

# The Correlation between Parity and Husband's Support with the Choice of Intra-Uterine Device Contraception at Work Area of Sleman Health Center

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## ABSTRACT

**Background:** The use of injectable and pills dominates the use of family planning in Indonesia. Injection and pill contraception require monthly control for re-injecting as well as obtaining birth control pills. Intrauterine device (IUD) contraception is a very effective long-term contraceptive to avoid unwanted pregnancies.

**Aim:** This study aims to determine the correlation between parity and husband's support with intrauterine device choice in the work area Sleman Health Center.

**Method:** Quantitative research with a cross-sectional approach was applied in the study. The study results showed that with a statistically significant test results, there was a correlation between parity and husband's support with the choice of IUD contraception with a *p-value* of 0.018 <0.05 and *p-value* 0.000 <0.05.

**Results:** The multivariate statistical tests results showed that the husband's support had the most significant relationship between the two factors. Husband's support had the smallest *p-value* of 0,000. Assessment of *Health Technology Assessment* (HTA), on husband class planning in health care facilities for understanding and information about contraceptives. Hence, the husband could play a role in the selection and use of contraceptives.

**Keywords:** Parity, husband's support, intrauterine device contraception

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## INTRODUCTION

Population growth that has increased every year is due to high fertility. A high growth part of the major problem faced by a country. The higher the population growth, the greater the effort that must be done to maintain people's welfare [1]. The threat of a population explosion in Indonesia is the evidence. In 2013 Indonesia was the 5th country globally with the largest population of 250 million [2]. Data on the Performance Report of the National Population and Family Planning Agency, the population, and Indonesia's growth rate in 2015 was 255.180 million. This shows an increase in the population in 2010-2015, amounting to 17.54%. The results of the *SDKI* (2012) showed that the highest dropout rate of family planning uses was pill (40.7%) and injectable contraception (25%). Dropout contraception rate can have an impact on fertility which will encourage the number of deliveries.

Whereas the population growth target to be achieved in 2020 is 1.27% [3]. It is primarily determined by the rate of birth, death, and population migration. Therefore, the Government continues to improve quality family planning capacity [4]. Contraception is a regulator of pregnancy, preventing unwanted pregnancies, which can reduce population growth in a country. The contraception method is divided into two methods: Long-term Contraception Method such as Implant and Intra Uterine Device Contraception (IUD) and Short-term Contraception Method such as injections pills. The use of injectable and pills dominates the use of family planning in Indonesia. Injection and pill contraceptives require monthly control to re-inject and to obtain birth control pills [5].

The Intra-Uterine Device Contraception (IUD), the most effective, safe, and comfortable contraceptive for

many women, does not need to be remembered every day. For mothers who are breastfeeding, the IUD will not affect the smoothness and level of the mother's milk or baby's growth [6]. IUD is a contraceptive that has superior effectiveness compared to short-term contraceptives, and the failure rate is meager compared to other contraceptives [7]. Many factors can influence the choice of contraception IUD. Factors that influence the choice of contraceptives including factors including age, parity, education, place of service, culture, and religious beliefs.

The Sleman health center data obtained the data that those who became fertile couples were 9,402 people and active family planning participants were 6,677. The number of family planning participants was 27.14% of reproductive age couples who chose the intrauterine device (IUD) Contraception tool. In comparison, the method chosen was injectable contraception reaching 42.35%, and the remaining 30.51% of fertile couples chose pill contraceptive methods, tubectomy, vasectomy, and condoms. Sleman Health Center's working area is divided into five villages: Tridadi, Triharjo, Caturharjo, Pandowoharjo, and Trimulyo. In this study, researchers only studied three villages, namely Pandowoharjo Village, Caturharjo Village, and Trimulyo Village. The three villages have the highest number of reproductive age couples, but PUS who choose IUD are reasonably low. Caturharjo village with IUD acceptors is 24.14% of 1562 couples of reproductive age. Pandowoharjo village with IUD acceptors is 31.36% of 1164 couples of reproductive age. Moreover, Trimulyo Village with IUD acceptors is 25.58% of 942 couples of reproductive age. Based on the background described above, this study will research the correlation of parity and husband's support with the choice of intrauterine device

contraceptives in the working area of Sleman Health Center Yogyakarta.

