

The Correlation between Interpersonal Factors, Self-Efficacy with the Choice of IUD Contraception among Women of Childbearing Age Couples

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Abstract: The Indonesian government approved the use of the long-acting reversible contraceptive method to prevent pregnancy effectively. One of the long-acting reversible contraceptives is the Intra Uterine Device (IUD). But nowadays the used of IUDs is low (6.81%). The aims of this study was to analyze the correlation between interpersonal factors and self-efficacy with the choice of IUD contraception among women of childbearing age couples. This research used a descriptive analytical study with a cross-sectional approach. The sample was 115 women from childbearing age couples in Gresik. The variables were interpersonal factors and self-efficacy and the choice of IUD contraception among women of childbearing age couples. The data was collected using questionnaires and tested with Spearman's rho. The result showed the relationship between interpersonal factors and the choice of IUD contraception ($p = 0,000$, $r = 0,613$), and self-efficacy with the choice of IUD contraception ($p = 0,015$, $r = 0,227$). If the self-efficacy was high, they would choose the IUD contraception. The higher interpersonal factor and self-efficacy will increase the possibility of choosing the IUD contraception in women of childbearing age couples.

1 BACKGROUND

The Long Acting Reversible Contraception is an effective method for preventing pregnancy and stopping fertility (Dewi and Notobroto, 2014). The IUD is one of the reversible MKJPs that is effective in delaying pregnancy with a failure rate of 0.1% and it does not need to be replaced for up to 10 years for CuT-380A (Leveno, Cunningham and Gant, 2009). However, based on interviews with the Head of Family Planning and Population Control BKBPP Gresik, until now interest in MKJPs is still low when compared with non MKJPs.

The number of fertile couples in Indonesia is 47,665,847 people. The choice of IUD as a contraceptive method by new family planning participants is still low (6.81%) compared to others, the injection method (49.93%), pill (26.36%) and implant (9.63%). In East Java, the percentage of users of IUDs is 6.32% of total new KB participants, that is 887,397 people (Kementerian Kesehatan RI, 2016). IUD users in Gresik District represent 2.3% of new KB participants and 5.2% of active KB participants (Dinas Kesehatan Jawa Timur, 2015).

Types of IUD are still inadequate with three villages in Wringinanom that had not met the target for the number of new IUD acceptors in 2016 and even failed in meeting the 5.9% target, Sumber Waru Village, Kepuh Klagen Village and Sembung Village.

Field Officers in Wringinanom have made various efforts to increase the number of MKJP users. Some methods involve direct socialization such as counseling every village one-by-one, making banners, and holding events promoting the long acting reversible contraception method. The Health Promotion Model Theory is a way to describe the interaction between man and his physical and interpersonal environment in various dimensions (Pender, Murdaugh and Parsons, 2015). Self-efficacy is understood to be a predictor of human behavior. Bandura defines self-efficacy as one's self-confidence for a particular purpose (Pender, Murdaugh and Parsons, 2015). Thus, self-efficacy is a key factor for family planning and the benefits of attitudes toward contraception that can predict family planning compliance (Heinrich, 1993; Peyman, Hidarnia and Ghofranipour, 2009). Other

findings suggest that women feel an inability to use family planning (Ong et al., 2012).

2 METHODS

This research used a descriptive analytic design with a cross-sectional approach. The research was conducted in Wringinanom, Gresik. The population in this study were women of fertile couples in Wringinanom, Gresik Regency, who became family planning acceptors. From the data obtained the number of family planning acceptors in 2016 was as many as 765 people. The sample consisted of 115 women from fertile couples who met the inclusion and exclusion criteria. This research uses cluster sampling, that is the grouping of a sample by region or population location (Nursalam 2013). Independent variables in this research are interpersonal factors and self-efficacy. The dependent variable is the selection of IUD contraceptives. Data was collected using questionnaires. Data was analyzed by Spearman's rho statistic test.

In Wringinanom, Gresik eligible reproductive age women were identified through available data from all governmental health facilities and interviewed while they had come for the service within the data collection period. All women of reproductive age who visited the integrated service (Posyandu) were included for interview. Data was collected by using a structured and pre-tested questionnaire using a face-to-face interview technique with the women.

The research was conducted after obtaining the ethical permit from the Health Research Ethics Committee, Faculty of Nursing, Airlangga University with ethical approval number 403-KEPK. Later, a letter was sent to the Ministry of Health Indonesia. Permission is obtained from the facility administration. Oral informed consent was obtained from each study participant. Women who refused to participate in the study were not forced. Each respondent was informed about the purpose of the study. Confidentiality is guaranteed for information to be collected by maintaining the confidentiality of the respondents when filling out the questionnaire.

