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Determinant Factors Related to the Unmet-Need of Family Planning Program among Married Women in Indonesia

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Abstract

Unmet family planning is one of the common causes of low contraceptive prevalence rates in developing countries, including Indonesia. Contraceptive in family planning is used to monitor family planning. Globally, the unmet for family planning remains high. The population growth rate is due to birth (fertility), death (mortality), and population. The high population growth is one of the problems in Indonesia and other developing countries. One of the population growth efforts is carrying out a family planning program to control fertility because it is critical for managing population growth, especially in Indonesia[1]. Program from the Indonesian government contains population growth, including the Family Planning Program, Reproductive Health, Prosperous family, and family empowerment. Based on the Indonesian Demographic Health Survey, it is evident that the proportion of unmet needs for family planning in 2012 was 11.4%, and in 2017 10.6%. This study aims to factors associated with the family planning program used by married women. Thus, this study is designed to assess the prevalence and associated factors of unmet needs of family planning programs.

This study uses secondary data from 2017 IDHS carried out in 34 provinces in Indonesia. The total sample was 34.086 of 49,627 mother's aged 15-49 years. The dependent variable was the family planning program. The independent variables consisted of socio-demographic and socioeconomic factors, knowledge, discussion with husband, and access to health services. Data analysis was performed through a binary logistic regression test to obtain the adjusted odds ratio of each factor. Data analysis using binary logistic regression STATA.

The results showed that determinant factors related to the unmet- need of family planning program were the use of contraception (p=0.000), maternal age (p=0.000), mother's education (p=0.000), number of children's ownership (p=0.000), history of child death (p=0.000) 0.000), wealth index (p=0.011), province of residence (p=0.000), knowledge about contraceptive use (p=0.000) and ever used anything to delay getting pregnant (p=0.000). The proportion of unmet needs in this analysis was 61% with p- value= 0.000 OR= 2.49 (95% CI= 2.43- 2.56).

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The proportion of unmet needs in Indonesia is still high. Programs intervention should be targeted at women to decrease associated factors, especially in the productive period.

Keyword: unmet- need, family planning

Introduction

Indonesia was a country with a population in the fourth position globally with growth relatively high. The point of the task in family planning, in this case, was clear, lower fertility to reduce the burden of development to achieve happiness and prosperity and the nation of Indonesia. Family planning is a key objective and the main feature for sustainable development goals (SDGs) launched in 2015 by the United Nations. Reproductive health is explicitly mentioned in goal three on good health and wellbeing but may also be considered as part of goal 5, which aims at gender equality and women's empowerment[1].

Family planning has proven benefits for individuals and society as it prevents unintended pregnancies, limits the number of children, and controls birth intervals and timing[2]. Generally, it has been observed that the unmet need for family planning is inversely related to contraceptive prevalence 8.9, with a few exceptions. As contraceptive uptake increases, the level of unmet need reduces. Globally, the contraceptive prevalence has increased 5.10, and the unmet need for contraceptive use has decreased. The large population in Indonesia can cause various problems such as stunted economic growth, increasing unemployment, crime, and abuse [3]. The government continues its efforts to overcome or suppress the population rate. One of the government's efforts to reduce population growth in Indonesia is the family Planning Program. The population problem in Indonesia is characterized by an increasing population, unequal population distribution, and an unfavorable situation for the population's age structure where there are many productive ages[4].

Good information from health providers in helping a client choose and determine the type of contraceptive used. Good communication will increase client satisfaction impact. Contraceptive use longer, thus assisting the success of family planning. In addition, the husband also supports affect the use of contraception. The client is provided with support by the husband will be using contraceptives continuously while the husband would not have the support.[4]

A study in Indonesia using the 2017 IDHS secondary data analysis found that the associated factor related to unmet needs family planning program is communication with husbands. There is no publication of determinants of unmet needs using IDHS 2017 data. In the past five years, there have been considerable changes in Indonesia, including infrastructure, national health insurance program, and the significant increase budget allocated to all villages throughout, with a possible impact in decreasing the unmet need for family planning. This study aims to determine the factors associated with unmet needs for family planning in Indonesia by analyzing the 2017 IDHS data. Thus, this study is designed to assess the prevalence and associated factors of unmet needs of family planning programs.