**METHOD**

The research design used in this study applied an *analytic survey* with a *cross-sectional* approach. This study's population were all reproductive-age couples in the Sleman health center, as many as 3668 contraceptive acceptors. The number of samples in this study was 97 family planning acceptors. The sampling technique uses cluster sampling in each village of Sleman Health Center's working area. This research was conducted for three months (May-July 2018). The study was conducted in Pandowoharjo Village, Caturharjo, and Trimulyo. This study's inclusion criteria were mothers who became family planning acceptors, mothers who had husbands, and exclusion criteria that were incomplete contraceptive data and refused to be used as respondents. The data collection instrument in this study used primary data (questionnaire). The independent variables (independent variable) were parity and husband's support. The dependent variable was the choice of intrauterine device contraceptives. Univariate analysis was carried out with descriptive statistics to describe the characteristics of each research variable. Bivariate analysis using Chi-Square test as well as multivariate analysis using logistic regression.

**RESULTS**

**Characteristics of Respondents:** Table. 1 Univariate analysis shows that most of the characteristics of respondents aged 31-34 were 21 respondents (21.6%). The respondents' educational characteristics showed that most respondents were middle educations (Junior high school, Senior high school), as many as 61 respondents (62.9%). Most respondents with multiparous parity were 72 respondents (74.2%). Most respondents who chose intrauterine device contraceptives as many as 60 respondents (61.9%). The respondents' job characteristics obtained results that most respondents worked as housewives as many as 73 respondents (75.3%). The respondents' characteristics about the husband's income every month showed that most respondents had an income of <1,200,000, namely 56 respondents (57.7%). The respondents' husbands' educational characteristics showed that most of the husbands were respondents with middle education (Junior high school, senior high school) and 69 husbands (71.1%). The husband's characteristics of the respondent's work found that most of the respondents' husbands worked as laborers as many as 43 husbands (45.4%).

Table 1. Variable Frequency and Characteristic Distribution

Variable	f	%
Age		
23-26 years	11	11.3
27-30 years	17	17.5
31-34 years	21	21.6
35-38 years	20	20.6
39-42 years	14	14.4
43-46 Years	10	10.3
47-50 years	4	4.1
Total	97	100

Mother's Education		
basic education	25	25.8
Middle education	61	62.9
higher education	11	11.3
Total	97	100
Mother's work		
Housewife	73	75.3
Self-employed/private	19	19.6
Government employees	5	5.2
Total	97	100
Husband's income		
<1,200,000	56	57.7
1,200,000-2,400,000	23	23.7
> 2,400,000	18	18.6
Total	97	100
Husband's Education		
basic education	19	19.6
Middle education	69	71.1
higher education	9	9.3
Total	97	100
Husband's work		
Laborer	44	45.4
Self-employed / private	43	44.3
Government employees	10	10.3
Total	97	100
Parity		
Primipara	25	25.8
Multipara	72	74.2
Total	97	100
Husband Support		
Low	24	24.7
Medium	29	29.9
High	44	45.4
Total	97	100

Table 2: The Correlation of Parity with the Choice of Intra-Uterine Device Contraception in the Work Area Sleman Health Center.

Parity	Choice of IUD						P-value	C
	Do not choose		Choose		Total			
	f	%	f	%	F	%		
Primipara	15	15.5	10	10.3	25	25.8	0.018	0.256
Multipara	22	22.7	50	51.5	72	74.2		
Total	37	38.1	60	61.9	85	100		

Table 3. The Correlation of Husband's Support with the Choice of Intra-Uterine Device Contraception in the work area Sleman Health Center.

Husband's Support	Choice of IUD						P-value	C
	Do not choose		Choose		Total			
	f	%	f	%	F	%		
Low	19	19.6	5	5.2	24	24.7	0,000	0.529
Medium	15	15.5	14	14.4	29	29.9		
High	3	3.1	41	42.3	44	45.4		
Total	37	38.1	60	61.9	97	100		

Table 2 bivariate analysis shows that respondents with primiparous parity who chose the IUD were as many as ten respondents (10.3%). Simultaneously, respondents with primiparous parity who did not choose the IUD were 15 respondents (15.5%). Respondents with multiparous parity who did not choose the IUD were 22 respondents (22.1%), while the respondents with multiparous parity who chose the IUD were 50 respondents (51.5%). The chi-Square test result is that *the p-value* showed 0.018 results, so it could be concluded that 0.018 *p-values*<0.05 and there was a parity correlation with the choice of intrauterine device contraceptives in the work area Sleman Health

Center in 2018. Contingency coefficient results show that  $C = 0.256$ , which means that the contingency coefficient relationship's strength was low (0.20-0.399).