3 RESULTS

The results of data analysis using Spearman's rho statistical test obtained significance value (p) = 0.015 and correlation coefficient (r) = 0.227.

Table 1: Demographic characteristics of research respondents.

Characteristics		N	%
Mother's age	<20 years	2	1
	20-35 years	94	82
	>35 years	19	17
Total		115	100
Religion	Moslem	113	98
	Christian	2	2
Total		115	100
Marital Age	1-5 years	46	40
	6-10 years	29	25
	11-20 years	29	25
	>20 years	11	10
Total		115	100
Education	University	18	16
	Senior high school	48	42
	Junior high school	42	37
	Elementary school	3	3
	Uneducated	4	3
Total		115	100
Mother's Occupation	Government employee	1	1
	Private employee	15	13
	Farmer	89	77
	Housewife	5	4
	Others	5	4
Total		115	100
Family income	< IDR 3.293.506	103	90
	≥ IDR 3.293.506	12	10
Total		115	100
Number of children now	1	42	37
	2	62	54
	>2	11	10
Total		115	100
Number of children wanted	1	5	4
	2	96	83
	>2	4	12
Total		115	100
Information resources about FP	Health workers	76	66
	Media	9	8
	Cadre	18	16
	Close related person	12	10
Total		115	100
Type contraception used now	IUD	8	7
	Implant	5	4
	Injection	89	77
	Pills	12	10
	Tubectomy	1	1
Total		115	100

Long use	<1 years	6	5
	1-5 years	87	76
	6-10 years	13	11
	>10 years	9	8
Total		115	100

The value of the correlation coefficient indicates a probability of less than 0.05, then H0 is rejected and H1 is accepted. This shows that there is a relationship between self-efficacy with IUD contraceptive selection. Correlation coefficient value indicates there is a weak relationship (0,200-0,399) with the direction of positive relationship. This shows that the relationship between self-efficacy is weak with IUD contraceptive selection where the higher the respondent's self-efficacy the more likely they will be to select IUD contraception.

Table 2: Interpersonal factor relationship with IUD contraceptive choice in Women at Kepuh Klagen Village.

Interpersonal Factors	Contraceptive choice				Total	
	IUD		Non IUD		N	%
	N	%	N	%		
Low	1	1	99	86	100	87
Moderate	3	3	5	4	8	7
High	4	3	3	3	7	6
Total	8	7	107	93	115	100
Spearman Rho	p=0,000		r=0,613			

Table 3: Self-efficacy relationship with IUD contraceptive choice in Women at Kepuh Klagen Village.

Self Efficacy	Contraception choice				Total	
	IUD		Non IUD		N	%
	N	%	N	%		
Low	1	1	61	53	62	54
High	7	6	46	40	53	46
Total	8	7	107	93	115	100
Spearman Rho	p=0,015		r=0,227			

4 DISCUSSION

Interpersonal factors in IUD contraceptive selection in Wringinanom, Gresik were mostly low. The majority of women of fertile couples choose not to use IUD contraceptives but use other types of contraceptives such as injections, the pill, implants, and tubal ligation. Almost all respondents with low interpersonal factors did not use IUD contraception, and respondents with high interpersonal factors chose IUD contraception. The results of analysis show that there is a strong correlation between interpersonal factors with IUD contraception choice

in woman of fertile age couples in Wringinanom, Gresik.

The Health Promotion Model theory explains that family, peer groups and healthcare providers are a major source of interpersonal factors that can increase or decrease the commitment to engage in health promotion behavior (Alligood, 2014). Misinformation as well as the environmental restrictions on contraception to be used may affect women in choosing to use IUDs or not (Hoopes et al., 2016). The results showed that there was hope from health workers to use IUD contraception. However, respondents did not obtain directions from their nearest person to use IUD contraception. The lack of encouragement and example of the family and the nearest person has caused a low number of IUD contraceptive users in Kepuh Klagen Village. This is in line with previous research which states that focusing health promotion on secondary targets such as mothers-in-law and husbands is very important in improving the quality of effective contraceptive use (Agha, 2010). There are three parameters in the interpersonal factors that affect one's actions, social norm, social support and role models. The results show that the most dominant is the low support from family and the nearest person in IUD contraceptive election. Positive support from the family may affect contraceptive selection as a result of previous studies (Yunitasari, Pradanie and Hardiansyah, 2017).