Methods

This study refers to secondary data from the 2017 IDHS. The IDHS data sets were download online after registration and notification to Indonesia's National Population and Family Planning Board. The 2017 IDHS survey was conducted on 35,681 women of childbearing age (15-49 years) using a two-stage stratified sampling and thorough study at the national level. Detailed information about study design, sample size calculations, survey instruments, data collection, and other survey procedures are available in the 2017 IDHS report.

In our analysis, eligible subjects are women of productive age and married marital status. Aged 15-49 years who married/living together with a partner. The total number of analyzed subjects or samples was 34.086 from 49.627 all women. Excluded subjects were menopausal or infertile women and women with marital status banned married. The dependent variable is the unmet need for a family planning program. And the independent variable is the

mother's age, education, number of living children, total children ever born, birth in last year, birth in the month of interview, wealth index, province, place of residence, knowledge of any method, ever used anything to delay getting pregnant, current contraceptive method. Mother's age is < 20 years old, 20- 29 years old, 30- 39 years old and more than 40 years old. Education are ranked as a university, graduated from high school, not graduated from high school, graduated from elementary school, not graduated from elementary school, and never go to school. Number of living children and total children ever born is categorized not having 1-2 son and more than 2 sons. Birth in last children and birth in the month of interview is categorized as not having 1-2 son and more than 2 sons.

Wealth index is categorized poorest, poorer, middle, richer, richest. Regions are categorized as "Sumatera," "Java and Bali," "Kalimantan," "Sulawesi." The place of residence is classified as "rural" and "urban." Bivariate analysis was performed with a chi-square test to display data on the characteristics of women of childbearing age with unmet needs. The bivariate analysis results are used for developing a model of the multivariate analysis. Multivariate analysis was performed with a binary logistic regression using the backward method to obtain the adjusted odds ratio of each variable.

Result

Table 1: Analysis Factor Family Planning in Indonesia Demographic Health Survey 2017

Variable	Family Planning Program	
	Family planning	Do not family planning program
Contraception		
Use	8.327 (24.42%)	0
Not use	4.970 (14.58%)	20.789 (61%)
	p value = 0.000 OR =2.49 (2.43- 2.56)	
Mother's age		
<20	281 (0.8)	345 (0.1)
20-29	4.873 (14.29)	3.511 (10.3)
30- 39	8.883 (26.06)	4.523 (13.27)
>40	6.752 (19.80)	4.918 (14.42)
	p value = 0.000 OR =0.71 (0.71-0.76)	
Education		
No education	271 (0.8)	422 (1.2)
Primary	6.662 (19.54)	3.968 (11.64)
Secondary	11.105 (32.58)	6.638 (19.47)
Higher	2.751 (8.07)	2.269 (6.66)
	p value = 0.003 OR =0.95 (0.92- 0.98)	
Number of living children		
0	382 (1.12%)	2.176 (6.38%)
≤2	17.701 (51.93%)	1.980 (5.80%)
>2	11.033 (33.16%)	814 (2.39%)
	p value = 0.000 OR =2.37 (2.28- 2.47)	

