



The Effect of Women's Autonomy in the Uptake of Long-Acting and Permanent Contraception Methods among Women Reproductive Age in East Kalimantan

Pengaruh Otonomi Perempuan terhadap Pemakaian Metode Kontrasepsi Jangka Panjang dan Permanen pada Wanita Usia Subur di Kalimantan Timur

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ABSTRACT

Despite the decreased fertility rate, East Kalimantan Province still facing unmet needs. Moreover, almost all contraceptive use in East Kalimantan depends on short-acting contraceptive methods. Only a few studies have ever been conducted on women's autonomy about Long-Acting Permanent Contraception Methods (LAPMs) choices. It is, therefore, essential to find the associated factors affecting LAPMs uptake. This study aimed to analyze the influence of socio-demographic, knowledge, women's autonomy, and fertility on LAPMs uptake at the household level. The data derived from the Indonesian Demographic and Health Survey (IDHS) 2017 of East Kalimantan Province. Samples were 570 married women of childbearing age (10–49 years) who still using contraception in any method. Independent variables were socio-demographic, knowledge of family planning, autonomy, and fertility. The dependent variable was uptake of LAPMs. Logistic regression used to analyze the correlation between variables. Results showed Factors correlated with the uptake of LAPMs in the bivariate analysis were age, insurance ownership, family planning knowledge, and women's autonomy (p value<0.05). While in the multivariate analysis only women autonomy and insurance ownership were related to the uptake of LAPMs. This finding provides evidence for including women empowerment programs in the family planning program.

ABSTRAK

Meskipun tingkat fertilitas menurun, Provinsi Kalimantan Timur masih menghadapi kebutuhan KB yang tidak terpenuhi, sebagian besar penggunaan kontrasepsi masih bergantung pada metode jangka pendek. Oleh karena itu, penting untuk meneliti faktor-faktor terkait yang mempengaruhi penggunaan Metode Kontrasepsi Jangka Panjang (MKJP) dan metode permanen. Penelitian ini bertujuan untuk menganalisis pengaruh sosio demografi, pengetahuan, otonomi perempuan dan kesuburan pada penggunaan MKJP di tingkat rumah tangga. Penelitian ini merupakan penelitian cross-sectional, data berasal dari Survei Demografi dan Kesehatan Indonesia (SDKI) 2017 Provinsi Kalimantan Timur. Sampel sejumlah 570 wanita usia subur (10-49 tahun) dengan status menikah yang masih menggunakan kontrasepsi metode apa pun. Variabel independen yaitu sosio demografi, pengetahuan, otonomi perempuan dan fertilitas, dengan variabel dependen penggunaan MKJP. Analisa data menggunakan regresi logistik untuk mengetahui keterkaitan antar variabel. Diperoleh hasil bahwa penggunaan metode kontrasepsi jangka panjang dan permanen hanya 17% dibandingkan dengan metode jangka pendek. Faktor yang berhubungan dengan penggunaan MKJP dalam analisis bivariat adalah usia, kepemilikan asuransi, pengetahuan keluarga berencana dan otonomi perempuan (nilai $p < 0,05$). Sementara dalam analisis multivariat hanya otonomi perempuan dan kepemilikan asuransi yang berhubungan dengan penggunaan LAPM. Temuan ini menunjukkan perlunya memasukkan program pemberdayaan perempuan dalam program keluarga berencana.

Keywords : Family planning, women autonomy, long acting contraceptive methods.

Kata Kunci : otonomi perempuan, keluarga berencana, metode jangka panjang.

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• Received 22 Jan 2020 • Accepted 11 Mei 2020 • p - ISSN : 2088-7612 • e - ISSN : 2548-8538 •

DOI: <https://doi.org/10.25311/keskom.Vol6.Iss1.511>

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BACKGROUND

Women's ability to involve in family planning decision making has a positive impact on pregnancy spacing and reduced number of children, lead to greater benefits on the social and economic aspects. Opposite to this, if women have low autonomy in decision making, lead to unintended pregnancy and low use of modern contraceptive " ". concludes that independent and joint decision-making through communication with partners about family planning use contributed substantially to improving maternal health. Likewise ensuring access to family planning and allowing women to decide independently about the use of family planning methods was an important effort in preventing unwanted pregnancy.