Based on Table 3, the bivariate analysis showed that respondents with the support of high husbands who chose the IUD were 41 respondents (42.3%). Simultaneously, respondents with the support of high husbands who did not choose the IUD were as many as three respondents (3.1%). Respondents with the support of low husbands who disagreed with the IUD were 19 respondents (19.6%), while respondents with low husband support who chose the IUD were five respondents (5.2%). The support of medium husbands who did not vote for the IUD was 15 respondents (15.5%), and the support of the husband who chose the IUD was 14 respondents (14.4%). *Chi-Square* test results, namely *p-value*, show the results of 0,000. Hence, it can be concluded that *p-values* are  $0,000 < 0,05$ , and there was a correlation between husband's support and the choice of intrauterine device contraceptives in Sleman Health Center Work Area 2018. The contingency coefficient value shows that  $C = 0.529$ , which means the strength of the contingency coefficient's relationship level is medium (0.40-0.599).

Table 4: Multivariate analysis Factors that have the closest correlation with the choice of intrauterine device Contraception in the Sleman Health Center Work Area.

Variable	p (value)	Exp $\beta$
Parity	0.036	3,853
Husband Support	0,000	7.320

Based on Table 4, multivariate analysis showed that the two variables studied both had a significant relationship with selecting contraceptives in the womb because these two variables had a *p-value*  $< 0.05$ . Parity had a *p-value* of 0.036 and Exp  $\beta$  of 3.853, and the husband's support had a *p-value* of 0.000 and Exp  $\beta$  7.320. From these two variables, the husband's support variable had the smallest *p-value* of 0.000, so it could be concluded that the husband's support was the variable that had the most significant relationship with the IUD selection and has Exp  $\beta$  7.320 so that mothers who had high husband support had seven times the opportunity to choose IUD contraception compared with mothers who had low husband support.

## DISCUSSION

Data analysis results showed that respondents with multiparous parity who chose the IUD were 50 respondents (51.5%). The chi-Square test result was that *the p-value* showed 0.018 results, so it can be concluded that  $0.018 p\text{-values} < 0.05$  and there was a parity relationship with the selection of intrauterine device contraceptives in the Sleman Health Center Work Area in 2018. Contingency coefficient results show that  $C = 0.256$ , which means that the contingency coefficient relationship's strength was low (0.20-0.399). Parity can be interpreted as the number of live births of a woman. The parity classification is divided into three that is primipara, multipara, and grademultipara. The results of this study stated that multipara or a woman who had experienced two or more pregnancies prefers long-term contraception as a method of preventing

unwanted pregnancies [8]. Research conducted in the United States explained that long-term contraception effectively reduces the rate of unwanted pregnancy that is the IUD. This intrauterine device contraceptive should be considered in all women, but young or primipara women who have new children prefer not to use an IUD. This is caused by pain and irregular bleeding. Therefore multiparous women prefer long-term contraception because they already have previous experience [9].

The prevalence and factors that influence long-term contraceptive use depend heavily on the availability of health extension workers in urban and rural areas and health promotion related to contraception through media (television and radio), which can continuously increase contraceptive use [10]. Factors that influence the use of long-term contraception include knowledge, education, parity, and age. Women with knowledge and higher education are more likely to use contraception. Women who have children are more likely to use the IUD as current contraception [11]. The choice of contraception is solid concerning parity factors. Mothers who have two children or more are encouraged to use long-term contraceptives such as the IUD. One of the reasons is because these contraceptives have high effectiveness in preventing unwanted pregnancies [5]. Unwanted pregnancy is a significant public health problem, from an unwanted pregnancy can be done abortion. Abortion is still common in developing countries that can increase maternal morbidity and mortality. Therefore in this study, contraception was more in mothers with two children or three children.