Variable	Family Planning Program	
	Family planning	Do not family planning program
Number of children died		
No	12.278 (36.02%)	1.019 (2.99%)
Yes	19.473 (57.13%)	1.316 (3.86%)
	p value = 0.000 OR =0.81 (0.748 – 0.886)	
Wealth Index		
Poorest	4.441 (13.03%)	3.252 (9.54%)
Poorer	4.199 (12.32%)	2.472 (7.25%)
Middle	4.169 (12.23%)	2.454 (7.2%)
Aricher	4.062 (11.92%)	2.559 (7.5%)
Richest	3.918 (11.49%)	2.560 (7.51%)
	p value = 0.011 OR =1.02 (1.00 – 1.035)	
Place of residence		
Urban	10.479 (30.74%)	10.310 (30.25%)
Rural	6.742 (19.78%)	6.555 (19.23%)
	p value = 0.593 OR =1.01 (0.96 – 1.05)	
Province		
Sumatera	7.385 (21.67%)	1.383 (4.06%)
Jawa	10.407 (30.53%)	1.314 (3.86%)
Bali- Nusa Tenggara	2.286 (6.7%)	468 (1.37%)
Kalimantan	2.815 (8.26%)	322 (0.95%)
Maluku- Papua	6.223 (18.26%)	1.483 (4.35%)
	p value = 0.000 OR =0.92 (0.91- 0.94)	
Knowledge of any method		
No method	0	152 (0.44)
Traditional method	10 (0.03)	12 (0.035)
Modern method	20.779 (60.96)	13.133 (38.53)
	p value = 0.000 OR =8.48 (5.17 – 13.91)	
Ever used anything to delay getting pregnant		
No	0 (0)	4.970 (14.58)
Yes	20.789 (60.99)	8.327 (24.43)
	p value = 0.000 OR =2.49 (2.43 – 2.56)	

Mother's age

Maternal age factor is one factor that influences family planning; this is indicated by = 0.000 were associated AOR 0.71 (95% CI [0.71-0.76]). The majority of mothers aged 30-39 years support the family planning program as many as 8,883 people (26.06%).

Education

The mother's education factor is a factor that affects family planning; this is indicated by =0.003 were associated AOR 0.95 (95%CI [0.92-0.98]) with most of the mothers who participated in the family planning program mostly secondary education or high school level as many as 11,105 people (32.5%).

Number of living children and children died

The factor of the number of children living and children dying is a factor that affects family planning, this is indicated by = 0.000 were associated AOR 2.37 (95% CI [2.28-2.47]) and in children who die are also factors that affect family planning, this is indicated by = 0.000 were associated AOR 0.81 (95% CI [0.748-0.886]) with most having children less than equal two.

Wealth Index

The wealth index is a factor that affects family planning; this is indicated by = 0.011 were associated AOR 1.02 (95% CI [1.00-1.035]) with some who follow the family planning program having a low wealth index or poorest of 4.441 people (13.03%).

Place of residence

Place of residence and region/province are factors that affect family planning; this is indicated by =0.593 were associated AOR 1.01 (95%CI [0.96-1.05]) while province also affected family planning as indicated by =0.000 were associated AOR 0.92 (95%CI [0.91-0.94]) with 10,479 people mostly living in urban areas and 10,407 people (30.53%) living in Java.

Knowledge of any method of contraception

Knowledge of any method of contraception is a factor that affects family planning; this is indicated by = 0.000 were associated AOR 8.48 (95% CI [5.17-13.91]) with most of the users knowing modern contraceptive methods as many as 20,779 people (60.96%).

Using contraception and ever used anything to delay getting pregnant

Contraceptive use factors and slowing pregnancy affect family planning; this is indicated by = 0.000 were associated AOR 2.49 (95% CI [2.43-2.56]) with the majority of delaying pregnancy as many as 20,789 people (60.99%).

Discussion

This study assesses the determinants of contraceptive use among married women in Indonesia. The benefits of using contraception are to delay or space getting pregnant and to limit the number of children

Mother's age

Maternal age factor is one factor that influences family planning; this is indicated by = 0.000 were associated AOR 0.71 (95% CI [0.71-0.76]). The majority of mothers aged 30-39 years support the family planning program as many as 8,883 people. We first found that mother's age was significantly associated with contraceptive use among married women, especially older age. This result is consistent with the previous studies conducted in Ghana and Nigeria, documenting that older women have a lower concern with modern contraceptive use 7,9. This finding is related to their less active sexual desires.

At this age, it is a period of achieving work success, stability in lifestyle, attitudes, values of life, and a good and healthy diet to maintain health. At that age, it is a mature age to have a baby and have more experience than at a younger generation so that an older mother will be more accepting of her pregnancy[5].

