



Relationship Between Age and Education of Women of Fertile Age with Participation in Long-Term Contraceptive Methods

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ABSTRACT

Objective: The aim of this research is to determine the relationship between age and education and the decision of women of childbearing age (WUS) to become MKJP family planning acceptors in Mamuju District.

Method: This research is quantitative research with a cross sectional method. Data collection techniques using questionnaires. The data analysis used was univariate analysis and bivariate analysis with the chi square statistical test.

Result: The results of research based on the Chi Square Test show that there is a relationship between age (p value = 0.050) and education (p value = 0.017) on MKJP family planning participation.

Conclusion: The results of this study explain that there is a relationship between age and education and WUS participation in family planning programs using long-term contraceptive methods.

Keywords: Age, Education, MKJP Method

Introduction

The rate of population growth in Indonesia is still a serious problem whose impact can spread to social and economic problems. Poverty, unemployment, crime are just a few of the problems that can arise (Jaya & Ir Ranatwati, 2022). The 2017 IDHS results show that the Total Fertility Rate (TFR) in Indonesia is 2.4 per woman of childbearing age, this figure does not meet

the target of 2.31 in 2018 and 2.1 in 2020. One of the causes of the high TFR is the low Contraceptive Prevalence Rate (CPR). The results of the 2017 IDHS show a decrease in the use of modern contraception (modern Contraceptive Prevalence Rate/mCPR) from 57.9 percent (2012 SDKI) to 57.2 percent (BPS, BKKBN, Kemenkes, 2017). In 2021 in Mamuju Regency the CPR percentage was 49.15%, the third lowest in West Sulawesi Province after Majene Regency (33.30%) and Polewali Mandar Regency (34.35%), still far from the national target of 61.78% in 2020 and 63.41% in 2024 (BPS, 2021). Meanwhile, coverage of MKJP family planning participation in Mamuju Regency in 2021 is still very low, namely 12.1%, far below the national average of 23.1% (SDKI, 2017) and the national target in 2021 of 25.93% (Mamuju, 2022).

Population policy in Indonesia is a form of government effort whose aim is to control population growth. One of the government's efforts is to launch a family planning program. Family planning is an effort to regulate the birth of children, the ideal birth distance and age, and regulate pregnancy, through promotion, protection and assistance in accordance with reproductive rights to create a quality family. Pregnancy management is an effort to help married couples give birth at a safe age (Asi et al., 2023). Data on the success of family planning programs can be known one way from research results. Research conducted by Febriyanti et al., (2023), the family planning program has not been maximally successful, because there are several inhibiting factors in realizing the success of this family planning program, namely the limited methods available and PUS' ignorance regarding contraceptive methods. Meanwhile, in other research, the results showed that the family planning program was successful in reducing the rate of population growth in Bitung City (Rompah et al., 2023).

One of the target indicators for the success of the government's family planning program is to increase participation in the use of Long Term Contraceptive Methods (MKJP). The long-term contraceptive method (MKJP) is a contraceptive method with a high level of effectiveness with a low failure rate and fewer complications and side effects compared to other contraceptive methods. MKJP is a type of contraception that once used can last for 3 years to a lifetime. There are various types of MKJP such as intrauterine contraceptive devices (IUD), implants, female surgical medical (MOP) and male surgical medical (MOP) (Kemenkes, 2021). Many factors influence the use of MKJP both in terms of social, demographic, programs related to service availability, in terms of the environment related to the role of those closest to them, and mass media in providing information as well as in terms of each individual as a service user. The use of MKJP is greatly influenced by individual factors, because the decision to use or not to use this type of contraception is at the individual level (BKKBN, 2020). Many studies have been conducted regarding the factors that influence the use of long-term contraceptive methods with results including maternal characteristics, knowledge and attitudes, family income and others, but there has been no similar research in Mamuju District (Setyorini et al., 2022).

This study aims to analyze the relationship between age and education of women of childbearing age (WUS) and the decision to become MKJP family planning acceptors in Mamuju District. The research hypothesis is that there is a relationship between age and WUS participation in using MKJP family planning and there is a relationship between education and WUS participation in using MKJP family planning.

Objective

The aim of this research is to determine the relationship between age and education and the decision of women of childbearing age (WUS) to become MKJP family planning acceptors in Mamuju District.

Method

This research is quantitative research using a cross-sectional survey method. Quantitative data plays a role in obtaining measurable data that is descriptive, comparative and associative using a questionnaire. The research was conducted from March to December 2023 at the Bambu and Binanga Community Health Centers, Mamuju District. The total population in this study is all wives/women of childbearing age who are active family planning participants in the Bambu Community Health Center and Binanga Health Center Working Area, Mamuju District, totaling 7,659 people. The sample in this study were all PUS wives who were active family planning participants and lived permanently in the Bambu Community Health Center and Binanga Community Health Center working areas using the criteria set by the researchers, resulting in a sample of 120 people.