Moreover, the contraceptive method that is often used is the IUD method [12]. The data analysis results showed that respondents with the support of high husbands who chose the IUD were 41 respondents (42.3%). At the same time, respondents with the support of low husbands who did not choose the IUD were 19 respondents (19.6%). *Chi-Square* test results, *p-value* showed the results of 0,000, so it could be concluded that *p-values*  $0.000 < 0.05$  and relationship between husband's support with the choice of intrauterine device contraceptives in the Work Area Sleman Health Center in 2018. The contingency coefficient value showed that  $C = 0.529$ , which means the contingency coefficient level's strength was medium (0.40-0.599). The husband's role in selecting contraception was to provide support and give freedom to the wife to use contraception or contraceptive methods [13]. The most substantial obstacle for women to use contraceptive methods is the belief that the husband makes decisions in family planning. Women are more dependent on husbands in using family planning methods to be used [14]. In this study, women who chose IUD contraception received high husband support. The husband helps the wife to choose the method or method of contraception that will be used. The husband's support given to his wife is when the husband digs up information about various types of contraception, discusses with his wife in determining the contraception to be used, and caring if side effects occur due to the use of contraceptives. This is in line with research conducted in Uganda which said that almost half (48.1%) of women in this study thought that husbands must decide on the contraceptive they would use [15]. Studies in Kenya and

Ethiopia explained that the husband's approval for contraceptives would affect his wife [16].

In Rwanda, the research found contraceptives the selective were related to the couple's decision. Women only make decisions to give birth but to a decision to choose contraception by the husband. The positive influence of the husband can affect maternal and child health. Nearly half of the women in this study considered that their husbands had to decide which contraception the wife would use because it included social culture [17]. Some obstacles that hinder the family planning program are cultural issues. In Indonesia, Cultural factors of "patriarchy" have a relationship with the use of contraception. The patriarchal culture makes the husband the head of the family whose decisions are in the husband's hands without maternal and child health [13]. This is in line with Pakistan's research that says that South Asian women are more concerned with their family or partner's interests than their desires. Choice of contraception depends on the husband's decision, and they are sacrificing their desire to regulate fertility selected contraception [18]. The multivariate analysis results showed that husband's support was the variable that had the most significant relationship with IUD selection and had  $\text{Exp } \beta$  7.320 so that mothers with high husband support had an opportunity of 7,320 times more to choose IUD contraception compared to mothers who had low husband support. The research in the Debre-Tabor City of Ethiopia said that women often discussed with their husbands or partners to use long-term contraception. The study results were husband's high support 3.89 times as long as using long-term contraception compared to women who rarely discussed with husband [19]. This is in line with research in Ethiopia which says that women whom their husbands support by discussing the selection of contraceptives are seven times more likely to use modern contraceptives. From these results, it can be concluded that husbands' involvement has an essential role in the use of contraception and maternal and child health.

## CONCLUSION

The study results of the correlation between parity and husband's support with the choice of intrauterine device contraceptives in Sleman Health Center Work Area with significant statistical test results  $p$ -value 0.018 <0.05 and  $p$ -value 0.000 <0.05. Thus, mothers with children > 2 were more likely to use long-term contraception because they want to prevent unwanted pregnancies. Husband support was the variable that had the most significant relationship with IUD selection and had  $\text{Exp } \beta$  7.320 so that mothers who had high husband support had an opportunity of 7,320 times more to choose IUD contraception compared to mothers who had low husband support. Husband's support in making the contraceptive decision used might be used as a strategy to promote the planning of family planning services.

**Suggestion:** With this study's results, it is expected that the husband can improve communication with his wife in making contraceptive use decisions and increasing

knowledge about contraception by providing overall support concerning the wife's health and comfort. Assessment of *Health Technology Assessment (HTA)* towards planning the "husband class" in health services for understanding and information about contraceptives. The husband can play a role in selecting and using contraceptives, health workers, especially midwives, can optimize the delivery of information and knowledge about family planning.

