust (PR = 2,583;  $p = 0,448$ ) (Table 2).

With Fisher Exact test, there was no significant relationship between values and decision of IUD acceptor, where the good score 5,333 times had more influence on decision of IUD acceptor than bad value but not significant (PR = 5,333;  $p = 0.323$ ) (Table 2).

With Fisher Exact test, there is a relationship between social relationship with decision of IUD acceptor, where social relationship which support 11,625 times have more significant effect to IUD acceptor decision than non-supporting social relationship (PR = 11,625;  $p = 0.030$ ) (Table 2).

With Fisher Exact test, there is a significant relationship between the role of counselor and the decision of IUD acceptors, in which the role of counsellor who supports 192 times has more

significant effect on the decision of IUD acceptor than the non-supportive the role of counsellor (PR = 192.00; p = 0.000) (Table 2).

uterus. One example of contraception is the IUD.<sup>7</sup> In this study obtained the average age of respondents of 26.55 ± 5.939 years. The average

**Table 2.** Analysis Result of Knowledge, Trust, Values, Social Relationship, The Role of Counselor, Relation with IUD Acceptor Decision

Characteristics	Groups		PR* (CI 95%)	P value*
	Agree to use IUD	Refuse to use IUD		
<b>Knowledge</b>				
Good	31(93.9)	3 (42.9)	20,667 (2,607-168,803)	0.005
Not Good	2 (6.1)	4 (57.1)		
<b>Trust</b>				
Supoorting	31 (93.9)	6 (85.7)	2,583 (0.201-33,240)	0.448
Not Supporting	2 (6.1)	1 (14.3)		
<b>Values</b>				
Good	32 (97.0)	6 (85.7)	5,333 (0,292-97,485)	0.323
Not Good	1 (3.0)	1 (14.3)		
<b>Social Relationship</b>				
Supporting	31 (93.9)	4 (57.1)	11,625 (1,467-92,139)	0.030
Not Supporting	2 (6.1)	3 (42.9)		
<b>The Role of Counselor</b>				
Supporting	32 (97.0)	1 (14.3)	192,000 (10,504-3509,451)	0.000
Not Supporting	1 (3.0)	6 (85.7)		

\* Fisher Exact Test, p value = 0.05

Based on logistic regression test, the role of counsellor influenced significantly on decision of IUD acceptor where supporter counsellor resulted in the respondent approved the use of IUD 108,989 times compared to counselor that did not support (PR = 108,989, p-value = 0,002), whereas good knowledge can cause the respondent approve the use of IUD KB 4.224 times compared to poor knowledge and supportive social relationship may result in the respondents approved the use of IUD 2,325 times compared to non-supportive but not significant (p> 0,05) (Table 3).

### DISCUSSION

Contraception is a tool, a medicine or a method used to eliminate the flow of conception or encounter between an egg and a sperm in the womb or

length of marriage is 5,100 ± 4,996 years with the highest number of parities of 1 parity, the number of children living the most 1 child and the most abortus incidence that never had an abortus. From the statistical analysis, there were no differences in age, length of marriage, parity, number of live children, abortus, education and occupation between the two groups (p> 0.05). In this study, the decision of the Family Planning acceptor choosing IUD is not influenced by age, marriage, parity, number of living children, abortion, education and occupation.

In this study, 33 people (82.5%) chose to use IUD contraception, and 7 (17.5%) refused to use IUD contraception. The majority of respondents in IUD-approved groups have good knowledge, supportive beliefs, good values, supportive social relationship and supportive the role of counselor,

**Table 3.** Analysis Results of Factors Affects Decision of IUD Acceptor

Variable	Unadjusted*		Adjusted**	
	PR	p value	PR	p value
The Role of Counselor	192.00	0.000	108,989	0.002
Knowledge	20,667	0.005	4,224	0.465
Social Relationship	11,625	0.030	2,325	0.729

\* Chi Square Test

\*\*Binary Logistic Regression Test

whereas in groups refuse to use IUD the majority of respondents have poor knowledge, supportive beliefs, good values, supportive social relationship and the role of counsellor which does not support.

