



The Dominant Factors Affecting the Low Participation of Young Women Ever Married in the Family Planning Program (KB) in Papua Province (2017 IDHS Data Analysis)

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Abstract

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BACKGROUND: Participation in family planning (FP) among young women who have ever married is the spearhead in reducing the Total Fertility Rate in Papua Province. However, the percentage of FP use in Papua Province in Papua Province is still very low, at 74.88%. This study looks at the dominant factors that influence the low participation of ever married young women in FP programs in Papua Province.

METHODS: This study is a cross-sectional study using data from the 2017 Indonesian Health Demographic Survey, conducted for ± 1 month. The sample in this study was 414 married young women in Papua Province in 2017. Data analysis in this study is the same way as multivariate analysis of risk factor models, which was processed using the STATA 12 application.

RESULTS: The final result of the multivariate analysis in this study was the household expenditure group variable (OR was 1.89 with a 95% CI value: 1.75–1.92), place of residence (OR 1.75 with 95% CI: 1.70–1.90), and age at first sexual intercourse (OR 2.34 with 95% CI: 2.24–2.48). In contrast, the most dominant variable that affects the low participation in FP use among young women who have ever been married in this study is the age of first sexual intercourse.

CONCLUSION: This study recommends the need for crosssectoral collaboration to socialize the Generation Planning (Genre) program in schools and universities in all corners of Papua Province.

Introduction

The Family Planning (FP) Program (KB) is one of the programs included in one of the goals of NAWACITA. The purpose of the Nawacita is to improve the population's health status to achieve prosperity in terms of economic, social, and spiritual. It is achieved by limiting the number of deliveries for the productive age group [1]. Globally in 2019, the number of participants using FP in their productive ages to plan the number of children they want or to have an abortion, according to a United Nations data report, is around 1.1 billion people. At the same time, the fertile age who did not use FP was 42% [2]. The high percentage of childbearing age who do not use FP is the East and Southeast Asia region which occupies the first position for the percentage increase in FP use. The reason is the high increase in the percentage of married young women with an annual increase of 0.1% [3]. From these data, it can be seen that the percentage of women of childbearing age who do not

participate in almost half of the population of women of childbearing age.

Participation in FP in the productive age structure, especially among young women who have been married, is one of the keys to controlling the number of people globally, including Indonesia. One of the productive ages referred to is the age structure of young women in the age range of 16–30 years [4]. The prevalence of FP use in several countries is different; one is in Indonesia. Based on FP data in 2020, the estimated number of married women who use FP in Indonesia is around 30,698,000 [5]. In Indonesia alone, the percentage of young women ever married in FP has decreased slightly by 0.74% when viewed based on data from 2019 (52.68%) to 2020 (51.94%) [4]. The decline in this percentage is inseparable from the prevalence of ever-married youth who have never used FP during the marriage in 34 provinces in Indonesia, one of which is Papua Province which has a percentage of 74.88%, which puts Papua Province as the first province for the province. The percentage of ever-married young women who have never used FP [4].

The use of FP in ever-married adolescents can reduce the occurrence of unwanted pregnancies, which will have an impact on reducing the occurrence of unsafe abortions in adolescents [6], [7]. It can be seen in the Indonesian FP data in 2020, where the use of FP can prevent around 11,712,000 cases of Unwanted Pregnancy (KTD), 2,764,000 cases of unsafe abortion, and 9,300 cases of maternal death [5]. Participation in FP among young married women is inseparable from several factors that influence it. It can be illustrated from the framework of the analysis of proximate determinants of fertility from Bongaarts (1987), which explains that socio-economic factors (education, occupation, and economic level), environmental and natural marital fertility factors affect participation in FP use in adolescent girls [8], [9]. Socio-economic factors include education, occupation, and economic level. The data described reminds us that there is a need for the participation of young women in the FP program, which is very useful in improving the country's welfare. Based on this background, the researcher is interested in examining the low participation of ever-married young women in FP programs in Papua province (2017 Indonesian Health Demographic Survey [IDHS] data analysis).

Methods

This study is analytic with a cross-sectional research design using secondary data from the 2017 WUS IDHS, conducted for \pm 1 month, on 18 May–18 September 2021. The sample in the total population study was all married young women aged between 16 and 30 years in Papua Province in the last 5 years. The survey amounted to 414 respondents, with the data source used in this study being secondary data, namely, IDHS data in 2017. Still, not all existing variables were analyzed. The variables used in this study were: education, occupation, economic level, place of residence, frequency of sexual intercourse (independent variable), and participation in FP use (dependent variable). In this study, secondary data from the 2017 IDHS were obtained by researchers by downloading the data for free through the Demographic and Health Survey (DHS) website on the www.measuredhs.com page. Before the data was downloaded, the authors carried out data requests until the researcher received permission to access the data. Complete raw data were processed with the help of a computer using STATA 12 software. The analysis in this study was carried out in three (3) stages: univariate analysis, bivariate analysis, and multivariate analysis.