In making the decision to choose IUD contraceptives there are three stages that require specific social support for each stage. The first stage is one must obtain correct and explicit information from reliable sources on IUD contraception. Here the role of health workers is needed in providing clear information. The second stage is listening to live testimony from people who have used IUD contraception and have been successful in preventing pregnancy safely. If a person only listens to the testimony of a person who is unsuccessful or dissatisfied with IUD contraception, then fear will come to them. The last stage is the accompaniment of the nearest person either the husband or the family to increase the confidence of the woman as she goes to the clinic (Gottert et al., 2017). Respondents who received full support at all three stages chose to use IUD contraception. While respondents who do not get social support in three stages are choosing not to use IUD contraception. Some respondents with high interpersonal factors are choosing not to use IUD contraception. The choice of contraception can be influenced by several factors, including the number of live children, and socioeconomic level (Hartini, Ikhsan and Salmah, 2014). There are respondents who still have one child and want to have more children. Women who

want to become pregnant are less likely to choose long-term contraceptive methods (Gomez and Freihart, 2017). Respondents who have high interpersonal factors but do not choose contraception, have less family income than MSEs. The economic level of a person can also affect the selection of IUD contraceptives. Users of IUDs will increase along with the improvement of one's economic status (İnal et al., 2017).

Most women of fertile couples in the village of Kepuh Klagen have low self-efficacy levels and some have high self-efficacy levels. Respondents with low self-efficacy mostly chose not to use IUD contraception. The results show that there is a weak relationship between self-efficacy with IUD contraceptive selection in women of fertile couples in Kepuh Klagen Village.

The Health Promotion Model Theories explain that self-efficacy or a person's belief that he or she can successfully perform an action will increase commitment in planning action. Self-efficacy is influenced by the way a person thinks, feels, motivates themselves, and performs actions (Bandura, 2002). There are three indicators of one's self-efficacy: the belief in using IUD contraceptives to prevent pregnancy, information obtained, and convenience in IUD use. Sufficient information has been obtained. Respondents believe that IUD contraceptives can prevent pregnancy. However, respondents felt anxious about the convenience of using IUD contraception. Most respondents who have a high level of self-efficacy choose to use IUD contraception. Those who have received clear information about IUD contraception are convinced to use the contraceptive in preventing pregnancy. Conversely, respondents who lacked information about IUD contraceptives were not sure about using IUD contraceptives.

There are four factors that can affect one's self-efficacy. First is past experience. Success can build a person's confidence and self-efficacy. Failure can tear it down, especially if the failure occurs before the person's self-efficacy is formed. The researcher did not identify the prior family history of the respondent so no data could corroborate the theory. The second factor is the experience of others who have succeeded. In Desa Kepuh Klagen, there are still very few IUD users so that they do not build self-efficacy in IUD contraceptive selection. The third factor is social persuasion. Persuasion from the social environment can increase the motivation to accomplish the task given. There is a lack of social support in Desa Kepuh Klagen in IUD contraceptive selection so that self-efficacy is not formed. The last factor is the psychological response. Respondents feel anxious about the convenience of using IUD contraception so as to decrease self-efficacy.

There are still many females of childbearing age with a high level of self-efficacy but do not choose to use IUD contraception. This can be influenced by several factors such as the level of education and husband support (Hartini, Ikhsan and Salmah, 2014). For example, one respondent was under 20 years of age with basic education. The lack of support from the husband and the nearest person is seen from the low interpersonal factors. This may cause the respondents to choose not to use IUD contraception despite having high self-efficacy levels.

A person's educational level may affect the choice of IUD contraceptives. Someone who is more open to new science chooses effective contraception as a result of their higher level of education (İnal et al., 2017). A mother's work is mostly as a housewife. It can also affect the lack of information obtained about IUD contraceptives due to lack of socialization with others. Mothers engage in more activities at home and socialize only with the neighbors around them. Social influences also determine the selection of contraception (Gomez and Freihart, 2017). The experience shared by the nearest person who has used the IUD as well as the direct support of the husband accompanying them to the clinic to consult on contraceptive choices may increase women's confidence (Gottert et al., 2017). Most respondents only obtain information from one source and the majority gain KB information from health workers. Lack of information or knowledge can affect a person's contraceptive choice (Hartini, Ikhsan and Salmah, 2014). In addition, the type of KB used at this time and the duration of its use also can affect one's choice. There were respondents who had used injectable contraceptives for more than 10 years. Success can build a person's confidence and self-efficacy. The respondents have had high self-efficacy against the use of injectable contraception so it is not easy to switch to another type of contraception.