Modern contraceptive uptake in Indonesia had been effectively reducing the birthrate of the Indonesian population. An increasing trend in the uptake of modern contraceptives also achieved in the 2017 IDHS, from 60.3% (2002-2003), 61.4% (2007), 61.9% (2012) become 63.6% (2017). Despite it's increasing trend, the family planning program still facing the problem. IDHS 2017 showed among the fairly large number of unwanted pregnancy namely 7% and mistimed was 8%. While compared to national data, East Kalimantan showed a greater number of unwanted pregnancies namely 11% and 9% mistimed. Study of ' found that the probability of an accidental pregnancy among contraceptive pill users to range from 0.19 in Zimbabwe to 1.24 in Indonesia, confirm that uptake of short term contraceptive method related with the high number of unwanted pregnancies. This problem is made worse by the low uptake of long-acting and permanent methods (LAPMs), such as Intrauterine Devices/ IUD (4.7%) and implants (4.7%). Other women still choose injectable (29%), 12% choose pills, and 4.2 % choose coitus interruptus (IDHS, 2017).

One of the efforts to prevent unwanted pregnancy was promotion of LAPMs. Various studies have shown some variables related to LAPMs contraceptive use. stated that if women had an autonomy, it will increase contraceptive use. This consistent with stated that contraceptive use is more likely in communities where women have control over household decisions. Program Performance and Accountability Survey report in 2018 found that Indonesian women's knowledge about family planning in women of childbearing age was still lack. This could be seen from 28.4 % of women age 15-29 years who do not know about family planning methods, 6% worried/ afraid of family planning side effects, while the most group of women age 30-49 years stated that the number of children owned was depends on destiny (94.2%).

Knowledge becomes important to be re-examined by the which showed that variables related to LAPMs were knowledge, acceptor attitude towards methods, and access to family

planning services with the most strongly factor related to the uptake of LAPMs was the acceptor's knowledge. Some research has been done to reveal the acceptance barriers of family planning programs in the community. In each fertility control policy, women become the key determinant of success as well as a target group of programs. It still not obvious what effect the autonomy factor of women have on the use of long-term contraceptive methods at the household level. This study aimed to analyze the influence of sociodemographic, knowledge, women's autonomy and fertility on LAPMs uptake at the household level.

SUBJECT & METHOD

Data were derived from the Indonesian Demographic and Health Survey (IDHS) 2017 East Kalimantan Province. This was a national-scale survey that representative to measure the achievement of national and provincial program targets. This survey provided an overview of fertility data, family planning, maternal and child health and knowledge of HIV and AIDS and sexually transmitted infections. The source population in this study were all female respondents of childbearing age (15-49 years). The sample in this study were respondents of women of childbearing age who were married or living with a partner and used either LAPMs or short contraceptive methods. The two stratified sampling design used in IDHS 2017. Stage 1: Select a number of systematic census block proportional to size (PPS) with the size of the number of households as a result of population census 2010 listing. In this case, systematic is carried out by implicit stratification process according to urban and rural as well as by sorting census blocks based on Wealth Index categories from population census 2010 results. Stage 2: Select 25 ordinary households in each census block systematically selected from the results of updating households in each of the census blocks.

The dependent variable in this study is the use of the long-term contraceptive method, which is obtained from questions about contraception. Respondents were asked: Do you use methods to prevent pregnancy at this time (Q303)? If the answered "Yes" then the respondent was sampled and then asked again about the type of family planning methods used (Q304). If the respondent answers "No" with the intention of not using family planning, the respondent will not be used as a sample.

Of 1221 respondents, 642 were not using family planning and 579 were using family planning. Nine respondents were coded as missing data or deleted and there still remaining 570 respondents. Respondents who currently using vasectomy, tubectomy, IUD or implant method were classified as LAPMs user. Otherwise, they who do not use family planning vasectomy, tubectomy, IUD or implants will be classified as not users of

LAPMs. The following population schemes and research samples shown in Figure 1.:

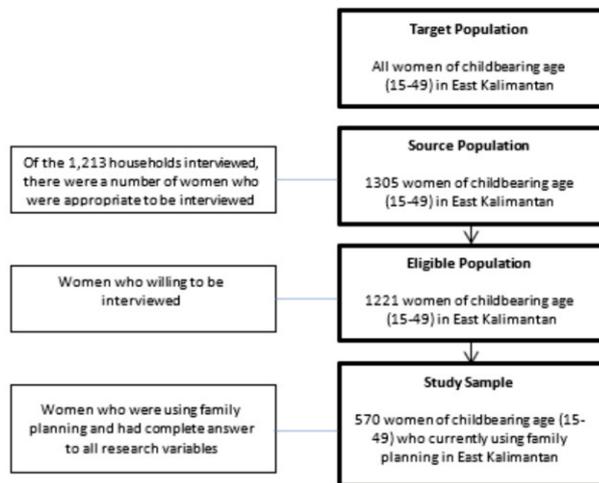


Figure 1. Population schemes and research samples

The independent variables were obtained from respondents' age (Q106), residence (Q102), wife's education (Q108), parity (Q314A), wealth index (Q HWLTHI), wife's occupation (Q909), husband's education (Q904), husband occupation (Q906), insurance ownership (Q1109), knowledge of family planning (Q301 number 1-13). The women autonomy measured in relation to women ability to decide about family planning needs choices and family expenditure independently or jointly with her husband using four questions, such as: is using family planning tools/ methods a mother/sister's decision, husband/partner's decision or joint decision (Q819); who was usually decided regarding maternal health care (Q922); who was usually made the decision for large expenditures in the household (Q923); Who was usually make the decision to visit family (Q24) (sourced from the United States Agency for International Development, 2018). We depart from earlier work the focus has been on women had a say in the decision versus husband dominated . Defined as high autonomy if women making all decision in financial and family planning indepently or jointly with her husband/partner, low autonomy if women had no say in the decisions making.

Descriptive and analytical statistics were carried out to give information on each variable. Frequency distribution of categorical data produces information on frequency distribution related to the use of LAPMs, socio demographic, fertility, family planning knowledge, and women's autonomy, while numerical data provide information on average/standard and standard deviations. The bivariate analysis used to determine the relationship between independent variables on the dependent variable. Multiple Logistic Regression tests conducted to determine the factors that influence women's decision-making in the household.

RESULT

Respondent characteristic's distribution based on demographic factors, wealth index, and insurance as seen in the table below:

Tabel 1 . Respondent Characteristic

Variable	n (570)	Percentage (%)
Age		
15-19	5	0,9
20-24	46	8,1
25-29	85	14,9
30-34	127	22,3
35-39	143	25,1
40-44	112	19,6
45-49	52	9,1
Residence		
Urban	411	72,1
Rural	159	27,9
Women Education		
Primary	148	26
Secondary	368	64,6
Higher	54	9,5
Man Education (Husband/Partner)		
Not attending	5	0,9
Primary	128	22,5
Secondary	381	66,8
Higher	56	9,8
Woman Occupation		
Work	284	49,8
Not Work	286	50,2
Man Occupation (Husband/Partner)		
Work	564	98,9
Not Work	6	1,1
Literacy		
Cannot read at all	6	1,1
Can only read sentence part	13	2,3
Can read entire sentence	551	96,7
Wealth Index		
Lowest	68	11,9
Second	151	26,5
Middle	134	23,5
Fourth	97	17
Highest	120	21,1
Insurance		
Covered by Insurance	378	66,3
Not Covered by Insurance	192	33,7
Parity		
0	2	0,4
1-2	317	55,6
≥ 3	251	44
Family Planning Knowledge		
Good	373	65,4
Poor	197	34,6
Otonomy		
High	311	54,6
Low	259	45,4
Contraceptive Methods		
LAPMs	97	17
Short term contraceptive methods	473	83

Table 1 illustrates that most of the respondents range from 35 to 39 years old lived in urban areas. In terms of education, more than half man and women graduated from secondary school but there's still a few man who does not attend school. More than half of the women were not employed, while almost all men

employed. Almost all women have good literacy (able to read whole sentences), and most respondent's wealth index at the lower middle level, and more than half of respondents already covered by health insurance. Table 1 shown that the number of children born by most respondents was 1 to 2 children and more than half have a good family planning knowledge, but there are still a few who's still lacking knowledge. Greater than a half of respondents had high autonomy and most of respondents did not use LAPMs.

Table 2 shows that of the eleven risk factors for LAPMs use, only 4 risk factors related to LAPMs use that is age, insurance ownership, family planning knowledge and women's autonomy ($p < 0.05$). While there were eight risk factors included in the multivariate model candidate ($p < 0.25$), that is age, wife education, Man education, wealth index, insurance ownership, parity, family planning knowledge, and women's autonomy.

Table 2. Relation between sosio-demography, knowledge, women's autonomy and fertility with LAPMs use

Variable	p value
Age	0,05*
Residence	0,793
Woman Education	0,144**
Man Education	0,129**
Women Occupation	0,710
Men Occupation	0,285
Wealth Index	0,202**
Insurance Ownership	0,023*
Parity	0,066**
Family Planning Knowledge	0,046*
Women's Otonomy	0,004*

* : significant in p value < 0,05

** : significant in p value < 0,25

Multivariate analysis from eight variables included in the candidate model, there were only 2 variables related to the use of LAPMs, which is health insurance ownership and women's autonomy. The exp (B) value of the insurance ownership is 1,801, which means that women who have health insurance had an opportunity to use LAPMs 1.80 times compared to mothers who do not have health insurance. Women's autonomy was the most influential determinant of the use of LAPMs, with exp.(B) value of 1.92. It means that women with a high degree of autonomy have a tendency to use LAPMs s by 1.92 times compared to mothers who have a low level of autonomy.

