

The Barrier to Contraceptive Use among Multiparous Women in Indonesia

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Abstract

Background: The lack of perception related to the risk of pregnancy and contraceptive use's side effects is the main reason for not using contraceptives. **Objective:** This study aimed to analyze barriers to contraceptive use among multiparous women in Indonesia. **Methods:** This study employed the 2017 Indonesia Demographic and Health Survey. The analysis unit was multiparous women aged 15–49 years old, and the sample was 25,543 women. The contraceptive use was the dependent variable, while the independent variables analyzed were residence, age, education, employment, wealth, and insurance. The study used a binary logistic regression to determine the barriers. **Results:** Women in urban areas were 1.100 times more likely not to use contraceptives than women in rural areas. All categories of age group are more likely to use contraception than the 45–49 age group. Multiparous women who had low education had a higher possibility of not using contraceptives. Unemployed multiparous women were 1.008 times more likely not to use contraceptives than employed multiparous women. In terms of wealth status, women with all wealth status tended not to use contraceptives than the richest. **Conclusions:** Multiparous women in Indonesia had five barriers to not using contraceptives. These included living in urban, being at younger ages, having no education, being unemployed, and having low wealth status.

Keywords: Contraceptive use, family planning, multiparous women, parity, women's health

INTRODUCTION

The maternal mortality rate (MMR) in Indonesia was still high, with an estimated 126 deaths per 100,000 live births. In comparison, the MMR among women of childbearing age was 264–285 cases per 100,000 live births in 2015. A family planning program aims to improve the quality of mothers' and children's lives, which is the primary indicator of reproductive health, by controlling the population through contraception.^[1,2] The Indonesian government first launched a family planning program in 1969 to provide contraceptive services, reduce births, and promote gender equality. The government demonstrated the family planning program's success in increased contraceptives from 8.6% in 1973 to 53.1% in 1993.^[3]

A previous study informed that 91% of women living in low-middle income countries had a-year pregnancy interval after the first birth and standard postpartum contraception methods, thereby creating the risk of unwanted pregnancy.^[4,5]

The low number of contraceptive users was related to the high MMR, unwanted pregnancies, and frequent pregnancy intervals, implying pregnancy complications and childbirth.^[6] A study in the rural areas of Burkina Faso found that women who had a son had pregnancy intervals of >1 year (women with a minimum birth interval of 2 years can reduce the risk of maternal mortalities by 30% and infant mortality by 10%). The economic level among the women was right, and the women tended to use modern contraception. However, the women who traveled >5 kilometers from their house to health services were reluctant to use contraceptives.^[7] A family regards a child

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as a gift from God. Seen from the child's gender preference, the community believed a child would live a long life. If the child is male, he is not involved in warfare. Meanwhile, women's low bargaining power related to reproduction and vital belief/religion also determined their partners' fertile age as the unmet need.^[8]

A study of long-term contraceptive use in Indonesia pointed out that the number of contraceptive users was relatively lower in Indonesia compared to other countries in Southeast Asia. The percentage of contraceptive users in Vietnam, Cambodia, and Thailand were 78%, 79%, and 80%, respectively.^[2] Simultaneously, the number of modern contraceptive users in the Philippines, Cambodia, Bangladesh, and India was 35%, 42%, 48%, and 49%.^[9] The long-term use of modern contraceptives, such as Intrauterine Devices (IUDs) and implants, was still low.^[4] Based on the Indonesia Demographic and Health Survey (IDHS) data in 2017, the number of contraceptive users in Indonesia fell from 57.9% to 57.2% in 2017. The types of modern contraception mostly selected by couples in childbearing age were injection (53.5%), pills (20.3%), implants (8.8%), IUD (8.1%), tubectomy (5.8%), condoms (3.0%), vasectomy (0.3%), lactation amenorrhea method (2%), and emergency contraception (0.1%).^[10]

Insufficient knowledge of pregnancy risks and the side effects of contraceptive use were the main reasons for not using contraceptives.^[4,11] Women of childbearing age were reluctant to use contraception because they were more interested in using traditional contraception methods (herbal medicine, massage, and calendar methods). Besides, access to contraception, for example, expensive contraceptive costs, was still a barrier to childbearing age women. This condition has implications for the high number of unmet needs in Indonesia. Unmet need is a condition in which women who want to limit or avoid pregnancies do not use contraceptives.^[12] The number of unmet need groups in Indonesia decreased from 11.4% in 2015 to 9.91% in 2019.^[13] Therefore, this study aimed to analyze barriers to contraceptive use among multiparous women in Indonesia.

METHODS

Data source

This study utilized secondary data of the 2017 IDHS. The analysis unit used was women of childbearing age (15–49 years) who have given birth to live babies twice or more (multiparous).^[14] The weighted sample was 25,543 multiparous women selected using stratification and multistage random sampling.

Procedure

The 2017 IDHS has passed the ethical test from the National Research and Development Agency, the Ministry of Health of the Republic of Indonesia. The authors removed all respondents' identities from the data set after they have agreed and signed an agreement to be involved in the 2017 IDHS. This study obtained the permission of secondary data used for analysis on <https://dhsprogram.com>.