Based on the table, it is known that according to the age of the mother, most of the respondents who need family planning are at risk, namely < 20 years or > 35 years. The results can obtain the results of thze statistical test calculation using the chi-square as presented in the table can be obtained p-value 0,001<_α (0.05) so that there is a significant relationship between maternal age and statistically unwanted pregnancy (p=0.001, CI 95%). The unmet need based on this study can occur at various ages, both at the young and old reproductive ages. In this study, the most incidence of unmet need were respondents aged >35 years. They were no longer reproductive and considered themselves old at that age, so the possibility of pregnancy was very slight. Based on the results of the 2007 IDHS shows that there is a significant relationship between the respondent's age and the status of unmet need or unmet need for family planning. The older age of the woman causes it. The more experience she will have in using family planning to choose a suitable family planning tool or method and minimize the experience of unmet family planning needs. A woman's age will affect the psychological and physiological aspects of experience in family planning and not only affect a woman's motivation to control her fertility.

Education

The mother's education factor is a factor that affects family planning, and this is indicated by =0.003 were associated AOR 0.95 (95%CI [0.92-0.98]) with most of the mothers who participated in the family planning program mostly secondary education or high school level as many as 11.105 people.

The average education of the respondents is moderate education or equivalent to high school; education is one of the factors that affect knowledge .

Following research conducted in India, which showed that the higher the mother's education level, the lower the number of want to pregnancy A woman's level of education is related to her ability to capture available information such as awareness, the value of small family benefits and knowledge about contraception and family planning. A high level of education allows a person to have a higher level of knowledge. It is easier to accept something new, especially if it is beneficial for himself and his family. Including in terms of preventing pregnancy with various kinds of contraception. Education also increases a person's awareness of the benefits of having fewer children so that can encourage someone to take part in family planning[6][7][8].

Number of living children and children died

The factor of the number of children living and children dying is a factor that affects family planning, this is indicated by = 0.000 were associated AOR 2.37 (95% CI [2.28-2.47]) and in children who die are also factors that affect family planning, this is indicated by = 0.000 were associated AOR 0.81 (95% CI [0.748-0.886]) with most having children less than equal to two or more than two as many as 17,701 people.

Parity is the number of children born to the mother, both alive and dead. mother with primipara is defined as a woman who has given birth for the first time where the fetus has reached the age of 28 weeks or more. Parity has a significant relationship with the incidence of unwanted pregnancy. The more children ever born, the higher the chances of unwanted pregnancies. The 2012 IDHS shows that the proportion of unwanted pregnancies also increases with the order in which children are born[1]. Unmet needs for family planning can also occur in low parity or high parity. Some couples of childbearing age want to delay pregnancy, space, or end pregnancies but do not use contraception for reasons of fear of side effects when using contraception and, if using contraception, are afraid that fertility will not return immediately. the pattern of contraceptive use is different between women with high parity and low parity. Contraceptive use increased in women with high parity. The number and sex of living children significantly influence accepting the family planning method. The more the number of children still alive, the more contraception will increase. Women with one living child have lower contraceptive use than those with two or more than three children. Women with a small number of children desire to have children of a different gender.

Wealth Index

The wealth index factor is a factor that affects family planning; this is indicated by = 0.011 were associated AOR 1.02 (95% CI [1.00-1.035]) with some who follow the family planning program having a very poor wealth index of 4.441 people. This is relevant where someone with more children has more living costs in the family. Low use among contraception in poor women, its related to sociodemographic status[9,10] .

Place of residence

Place of residence and region/province factors are factors that affect family planning; this is indicated by =0.593 were associated AOR 1.01 (95%CI [0.96-1.05]) while province also affected family planning as indicated by =0.000 were associated AOR 0.92 (95%CI [0.91-0.94]) with 10,479 people mostly living in urban areas and 10,407 people living in Java.

This is relevant where the distribution of the majority of Indonesia's population is on the island of Java.

Knowledge method of contraception

Knowledge of any method of contraception is a factor that affects family planning; this is indicated by = 0.000 were associated AOR 8.48 (95% CI [5.17-13.91]) with most of the users knowing modern contraceptive methods as many as 20,779 people.