Knowledge is everything known to the IUD Acceptors on IUD, including; understanding, a dvantages,sideeffects,propertimeforinstallatio n and myths about IUD.<sup>6,8</sup> In this study found a significant relationship between knowledge with the acceptance of IUD acceptors, where good knowledge 20,667 times more significant effect on decisions IUD acceptors compared poor knowledge (PR = 20,667; p = 0.005). These results are in line with Johana et al's research in 2013 which shows a significant correlation between knowledge with the acceptance of IUD acceptors, in which a good knowledge of 2,971 times has a significantly more significant effect on the acceptors' decision than inadequate knowledge (PR = 2.971; p = 0.026 ).<sup>9</sup>

Respondents with good knowledge prove that knowledge of IUD has been obtained before through health, internet, television or magazine. According to Rogers (1974) quoted by Notoatmodjo (2007), a person behaves based on knowledge, awareness and positive attitude so that the behaviour will be lasting; otherwise if the behaviour is not based on knowledge and consciousness it will not last long.<sup>10</sup> In this study, trust is the opinion of the Family Planning Acceptor on Family Planning Program according to religion, norm and custom, include; restrictions on the number of children according to religion and custom, the meaning of children in family and methods of family planning in accordance with religion.<sup>8</sup> In this study obtained results there is a meaningless relationship between the belief with the acceptance of IUD acceptors in which the trust that supports 2,583 times more influence on the acceptors acceptance decisions compared to non-supportive but insignificant beliefs (PR = 2.583; p = 0.448). The result of this research is different with Ismi research in 2015 where the result showed that there was a significant correlation between confidence with the acceptors decision of Family Planning where trust that support 7,759 times more influence to decision of Family Planning acceptor compared to trust which not support but not significant (PR = 7,759; p = 0.007).<sup>12</sup>

According to Pendit, a number of cultural factors may affect clients in choosing

contraception methods. These factors include misunderstanding in the community about various methods, religious and cultural beliefs, educational level, perceptions about pregnancy risk, and the status of women. The difference in outcomes in this study is likely due to the increase in community knowledge resulting in some beliefs and customs have begun to fade, for example, the trust of many children is much sustenance.<sup>13</sup>

Values are something that is considered good or bad by the family planning acceptors of the family planning program especially the IUD contraception which is the basis for decision making to use it, including; IUD membership can improve health status, family welfare, make family quality and improve family harmony.<sup>8</sup> In this research, there is no significant relationship between value with acceptance decision of IUD where good value 5,333 times more influence to decision of Family Planning acceptor compared the value is not good but not significant (PR = 5.333; p = 0.323). This shows that although respondents have good values or views about the IUD but have no significant effect on the decision to reject or approve IUD.

The result of this research showed that there was a significant correlation between social relationship with acceptance decision of IUD where social relationship that support 11.625 times had more significant effect to decision of IUD acceptor than social relationship which did not support (PR = 11.625; p = 0,030). Social relationship is a social unit consisting of several families who have blood relations or marital relationships. The result of this research is consistent with Nana research in year 2103 that got result there is significant relation between social relationship in this research support husband with decision of acceptors of IUD, where social relationship that support 9,250 times have more significant effect to decision of IUD acceptors than social relationship which not support (PR = 9,250; p = 0,000).<sup>14</sup>

The role of counsellor is the contribution of counsellor in influencing Family Planning acceptor using IUD by conveying the advantages and disadvantages of IUD.<sup>15</sup> In this study, there was a significant relationship between the role of counsellor and the decision of IUD acceptors, in which the role of counsellor who supported 192 times had more significant effect on the acceptance of IUD acceptor than the role of

counsellor non-supportive (PR = 192,00; p = 0,000).

Statistical analysis of logistic regression showed that the factor that most played a role in decision of Family Planning acceptor to approve IUD was the role of counsellor, supporter counsellor resulted in the respondent approving the use of IUD 108,989 times compared unsupportive counsellor (PR = 108,989, p = 0,002). The role of counsellor in the decision to approve or reject the use of IUD is very dominant, although knowledge and value of respondents is not good and social relationship and trust does not support but with the role of counsellor, respondents are more confident decide to approve IUD, even though knowledge and good values and social relationship and trust support but the role of counsellor does not support, respondents tend to decide to reject IUD.

Health workers and community leaders have a role as counsellor. With regard to community participation in IUD family planning programs, the role of community leaders and religious leaders is very important, especially in influencing, modelling and mobilising the involvement of all citizens in their communities. The role becomes a determinant factor because the position of the community leaders is still very strong influence.<sup>16</sup>

### CONCLUSION

Based on this research it can be concluded that; There is a significant relationship between knowledge, social relationship, and the role of counsellor with decision of IUD acceptors; There is an insignificant relationship between the beliefs and values with decisions of IUD acceptors; The role of counsellor is a factor influencing decision of Family Planning acceptor to use IUD contraception.

### SUGGESTION

Conducted counselling about the benefits and profits of IUD contraception followed by husbands. Conducted counselling that aims to motivate mothers to be able to increase the confidence of mothers. Further research is undertaken to assess the effectiveness of family planning extension on the improvement of mother's knowledge and belief.

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