## REFERENCES

- [1] E. N. Arifin and A. Ananta, "Three Mega-Demographic Trends in Indonesia," *Soc. Dev. Issues*, vol. 35, no. 3, pp. 109–124, 2013.
- [2] B. Kependudukan and K. B. Nasional, "Laporan Kinerja Instansi Pemerintah 2015," *Jakarta: BKKBN*, 2016.
- [3] E. N. Berry-Bibee, N. K. Tepper, T. C. Jatlaoui, M. K. Whiteman, D. J. Jamieson, and K. M. Curtis, "The Safety of Intrauterine Devices in Breastfeeding Women: a Systematic Review," *Contraception*, vol. 94, no. 6, pp. 725–738, 2016.
- [4] L. Gavin *et al.*, "Providing Quality Family Planning Services: Recommendations of CDC and the US Office of Population Affairs," *Morb. Mortal. Wkly. Rep. Recomm. Reports*, vol. 63, no. 4, pp. 1–54, 2014.
- [5] B. Kependudukan and K. B. Nasional, "Pedoman Penggunaan Dana Alokasi Khusus (DAK) Bidang Keluarga Berencana Tahun 2014." *Jakarta: BKKBN*, 2013.
- [6] J. Tang, R. Maurer, and D. Bartz, "Intrauterine Device Knowledge and Practices: a National Survey of Obstetrics and Gynecology Residents," *South Med J*, vol. 106, no. 9, pp. 500–505, 2013.
- [7] J. Trussell, "Contraceptive Failure in the United States," *Contraception*, vol. 70, no. 2, pp. 89–96, 2004.
- [8] W. H. O. R. Health, *Family Planning: a Global Handbook for Providers: Evidence-Based Guidance Developed Through Worldwide Collaboration*. Johns Hopkins Ccp-Info, 2007.
- [9] S. Agha, "Intentions to Use Contraceptives in Pakistan: Implications for Behavior Change Campaigns," *BMC Public Health*, vol. 10, no. 1, p. 450, 2010.
- [10] R. Anguzu *et al.*, "Knowledge and attitudes towards use of long acting reversible contraceptives among women of reproductive age in Lubaga division, Kampala district, Uganda," *BMC Res. Notes*, vol. 7, no. 1, p. 153, 2014.
- [11] T. C. Okech, N. W. Wawire, and T. K. Mburu, "Contraceptive use among women of reproductive age in Kenya's city slums," 2011.
- [12] J. Aoun, V. A. Dines, D. W. Stovall, M. Mete, C. B. Nelson, and V. Gomez-Lobo, "Effects of Age, Parity, and Device Type on Complications and Discontinuation of Intrauterine Devices," *Obstet. Gynecol.*, vol. 123, no. 3, pp. 585–592, Mar. 2014.
- [13] M. Alemayehu, T. Belachew, and T. Tilahun, "Factors associated with utilization of long acting and permanent contraceptive methods among married women of reproductive age in Mekelle town, Tigray region, north Ethiopia," *BMC Pregnancy Childbirth*, vol. 12, no. 1, p. 6, Dec. 2012.
- [14] A. Sköld and M. Larsson, "Contraceptive use during the reproductive lifecycle as reported by 46-year-old women in Sweden," *Sex. Reprod. Healthc.*, vol. 3, no. 1, pp. 43–47, Mar. 2012.
- [15] K. Kahraman *et al.*, "Factors influencing the contraceptive method choice: a University hospital experience," *J. Turkish Ger. Gynecol. Assoc.*, Apr. 2012.
- [16] R. Stephenson, D. Bartel, and M. Rubardt, "Constructs of power and equity and their association with contraceptive use among men and women in rural Ethiopia and Kenya," *Glob. Public Health*, vol. 7, no. 6, pp. 618–634, 2012.
- [17] W. Hameed *et al.*, "Women's Empowerment and Contraceptive Use: The Role of Independent versus Couples' Decision-Making, from a Lower Middle Income Country Perspective," *PLoS One*, vol. 9, no. 8, p. e104633, Aug. 2014.
- [18] S. Yalew, B. Zeleke, and A. Teferra, "Demand for long acting contraceptive methods and associated factors among family planning service users, Northwest Ethiopia: a health facility based cross sectional study," *BMC Res. Notes*, vol. 8, no. 1, p. 29, 2015.
- [19] A. Mohammed, D. Woldeyohannes, A. Feleke, and B. Megabiaw, "Determinants of modern contraceptive utilization among married women of reproductive age group in North Shoa Zone, Amhara Region, Ethiopia," *Reprod. Health*, vol. 11, no. 1, p. 13, Dec. 2014.