Results

As many as 63.76% of young women who have been married have low participation in FP. As many as 68.59% of ever-married young women have low education (junior high school and below). Most of the ever-married youth did not work or as household workers (79.95%), and most (56.76%) were in the bottom 40% group. Judging from the residence variable, adolescents who have been married are most widely distributed in rural areas with a proportion of 85.99%. The highest proportion of having sex for the first time under 19 is around 51.5%. These results can be shown in Table 1:

Table 1: Distribution of ever married youth in papua province based on participation in family planning use (KB), education, occupation, household expenditure group, residence, and age at first sexual intercourse (n = 414)

Variable	n	%
Participation in family planning (KB)		
Low	264	63.76
High	150	36.24
Education		
Low (\leq JHS)	284	68.59
High ($>$ SHS)	130	31.41
Occupation		
Do not work	331	79.95
Work	83	20.05
Household expenditure group		
40% bottom	235	56.76
40% middle	123	29.71
20% top	56	13.53
Residence		
Rural	356	85.99
Urban	58	14.01
Age at first sexual intercourse		
<19 years	213	51.5
\geq 19 years	201	48.5

The bivariate analysis results in this study showed that all the independent variables had a significant relationship with the low participation in FP use among young married women in Papua Province. The independent variables include education, occupation, household expenses, residence, and age at first having sexual intercourse. It can be seen in Table 2:

Table 2: Results of bivariate analysis of family planning (KB) participation (n = 414)

Variable	Low Participation in Family Planning (KB)				Total	p-value	OR (95% CI)
	Yes		No				
	n	%	n	%			
Education						0.003	2.090 (1.985–2.343)
Low (\leq JHS)	174	61.3	110	23.7	284	100	
High ($>$ SHS)	56	43.1	74	56.9	130	100	
Occupation						0.039	3.722 (2.897–3.975)
Do not work	254	76.7	77	23.3	331	100	
Work	39	46.9	44	53.1	83	100	
Household expenditure group						0.045	2.169 (2.019–2.567)
40% bottom	156	66.4	79	33.6	235	100	
40% middle	59	47.9	64	52.1	123	100	
20% top	18	32.1	33	67.9	56	100	0.009 (1.557–1.732)
Residence						0.025	3.403 (3.107–3.675)
Rural	246	69.1	110	31.9	356	100	
Urban	23	39.6	35	60.4	58	100	
Age at first sexual intercourse						0.003	2.090 (1.985–2.343)
<19 years	145	68.1	68	31.9	213	100	
\geq 19 years	156	77.6	45	22.4	201	100	

The final result of the multivariate analysis in this study showed a relationship between household expenditure groups with the lowest 20% income and low participation in FP use. Respondents in the bottom

40% income category are 1.89 times more likely to have low participation in FP than respondents in the middle 40% group. This study also found a relationship between residence and low participation in FP use. Respondents living in rural areas had a 1.75 times higher risk of having low awareness of participation in FP use than respondents living in urban areas.

Age at first sexual intercourse has a relationship with low participation in FP use. Those who have sexual intercourse under the age of 19 have a 2.34 times greater risk of having low awareness of using FP than those who have sexual intercourse over 19. The results of the multivariate analysis also showed that the dominant variable that influenced the low participation in FP use among married young women was the age at first having sexual intercourse. It can be seen in Table 3:

Table 3: Final model of logistic regression analysis of risk factors affecting participation in family planning use

Variable	B	SE	p value	OR (95% CI)
40% bottom	2.191	0.678	0.044	1.89 (1.75–1.92)
Residence	1.922	0.364	0.047	1.75 (1.70–1.90)
Age at First Sexual Intercourse	2.456	0.394	0.001	2.34 (2.24–2.48)

Discussion

This study found that most of the ever-married young women in Papua Province had low participation in using FP. It is supported by several research results, including a study conducted in Kantorová *et al.* (2019) on the use and need for contraceptives in women aged 15–19 years in the world shows that most of the women aged 15–19 years do not use contraception to prevent pregnancy with a percentage of 80.8% [10]. The same study conducted by Suchithra and Sujina (2016) in India also showed that the percentage of ever-married adolescents who did not use FP was greater than that of ever-married adolescents who used FP, which was 51.2% [11]. Research conducted by Haque in Bangladesh shows that almost the majority (57.6%) of ever-married women aged 10–19 years in Bangladesh have never used FP [12]. The relationship between the results of this study and previous research, the researchers suspect, is due to the relevance of local Papuan wisdom, where the FP program itself in Papua seems to give a negative issue, namely limiting the number of children. In contrast, from a geographical perspective, Papua is extensive, inversely proportional to the population of Indigenous Papuans. (OAP), so that this is what researchers suspect is why participation in the use of FP among young women in Papua Province is still relatively low.

In developing countries, women living in rural areas with low education and a low economy will affect participation in contraceptives [13]. It is found in this study that there is a link between the education of young people who have been married and low participation in FP use. It is consistently found in several studies, including

research conducted by Haque in Bangladesh, found that women with higher education have a 1.22 times chance of experiencing an unmet need for FP [12]. Several research results conducted domestically also found that respondents with high education and low economic level tend to have a low proportion of participating in FP [14]. A person's education will affect a person's desire and ability to understand. This study obtained about 56.9% of higher-educated respondents who participated in FP; another suspicion from researchers was a link between residence. Women who live in rural areas have difficulty accessing education, thus preventing them from obtaining information about reproductive health. This matter increases the risk of marriage at a young age and increases the participation of married young women in using FP. Most respondents (85.99%) live in rural areas in this study.

