

## Analysis Of Factors Influencing The Decision Of Couples Of Childbearing Age (PUS) In Choosing Contraception In West Denpasar District

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**Abstract** . Contraceptive methods are effective methods for delaying and spacing pregnancies and stopping fertility. Decision making in choosing a contraceptive device needs to consider the fertility needs and health conditions of the prospective contraceptive user. This research aims to: 1) To analyze the simultaneous influence of education level, income, husband's support, and the role of family planning officers on the decisions of couples of childbearing age (CCA) in choosing contraception in West Denpasar District. 2) To analyze the partial influence of education level, income, husband's support, and the role of family planning officers on the decisions of couples of childbearing age (CCA) in choosing contraception in West Denpasar District. This data uses primary data with a quantitative approach obtained from interviews and a combination of secondary data. The population of this study was 18,236 thousand people using 100 samples from this population. Data analysis techniques use descriptive statistical analysis, binary logistic analysis, model fit test, multiple linear analysis. These results show that: 1) education, income, husband's support, and the role of family planning officers simultaneously influence the decision to choose contraception in West Denpasar District. 2) education partially has a positive effect on the decision to choose contraception in West Denpasar District. 3) income partially has a positive effect on the decision to choose contraception in West Denpasar District. 4) husband's support partially has a positive effect on the decision to choose contraception in West Denpasar District. 5) the role of family planning officers partially has a positive influence on the decision to choose contraception in West Denpasar District.

**Keywords** : Education, Income, Husband's Support, Role of Family Planning Officer

### BACKGROUND

Indonesia is the country with the fourth largest population in the world with a population growth rate (LPP) of 1.49% and the number will continue to increase by around 3.5 million people every year. This condition causes the high growth rate and population in Indonesia from year to year. Increasing population is a challenge being faced by developed and developing countries, including Indonesia. In this case, it can be interpreted that fertility or live birth rates increase every year. Fertility control is the right thing to do in an effort to control population growth so that people can have a decent and prosperous life. For this reason, the government has certain programs so that things like this can be overcome.

Considering that Indonesia has the goal of achieving Sustainable Development Goals (SDGs) to improve the lives of Indonesian people. High population density can also affect the quality of human life. So, in order for society to have a healthy and prosperous life, high population density must be immediately addressed by controlling fertility rates. One of the institutions formed by Indonesia whose task is to control population growth and family planning in Indonesia is the National Population and Family Planning Agency (BKKBN).

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The Family Planning (KB) program aims to reduce the birth rate and create a better quality generation, so that in the future human resources in Indonesia will have good quality. Not only that, the formation of Family Planning (KB) Villages can also handle population problems aimed at families in the smallest scope, so that later they can create quality, healthy and prosperous families.

Denpasar City is one of the cities in Bali Province that has a very high population density. It is feared that this could have a negative effect on population growth if it is not addressed immediately. It is feared that the high birth rate will also have an impact on poverty and welfare. As per the researchers' review of the number of babies born in Denpasar City sub-district.

**Table 1. 1Number of Babies Born in Bali Province by Year and Regency/City in Bali Province (Jiwa)**

Denpasar-Bali	Number of Babies Born		
	2020	2021	2022
Denpasar City	16,453	16,619	17,089
Bali province	63,745	65,864	58,452

Source: BPS Bali Province, 2023

Based on data obtained from the Central Statistics Agency in table 1.1, there is data on the number of babies born in Denpasar City District from 2020 to 2022 which has increased. From this table, it can be seen that Denpasar City will have 17,089 babies in 2022. Considering that the increasing birth rate in Indonesia is currently a big problem and requires special attention in handling it. One form of special attention from the government in overcoming high birth rates is by implementing the Family Planning (KB) program so that the population can be controlled.

There are three choices of birth control methods which are key in choosing birth control, namely the choice of a very long and very effective method, very effective with correct use, and effective with correct use. With these three options, midwives usually provide information to clients that there are three categories of birth control methods. If you want to choose a long-term and very effective method, then the contraceptives you can choose consist of the IUD, MOW, MOP and Implant contraceptives. The second category is very effective with correct use consisting of pills, injections, condoms, and the Lactational Amenorrhea Method (MAL). The next category is effective with correct use, namely natural birth control which consists of the calendar method and interrupted intercourse. These three choices can be the key for clients whether they want to choose birth control that is very

effective or only effective. This can be an attraction in itself (Nurcahyani, Lia. Widyastuti, 2020).