The sampling technique used was proportional stratified random sampling. The research variables consist of dependent variables and independent variables. In this research, the dependent variable is the participation of the MKJP family planning program and the independent variables are the age and education of WUS. Validity and reliability tests were carried out on 30 PUS wives in Tadui Village, Mamuju District.

The location selection is based on the consideration that the place has the same characteristics as the research location. Quantitative data collection techniques using questionnaires. The data analysis used is univariate analysis, bivariate analysis with the chi square statistical test.

Result

One indicator of the achievement of family planning (KB) services is the percentage of new family planning participants. Data obtained from the Mamuju District Health Service shows that there are 12,031 PUS in Mamuju District (working areas of the Binanga Health Center and Bambu Health Center), and of this number, 7,654 PUS are active family planning participants (22.74%). The proportion of family planning participants according to type of contraception is as follows, condoms 136 (1.7%), injections 4579 (59.8%), pills 2214 (28.9%), IUD 251 (3.3%), MOP 23 (0.3%), MOW 143 (1.8%), implant 308 people (4.02%). Based on the data above, it can be seen that the most widely used type of contraception is injection (59.8%) and the least is MOP (male surgical method), namely 0.3%, while for MKJP contraception the most widely used contraceptive is implant (4.02%). Univariate analysis was carried out to get an idea of the frequency distribution of age variables, participation in the MKJP family planning program.

Table 1. Distribusi Frekuensi Responden

No	Variabel	f	%
1	KB participation		
	KB Non MKJP	67	55,8
	KB MKJP	53	44,2
2	Age		
	High risk (>35 tahun)	50	41,7
	Low Risk (20-35 tahun)	70	58,3
3	Education		
	Base	40	33,3
	Carry on	21	17,5
	Tall	59	49,2

Based on table 1, the majority of respondents used non-MKJP family planning, 67 people (55.8%) and 53 people (44.2%) used MKJP family planning. Of all respondents who use birth control, 34 people (28.3%) use the most implantable type of birth control, 30 people (25%), 3 month injections (25%), 18 people (15%) with IUDs, 18 people with combination pills (15%), breastfeeding pills 5 people (4.17), 1 month injection 4 people (3.3%), condoms 4 people (3.3%), interrupted intercourse 4 people (3.3%), calendar method 2 people (1, 67%) and MOW 1 person (0.83%).

Respondents' ages were grouped into two categories, namely low risk (20-35 years) and high risk (>35 years). From table 5.1, it shows that respondents with a low risk age (20 - 35 years) were 70 people (58.3%), more than respondents with a high risk age (>35 years), namely 50 people (41.7%). The majority of respondents' education was higher education (DIII, Bachelor's Degree, Master's Degree) with 59 people (49.2%), then basic education (SD, SMP) with 40 people (33.3%) and further education (SMA) with 21 people (17.5%).

Bivariate analysis is used to determine the relationship between two variables, namely between one independent variable and one dependent variable. In this study, the bivariate analysis used was the Chi square test, each independent and dependent variable that had been categorized was tested to see whether there was a relationship between the independent variables, namely maternal age and education, and the dependent variable (participation in the MKJP family planning program). If the p value <0.05 then Ho is rejected or the research hypothesis is accepted.

Table 2. Relationship between Age and Participation of MKJP Family Planning Acceptors

Age	Akseptor KB				Total		P
	KB Non MKJP		KB MKJP		f	%	
	f	%	f	%			
High Risk (>35 tahun)	19	38,0	31	62,0	50	100	0,001
Low Risk (20-35 tahun)	48	68,6	22	31,4	70	100	

Based on table 5.2, from the results of bivariate analysis using the chi square test, it was found that the age variable had a p-value of 0.001 (< 0.05), which means there is a relationship between age and participation as an MKJP family planning acceptor with a value of (95% ci 1.661 – 7.628).

Table 3. The Relationship between Education and the Participation of MKJP Family Planning Acceptors

Education	participation				Total		P
	Follow		Do not participate		f	%	
	f	%	f	%			
High/Basic carry on	41	41,4	58	58,6	99	100	0,035
High/Advanced Base	12	57,1	9	42,9	21	100	0,040
	36	45,0	44	55,0	80	100	
	17	42,5	23	57,5	40	100	

In the bivariate test, education is tested twice because education consists of three categories, namely as follows: category 1, namely higher/primary education and basic education. And the next category is higher/further education and basic education. Based on the results of the cross tabulation between education and family planning participation in category 1 and category 2, the education variable has a relationship with MKJP family planning participation with a value of $p = 0.035$ and $p = 0.040$.

Discussion

Family planning program participation in this study was divided into 2 groups, namely MKJP family planning acceptors and non-MKJP family planning acceptors. Those who participated in the MKJP family planning program were respondents who in this study used long-term contraceptive methods, namely IUD, Implant, MOW and MOP, while Non-MKJP contraceptive acceptors were respondents who at the time of the study used non-long-term contraceptives, including pills, injections, condoms, simple contraceptive methods (calendar method, periodic abstinence).