The role of working mothers in development has a significant contribution to economic development. Working mothers have roles as development agents and change agents. The participation of working mothers has a role in economic growth, reducing the poverty rate among women, and as a solid foundation in other sectors, namely in preventing maternal deaths by participating in using FP [15]. This study found a significant relationship between the employment of young women married and the low participation in FP in Papua Province. Several previous studies also showed the same results, including the research results conducted by Suryani *et al.* (2015) in Bali. There was no relationship between work and participation in FP use [16]. A study conducted by Vijayasree (2017) in India also shows the same result. There is a significant relationship between work and the participation of ever-married women to use FP [17]. Researchers assume that if a woman works, she will interact with the outside world and get information, especially health information. In this condition, the environment will play a role in encouraging women to use FP. In this study, married young women who work and participate in FP are relatively high, around 53.1%. Another thing that the researchers suspect is that women usually tend to care about their health compared to men, so this is the researcher's guess, why the job variable has a role in the participation of young women who have been married in using FP.

The amount of income received in a household can describe the level of welfare of society. If the number of children is large, it will hinder their maturation as optimally as possible [23]. It can be seen from the final results of the multivariate analysis of this study. Adolescent girls in the lowest 40% household expenditure group are 1.89 times more likely to have a low participation rate in FP.

This study follows the results of research conducted by Haque (2010) in Bangladesh, which states that most of the respondents who have been married aged 10–19 years do not use FP have middle to lower economic status. It is due to lack of access or cost to use FP [12].

The same thing was found in Aslam *et al.* (2016) research, which analyzed Pakistani health demographic data in 2013. The study showed a relationship between the use of FP in ever-married women who were in the lower quintile living in rural areas with low participation in FP use. among ever-married women in Pakistan [18].

The results of this study indicate that the majority (56.76%) of young women who have been married are in the lowest 40% household income group. In this study, the researcher suspected that this variable was related to low participation in FP. In addition, the education level of married young women is still very low. that is, 68.59% have a junior high school education and below.

The residence of ever-married youth in this study is related to low participation in FP use. It has been consistently found in several previous studies, including research conducted by Gupta *et al.* (2017) conducted in Uganda. This study found a relationship between residence and participation in FP use [19]. The research above is also almost the same as research conducted in the country, including research conducted by Herowati found a relationship between residence and participation in FP use [20]. Based on the study results, it is known that most of the respondents in the study are scattered in rural areas. If you look at the geography, Papua itself is still difficult to reach by health services and health information and difficult to access because of the geographical conditions in Papua. In addition, certain areas still believe that if they use FP, resulting in a smaller population, it is feared that the next generation who will manage the vast land in Papua will not exist.

Age at first marriage affects fertility rates and last education, socio-economic and cultural factors [21]. The age at first intercourse has a linear line with birth, so a FP program is needed [22]. This study shows results in line with existing theories, where there is a relationship between the age of first sexual intercourse in both bivariate and multivariate analysis. In this study, it was found that there was a relationship between the age at first having sexual intercourse with participation in FP. Based on available data, sexual behaviour before marriage has been carried out on young women who have married under marriage before 19 years by 51.5%.

This study shows a relationship between the lack of information about reproductive health received by adolescents at school and the lack of knowledge about FP. It is also suspected that the age variable at first having sexual intercourse is related to the low use of FP tools in married young women in Papua Province.

This study has several limitations: this research is a 2017 IDHS data analysis study with a cross-sectional design. The weakness of this design is that it cannot show a causal relationship. The use of IDHS data itself has limitations. The number of variables studied is very limited, so the existing literature data related to marriage patterns cannot be analyzed. There was also a

recall bias in this study, where respondents were asked to recall events within the past year regarding health behaviors carried out. In addition, to recall bias, some misclassifications occurred in the IDHS data collection, such as economic variables measured by quintiles. The wealth index based on property ownership and housing conditions between rural and urban residents is very different, especially in eastern Indonesia, where wealth is seen from livestock or agricultural land, even though the houses are shacks. Despite the limitations in the IDHS data, the instrument used is considered to have good validity and reliability, so that the questionnaire is still used from year to year. In addition, the IDHS instrument itself is also used in surveys in other countries, which is better known as the DHS.

Conclusion

This study found that the dominant factor influencing the low participation in FP use among ever-married young women in Papua Province in 2017 was the age at which they first had sex. The need to increase the Youth Family Development program (BKR) reaches teenagers in urban areas and needs to be reached for teenagers under challenging areas in Papua Province. In addition, there is a need for cross-sectoral collaboration in intensifying the Generation Planning (Genre) program at several schools, universities and spread throughout the regions in Papua Province so that youth in Papua Province can plan for their future.

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