Table 3. Multivariat Analysis

Variable	p value	B	Exp(B)	95% CI
Insurance Ownership	0,023	0,588	1,801	1,084-2,992
Women's Otonomy	0,004	0,653	1,922	1,231-3,0
Hosmer and Lemeshow Test			0,936	

DISCUSSION

Women Autonomy Correlation with Long Acting and Permanent Methods Uptake

Long-acting and permanent contraceptive methods (LAPMs) are more effective, convenient, and cost-effective. This study found that the uptake of long-acting and permanent contraceptives has not matched the obvious benefits of it.

Among the commonly used contraceptives in East Kalimantan LAPMs was only 17% compare to sort acting methods (83%). The low percentage, meaning LAPMs were less preferred by the clients, but points to a gap that requires an effort to overcome.

The findings in multivariate showed that association exists between women autonomy with LAPMs uptake which women with a high degree of autonomy have a tendency to use LAPMs s by 1.92 times compared to mothers who have a low level of autonomy. It's similar to the study of which stated that women with joint decision making were more likely to use LAPMs compare to women who did not involve their husband. The study of showed that women with higher autonomy used a more efficient contraception method and continued their contraception method for a longer time.

This study found that women's autonomy was high as a reflection an equal husband and wife relations. This difference with the findings of stated that reproductive decision-making by married couples is unequal and that the husband dominates. While DeRose's study in Uganda showed when women have a higher power in decision-making, their level of contraception method used was also increased. This study also found a correlation between couples' decision-making in family and society with their use of modern contraception methods. in a qualitative study from Iran, reported that women's autonomy of decision-making infertility issues as an essential element for the control of their fertility plan. The systematic review also showed a lack of women's decision-making power and low women status has been proven to become a barrier for LAPMs using.

Autonomy is a multidimensional variable and relying on one index to try capturing it in any society might not be sufficient "" Although in the multivariate analysis education has no association, study "" stated that autonomy has an association with modern contraceptive use mediated through high education. Women's education also mentioned having an effect on women's choice for long-term contraceptive methods in the study of '. This study focuses on women's autonomy in deciding family health care, large household purchases, money husband earn and women's freedom to visit family or relatives. The study from Pakistan found that women with freedom of mobility, and finances in the household decision were more likely to be current users of contraception.

Findings from this study have implications for both programs and research. In terms of programs, the findings indicate that creating supportive conditions in which women are able to develop their autonomy is likely to enhance their ability to use LAPMs contraception. Further research is needed to understand the pathways through which autonomy influence LAPMs. **The Association between Insurance Ownership and Long Acting and Permanent Methods Uptake**

This study found that there was a correlation in having health insurance with LAPMs uptake. The association between insurance ownership indicated that the cost of family planning is also considered by women. Study of showed that lower cost becomes one of the reasons women choose a short-acting method through insurance coverage, security and affordability for long-term contraception are created. Equality is needed especially in long-term contraception which is relatively more expensive. If there is no insurance as the study showed in low resources setting area only women in the richest wealth quintile were more likely than those in the poorest quintile to practice long-term contraception. Health insurance is expected to close the gap and ensure coverage of more effective contraceptive for all women.

The women who belonged to households in the lowest wealth quintile were less likely to use LAPMs compared to women who belonged to the highest wealth quintile Ensuring long-term contraception in health insurance is a women's need . This confirmed by , which have shown that cost is a significant barrier to consistent use of effective contraceptive methods. The study also showed when cost barriers removed, women are more likely to use prescription methods and to select highly effective methods such as IUDs and implants .

CONCLUSION

This study provided empirical evidence regarding the correlation between women autonomy, insurance ownership, and long-acting and permanent methods uptake. It also showed that women's contraceptive use is not merely about the quality of family planning service but also a function of social, cultural and individual factors. There a needs to integrate women's empowerment programs which support women's autonomy increasing in the family planning program.

AUTHOR CONTRIBUTION

A contributed in drafting and review the manuscript, IA contributed in data analysis, drafting and review the manuscript, H, MB and DE contributed in data providing and data cleaning.

FUNDING AND SPONSORSHIP

This study was funded by National Family Planning & Coordination Agency, East Kalimantan Representatives. The funding source was not involved in study design, data collection, analysis or interpretation, in the writing of this report, or in the decision to submit the article for publication.

CONFLICT OF INTEREST

The authors report no conflicts of interest in this work.

ACKNOWLEDGEMENT

The authors gratefully appreciate to all those who provided IDHS East Kalimantan Province data set in this study: National Family Planning & Coordination Agency, Jakarta and National Family Planning & Coordination Agency, East Kalimantan Representatives.

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