The research results depicted in the frequency distribution were obtained from 120 respondents, the number of MKJP family planning acceptors (IUD, Implant, MOW, MOP) was 53 people with a percentage of (44.2%) and non MKJP family planning acceptors were 67 people with a percentage of (55.8 %). This is in line with several studies which found that there were more acceptors of non-MKJP methods of family planning than acceptors of non-MKJP methods. One of them is from the research results of Aldila & Damayanti, (2020) which wrote that the majority of respondents used non-MKJP contraception, 81.4%, while only 18.6% MKJP.

The low use of MKJP is a problem in family planning programs, this is due to several rumors about MKJP such as IUDs, that IUDs can be lost in the body, IUDs can fail and stick to the baby's head, couples will feel discomfort, IUDs can come out of the uterus, causing miscarriage and cancer (Ibrahim et al., 2019). Another perception regarding MKJP is the husband's prohibition and the side effects of the IUD felt by the acceptor, such as the discomfort of using the IUD when having intimate relations. The acceptor's perception of

contraceptive devices influences the contraceptive method chosen. Therefore, this research wants to look at acceptors' perceptions of contraceptive devices regarding the decision to use MKJP and Non-MKJP to strengthen family planning promotion program strategies so that acceptors can have an understanding and choose contraceptives according to their needs.

Relationship between maternal age and use of MKJP

In the results of research based on age, it is known that respondents are categorized into two categories, namely low risk age (20 - 35 years old) and high risk age (> 35 years old). The research results showed that the majority of respondents were aged 20 - 35 years (low risk), namely 70 people (58.3%), while the remaining respondents were aged over 35 years (high risk), as many as 50 people (41.7%). In accordance with the reproductive goals recommended by the government, the ideal age for reproduction is 20 – 35 years, which is called the healthy reproductive age. At the age of < 20 years the reproductive organs are not yet mature so the possibility of complications due to the use of contraceptives will be greater, whereas at the age of over 35 years the reproductive organs have experienced a decline in the function and quality of egg cells, thereby increasing the risk of complications and defects in the fetus. (Kemenkes, 2021).

Based on the results of the logistic test, the effect of respondent age on participation in using MKJP shows a value of $p = 0.001 < \alpha = 0.05$ so it can be concluded that there is a relationship between respondent age and participation in using MKJP. This is in line with research which shows that there is a significant relationship between age and the use of MKJP in Muara Enim Rumkitban (Ibrahim et al., 2019).

Age is an intrinsic factor in a person's decision making to determine which contraceptive method to use. Age 20 - 35 is an age that is not at risk because this is the period when a woman's organs, reproductive function and hormonal system are mature enough to have children. Young women have a smaller chance of using the MKJP method compared to older women. The fertility choices of women over 35 years of age are more likely to limit pregnancy, so the main choice of contraceptives is contraception that can be used for the long term (Andini et al., 2023). The older a person is, the choice of contraceptive device is towards one that has higher effectiveness, namely long-term contraceptive methods (BKKBN, 2015). The older you get, the more mature you are in thinking and the wiser you will be in choosing contraception that suits you, but it does not rule out the possibility that there are many factors that influence the use of contraception so that it is not only seen in one factor but can also be related to other factors.

Relationship between maternal education and the use of MKJP

Respondents' education was categorized into three categories, namely basic education (SD, SMP), further education (SMA), and higher education (graduated from college). The research results showed that the majority of respondents' education was primary education (SD, SMP), namely 59 people (49.2%), then higher education (DIII, Bachelor's Degree, Master's degree) as many as 40 people (33.3%), and further education (SMA) as many as 21 people (17.5%).

Based on the results of the logistic test, the influence of the respondent's education level on participation in using MKJP shows a value of $p = 0.017 < \alpha = 0.05$, so it can be concluded that there is a relationship between the respondent's education level and participation in

using MKJP. This is in line with Bertand's (1980) theory quoted by Rosidah (2020), education not only makes respondents decide which contraceptives to use but also the mindset to understand and evaluate the contraceptives used. (Rosidah, 2020). The low number of users of long-term contraceptives is due to the lack of understanding of PUS women regarding long-term contraceptives including the profile, advantages, disadvantages, and side effects of using these contraceptives (Rosidah, 2020).

Education is one of the factors that influences a person's acceptance of new ideas, including using contraception. Someone who has a high level of education will be more knowledgeable and easier to accept ideas, more independent and rational in making decisions and actions. Women who have higher education will tend to implement family planning programs (Notoatmodjo, 2014). The level of education also has an influence in determining choices, because someone who has higher education will generally have broader views and be more receptive to innovative ideas and things. (Triyanto & Indriani, 2018).

Conclusion

Based on the results of this study, the age and education of women of childbearing age are related to their participation in using long-term contraceptive methods. Older people and those with higher education prefer to use more effective contraception, namely MKJP.

Conflict of interest

There is no conflict of interest.

Authors' contribution

Each author contributed equally in all the parts of the research. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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