According to Green's theory (1980), predisposing factors are one of the factors that motivate to behave. Knowledge of contraceptives is one of the predisposing factors for family planning. This is following previous research, which showed a relationship between contraceptive methods and

family planning knowledge. In addition, individuals who have good knowledge will be better able to accept reasons to practice because they have good knowledge and attitudes about family planning as a basis for behavior and support for family planning programs[10–12].

Using contraception and ever used anything to delay getting pregnant

Contraceptive use factors and slowing pregnancy affect family planning; this is indicated by = 0.000 were associated AOR 2.49 (95% CI [2.43-2.56]) with the majority of delaying pregnancy as many as 20,789 people.

However, family planning decisions can be heavily influenced by men's socioeconomic characteristics, views, and perceptions about family planning services [13, 14].

Conclusions

Determinant factor related to unmet family planning programs are the use of contraception where most use modern contraception (e.g., IUDs, injections, implants, etc.) to delay pregnancy with p value= 0.000, mother's age where the majority are aged 30-39 years, education factor, wealth index, province and knowledge. While the place of resident is not a determinant factor related to unmet family planning.

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Reference

1. Nzokirishaka A, Itua I. Determinants of unmet need for family planning among married women of reproductive age in Burundi: a cross-sectional study. Contracept Reprod Med. 2018;3:1–13.
2. Feeser K, Chakraborty NM, Calhoun L, Speizer IS. Measures of family planning service quality associated with contraceptive discontinuation: An analysis of Measurement, Learning & Evaluation (MLE) project data from urban Kenya. Gates Open Res. 2020;3:1–29.
3. Asif MF, Pervaiz Z. Socio-demographic determinants of unmet need for family planning among married women in Pakistan. BMC Public Health. 2019;19:1–8.
4. Fitriyah N. Pilihan Fertilitas Suami Dan Unmet Need KB Pada Pasangan Usia Subur (PUS) Di Indonesia (Analisis Data SDKI 2007). J Kesehat Masy Andalas. 2017;11:49–54.
5. Phinney A, Chesla CA, Taylor K, Blacklock C, Hayward G, Bidwell P, et. al. No Title. Int Nurs Rev. 2016;20:1–10. doi:10.1163/_q3_SIM_00374.
6. Gebre G, Birhan N, Gebreslasie K. Prevalence and factors associated with unmet need for family planning among the currently married reproductive age women in shire-Enda-Slassie, northern west of Tigray, Ethiopia 2015: A community based cross-sectional study. Pan Afr Med J. 2016;23:1–9.
7. Chakraborty NM, Sprockett A. Use of family planning and child health services in the private sector: An equity analysis of 12 DHS surveys. Int J Equity Health. 2018;17:1–12.
8. Ewerling F, Victora CG, Raj A, Coll CVN, Hellwig F, Barros AJD. Demand for family planning satisfied with modern methods among sexually active women in low- and middle-income countries: Who is lagging behind? Reprod Health. 2018;15:1–10.
9. Sumiati LN, Wirawan DN, Ani LS. Determinants of unmet needs for family planning in Indonesia : Secondary data analysis of the 2017 Indonesia Demographic and Health Survey. Publich Heal Prev Med Arch. 2019;7:85–94.
10. Wang W, Mallick L. Understanding the relationship between family planning method choices and modern contraceptive use: An analysis of geographically linked population and health facilities data in Haiti. BMJ Glob Heal. 2020;4:1–10.
11. Wulifan JK, Jahn A, Hien H, Ilboudo PC, Meda N, Robyn PJ, et. al. Determinants of unmet need for family planning in rural Burkina Faso: A multilevel logistic regression analysis. BMC Pregnancy Childbirth. 2017;17:1–11.
12. Sougou NM, Bassoum O, Faye A, Leye MMM. Women's autonomy in health decision-making and its effect on access to family planning services in Senegal in 2017: A propensity score analysis. BMC Public Health. 2020;20:1–9.
13. Sidibe S, Delamou A. Levels and trends in family planning method use among urban adolescents and young women in Guinea : analysis of Demographic and Health Surveys from 1999 to 2018. 2018.
14. Mulenga JN, Bwalya BB, Mulenga MC, Mumba K. Determinants of unmet need for family planning among married women in Zambia. J Public Health Africa. 2020;11.