Variables

The study identified contraceptives use from the respondents' condition at the time of the interview. Contraceptives use consists of two categories: Yes and no.

The independent variables involved residence, age, education, employment, wealth, and health insurance. The type of residence consists of two categories, namely, urban and rural. The study divided the age group at 5-year intervals into seven groups: 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, and 45–49. The education level consists of four strata, namely, no education, primary, secondary, and higher. Employment status consists of two categories, namely, unemployed and employed.

The study determined wealth status based on the wealth index calculation. The wealth index was a composite measure of a household's cumulative living standard. The study calculated wealth index using easy to collect data on a household's ownership of selected assets, such as televisions and bicycles; materials used for housing construction; and types of water access and sanitation facilities. The wealth index consists of five categories: The poorest, poorer, middle, richer, and the richest.^[10]

Health insurance is the owner of any health insurance. Health insurance consists of two categories: No (uninsured) and yes (insured).

Data analysis

In the first stage, the study used a multicollinearity test. The test was to ensure that the independent variables do not have multicollinearity. Then, the Chi-square test was employed to select variables used until the final step. For the dependent variable's nature, the analysis used binary logistic regression to determine barriers to contraceptive use among multiparous women in Indonesia. All stages of statistical analysis utilized SPSS software version 22.0 IBM SPSS Statistics 22.0 (IBM, Armonk, New York, United States).

RESULTS

The Eastern regions had the broadest coverage of multiparous women with no contraceptive use.

Table 1 illustrates a descriptive statistic of multiparous women with other related variables. Table 1 shows that women who lived in rural areas dominated by multiparous women who did not use contraceptives. Based on the age group, multiparous women who used contraceptives were mainly aged 35–39 years, while multiparous women who did not use contraceptives were 45–49 years.

Table 1 informs that both contraceptive use categories were dominated by those with secondary education based on education level. Seen from the employment category, employed multiparous women dominated both types of contraceptive use.

Based on the wealth status, the poorest women dominated both categories of contraceptive use. In both types of contraceptive use, multiparous women who had health insurance were dominant.

Table 2 explains the binary logistic regression test results of barriers to contraceptive use among multiparous women in Indonesia. Multiparous women who lived in urban areas were 1.100 times more likely not to use contraceptives than multiparous women who lived in rural areas (odds ratio [OR] 1.100; 95% confidence interval [CI] 1.100–1.100). It indicated that although the number of multiparous women living in urban areas was not too different from rural areas, they were more likely not to use contraceptives than those in rural areas. It suggested residing in urban areas became one of the barriers to contraceptive use among multiparous women in Indonesia.

Table 1 informs that all age groups are more likely to use contraception than the 45–49 age group. This information shows that older age is a barrier to contraceptive use among multiparous women in Indonesia.

Multiparous women with no education had 2.686 times the probability of not using contraceptives than those with higher education (OR 2.686; 95% CI 2.685–2.687). Multiparous women with primary education were 1.005 times more likely not to use contraceptives than those with higher education (OR 1.005; 95% CI 1.005–1.005). Meanwhile, women with secondary education levels were 0.975 times more likely to not use contraceptives than women with higher education (OR 0.975; 95% CI 0.975–0.975). Women who had low education had a higher possibility of not using contraceptives. It pointed out that having no education was one of the barriers to contraceptive use among multiparous women in Indonesia.

Table 2 informs those unemployed women had 1.008 times more possibilities not to use contraceptives than employed women (OR 1.008; 95% CI 1.008–1.008). It suggested that unemployment became a barrier to contraceptive use among multiparous women in Indonesia.

The poorest multiparous women were 1.623 times more likely to not use contraceptives than the richest multiparous women (OR 1.623; 95% CI 1.623–1.624). Women with wealth status in the more deficient category had 1.082 times more possibilities not to use contraceptives than the richest women (OR 1.082; 95% CI 1.082–1.082). Women with wealth status in the middle category were 1.059 times more likely not to use contraceptives than the richest women (OR 1.059; 95% CI 1.059–1.059). Women with the more decadent category in the more affluent category had 1.055 times the probability of not using contraceptives than the richest women (OR 1.055; 95% CI 1.055–1.055). The results showed that women with all wealth status tended not to use contraceptives than the richest. The works consider poverty as another barrier to contraceptive use among multiparous women in Indonesia.

DISCUSSION

This study revealed that living in urban areas was one of the barriers to contraceptive use among multiparous women in Indonesia. It was pretty surprising because it contradicted the previous research, which informed that public access to

health services in Indonesian urban areas generally tended to be better than rural areas.^[15,16] Better facilities of reproductive health services in urban areas did not necessarily increase contraceptive use among multiparous women in Indonesia.

The analysis found that the age variable was another barrier among multiparous women in Indonesia for using contraceptives or not. Several studies also state a similar finding in the previous studies in Burkina Faso, Peru, and 23 countries in Latin America and the Caribbean.^[17,18] This present study discovered in Indonesia that multiparous women of older ages tend not to use contraceptives.