5 CONCLUSIONS

Women of childbearing age in Desa Kepuh Klagen mostly chose non-IUD contraception i.e. injection. Women of childbearing age in Desa Kepuh Klagen mostly have low interpersonal factors in IUD contraceptive selection and obtain less support from family or nearest person to use IUD contraception. Most women of childbearing age in Desa Kepuh Klagen have low self-efficacy levels in IUD contraceptive selection and they are mostly uncomfortable using IUD contraceptives to prevent pregnancy. The higher the interpersonal factor of a woman of childbearing age, the more likely she will

choose to use IUD contraceptives. The higher the self-efficacy of a woman of childbearing age, the more likely she will choose to use IUD contraceptives.

REFERENCES

- Agha, S. (2010) 'Intentions to use contraceptives in Pakistan: Implications for behavior change campaigns.', *BMC Public Health*, 10, p. 450.
- Alligood, M. R. (2014) *Nursing Theorists and Their Work*. 8th edn. United State of America: Elsevier Inc.
- Bandura, A. (2002) *Self-efficacy in Changing Societies*. New York: Cambridge University Press.
- Dewi, P. H. C. and Notobroto, H. B. (2014) 'Rendahnya Keikutsertaan Pengguna Metode Kontrasepsi Jangka Panjang Pada Pasangan Usia Subur Di Polindes Tebalo Kecamatan Manyar Kabupaten Gresik', *Biometrika dan Kependudukan*, 3, pp. 66–72.
- Dinas Kesehatan Jawa Timur (2015) *Profil Kesehatan Provinsi Jawa Timur 2014*.
- Gomez, A. M. and Freihart, B. (2017) 'Motivations for Interest, Disinterest and Uncertainty in Intrauterine Device Use Among Young Women', *Maternal and Child Health Journal*, 21(9), pp. 1753–1762.
- Gottert, A. et al. (2017) 'Influences on women's decision making about intrauterine device use in Madagascar', *Contraception*, 91(4). doi: <https://doi.org/10.1016/j.contraception.2015.01.014>.
- Hartini, Ikhsan, M. and Salmah, A. U. (2014) *Determinant of the Selection of IUD Contraceptives in Sanrobone Health Center Takalar*. Universitas Hasanuddin.
- Heinrich, L. B. (1993) 'Contraceptive self-efficacy in college women', *Journal of Adolescent Health*, 14(4), pp. 269–276. doi: 10.1016/1054-139X(93)90173-M.
- İnal, Z. Ö. et al. (2017) 'The level of using family planning methods and factors that influence the preference of methods in the Konya-Merem area', *J Turk Ger Gynecol Assoc*, 18(2), pp. 72–76.
- J. Hoopes, A. et al. (2016) 'A Qualitative Study of Factors That Influence Contraceptive Choice among Adolescent School-Based Health Center Patients', *Journal of Pediatric and Adolescent Gynecology*, 29(3), pp. 259–264. doi: <https://doi.org/10.1016/j.jpag.2015.09.011>.
- Kementerian Kesehatan RI (2016) *Profil Kesehatan Indonesia 2015*.
- Leveno, J. K., Cunningham, G. and Gant, N. (2009) *Obstetri Williams Panduan Ringkas*. 21st edn. Jakarta: EGC.
- Ong, J. et al. (2012) 'Contraception matters: indicators of poor usage of contraception in sexually active women attending family planning clinics in Victoria, Australia', *BMC Public Health*, 12, p. 1108. doi: <https://doi.org/10.1186/1471-2458-12-1108>.
- Pender, N. J., Murdaugh, C. L. and Parsons, M. A. (2015) *Health promotion in nursing practice*. Seventh ed. Prentice-Hall.
- Peyman, N., Hidarnia, A. and Ghofranipour, F. (2009) 'Self-efficacy: Does it predict the effectiveness of contraceptive use in Iranian women', *Eastern Mediterranean health journal = La revue de santé de la Méditerranée orientale = al-Majallah al-šihhīyah li-sharq al-mutawassiṭ*, 15(5), pp. 1254–62. Available at: https://www.researchgate.net/publication/41847383_Self-efficacy_Does_it_predict_the_effectiveness_of_contraceptive_use_in_Iranian_women.
- Yunitasari, E., Pradanie, R. and Hardiansyah, H. (2017) 'Determinants Factors of Vasectomy Method Selection', *Jurnal Ners*, 12(1), p. 33.