Another finding showed having no education became a barrier to contraceptive use among multiparous women in Indonesia. It corroborated the previous research, which found that family planning education and knowledge strongly affected contraceptive use.^[19] Low education was closely related to an inadequate understanding of family planning. This barrier made women still hold tight the myths and misconceptions against modern contraception.^[20] Decisions of using contraceptives or not among women with low education levels depended on the husbands' decisions.^[21]

Table 1: Descriptive statistics of multiparous women in Indonesia (n=25,543)

Variable	Contraceptive use		P
	Yes, n (%)	No, n (%)	
Type of place of residence			
Urban	8546 (50.9)	4234 (48.4)	<0.001***
Rural	8247 (49.1)	4516 (51.6)	
Age group			
15-19	15 (0.1)	11 (0.1)	<0.001***
20-24	416 (2.5)	194 (2.2)	
25-29	1793 (10.7)	707 (8.1)	
30-34	3584 (21.3)	1361 (15.6)	
35-39	4463 (26.6)	1748 (20.0)	
40-44	3934 (23.4)	1989 (22.7)	
45-49	2588 (15.4)	2740 (31.3)	
Education level			
No education	255 (1.5)	409 (4.7)	<0.001***
Primary	5879 (35.0)	3393 (38.8)	
Secondary	8595 (51.2)	4016 (45.9)	
Higher	2064 (12.3)	932 (10.7)	
Employment status			
Unemployed	6784 (40.4)	3386 (38.7)	0.007**
Employed	9995 (59.6)	5363 (61.3)	
Wealth status			
Poorest	3620 (21.6)	2605 (29.8)	<0.001***
Poorer	3265 (19.4)	1628 (18.6)	
Middle	3280 (19.5)	1518 (17.3)	
Richer	3299 (19.6)	1507 (17.2)	
Richest	3329 (19.8)	1492 (17.1)	
Health insurance			
No	6138 (36.6)	3295 (37.7)	0.083
Yes	10,654 (63.4)	5455 (62.3)	

P<0.05, **P<0.01, ***P<0.001

Table 2: The result of binary logistic regression of the barrier to contraceptive use among multiparous women in Indonesia (n=25,543)

Predictors	Do not use contraception			
	Significant	AOR	LB	UB
The type of place of residence				
Urban	<0.001***	1.100	1.100	1.100
Rural	-	-	-	-
Age group				
15-19	<0.001***	0.643	0.643	0.644
20-24	<0.001***	0.461	0.461	0.461
25-29	<0.001***	0.369	0.369	0.369
30-34	<0.001***	0.360	0.360	0.361
35-39	<0.001***	0.391	0.391	0.391
40-44	<0.001***	0.483	0.483	0.483
45-49	-	-	-	-
Education level				
No education	<0.001***	2.686	2.685	2.687
Primary	<0.001***	1.005	1.005	1.005
Secondary	<0.001***	0.975	0.975	0.975
Higher	-	-	-	-
Employment status				
Unemployed	<0.001***	1.008	1.008	1.008
Employed	-	-	-	-
Wealth status				
Poorest	<0.001***	1.623	1.623	1.624
Poorer	<0.001***	1.082	1.082	1.082
Middle	<0.001***	1.059	1.059	1.059
Richer	<0.001***	1.055	1.055	1.055
Richest	-	-	-	-

$P < 0.05$, $P < 0.01$, $***P < 0.001$. Note: 95% CI. CI: Confidence interval, AOR: Adjusted odds ratio, LB: lower bound; UB: upper bound

This study's results are in line with several previous studies, which often find education a positive determinant of output in the health sector.^[15,22,23] On the other hand, several studies also found poor education as a barrier to achieving better performance in the health sector.^[24,25]

Another barrier to contraceptive use was unemployment among multiparous women in Indonesia. Employed women tended to choose to limit the number of children. Employed women could decide for themselves whether to use contraceptives or not, i.e., being not dependent on their husbands' or partners' decisions.^[26]

The results also explained poverty became another barrier to contraceptive use among multiparous women in Indonesia. It was consistent with the previous research that found low wealth status was a barrier to access contraceptive use and health services in general.^[19] In the Indonesian setting, costs as a barrier related to access to services and access to transportation. In many peripheral areas, such a wall was the consequence that imposes the archipelagic state.^[27]

Overall, the barriers to contraceptive use in Indonesia were largely preventable variables.^[28] Policymakers responsible

for the family planning program in Indonesia have to focus on tackling obstacles, as this present study has revealed. Policies that focus on target groups with clear and detailed characteristics are required to accelerate the coverage of contraceptive use among multiparous women in Indonesia.

CONCLUSIONS

Based on the results, the study concluded that multiparous women in Indonesia face five barriers to contraceptive use. These barriers include living in urban areas, being of older ages, having no education, being unemployed, and having low wealth status.

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Conflicts of interest

There are no conflicts of interest.

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