The use of birth control contraceptives really has an influence on family income, because lower income levels prefer non-MKJP contraceptives with relatively low costs and practicality, apart from reducing the costs of using these contraceptives, this also has an impact on their effectiveness. The relatively cheap price is a reason for families to use contraception, especially non-MKJP, not only that, the lack of knowledge also influences each individual's choice to use non-MKJP contraception (Firdaus et al., 2018). The use of this type of family planning regarding MKJP and non-MKJP also requires the main support of the Childbearing Age Couple (PUS), which in this case is the Husband.

There are several factors that influence mothers in choosing MKJP contraception, one of which is the support of the husband, this is very necessary in using contraception, because without support from the husband, the feeling of comfort in using contraception will not be obtained, the contraceptive method cannot be forced, husband and wife must be together. choose the best contraceptive method, cooperate with each other in using it, pay for contraceptive expenses, and pay attention to signs and dangers. It needs to be understood that the use of contraception is also a joint responsibility of men and women as a couple, so that the contraceptive method chosen reflects the needs and desires of the husband and wife.

According to (Rohmah et al., 2022) research results show that almost all respondents received good support from their husbands. This result shows that husbands participated by providing real assistance to their wives in choosing contraceptives. One real form of support from a husband for his wife is accompanying his wife during consultations and installation of IUD contraception (MKJP).

According to research (Agustina Dwi, 2017) the success of the program, the role of officers in the practice of men's participation in the Family Planning program is closely related, namely health officers provide complete information and good communication about male family planning services, the role of officers is also supported by the availability of health workers who are competent in health services so as to increase men's participation in family planning programs.

Based on the description stated above, research was conducted with the title "Analysis of Factors that Influence the Decision of Fertile Age Couples (PUS) in choosing contraception in West Denpasar District". Where this research was conducted to find out the influence of education, income, husband's support, and the role of family planning officers in West Denpasar District.

## **LITERATURE REVIEW**

### **Population Growth**

Population growth is the change in population over time, and can be calculated as the change in the number of individuals in a population using "per unit time" for measurement. The term population growth refers to all species, but always refers to humans, and is often used informally to refer to the demographic value of population growth, and is used to refer to world population growth (Zulfa, 2016). Basically, the results of population science are intended to organize a better life in the future. The population growth rate itself is one of the indicators most often used to describe population conditions in an area, not only at present but also to see trends in development in the future. If the rate of population growth is higher than the rate of economic growth, it means that the additional production generated by economic growth will be consumed by the population itself which is increasing much larger (Efendi et al., 2021).

### **Population Theory (Malthusian Theory)**

Malthus proposed two types of preventive checks that can maintain the rate of population growth at a level of balance with food availability, known as preventive checks and positive checks. Preventive checks work to influence population growth through reducing birth rates, such as avoiding marriage, delaying the age of marriage, and limiting the number of children (family planning), while positive checks influence population growth through high death rates, such as the impact of war, poverty, famine, and epidemics. disease (Raharto, 2020).

### **Population**

At the beginning of the first demographic transition, according to this theory, fertility and mortality were at high levels, with crude birth rates and crude death rates in the range of 40 per thousand of the population. The population almost does not change, unless mass migration occurs. Then, in developing countries, mortality fell rapidly due to health technology that had been created in more developed countries. However, fertility fell slowly. As a result, the population exploded. Concerns arise about how to provide life to the large number of children. So, programs emerged to control the population, especially family planning programs. This program has succeeded in reducing birth rates rapidly in many countries, including Indonesia. In some countries, the total fertility rate (TFR) has even reached 1.1 from the start of the first demographic transition which was around 6.0.

### **Concept of Family Planning (KB)**

Family planning is the ability of individuals and couples to anticipate and achieve the desired number of children and the spacing and timing of their births. Family planning is achieved through contraception which is defined as any method capable of preventing pregnancy and through controlling unintentional infertility. The contraceptive effect can be obtained through temporary or permanent means.

### **Contraception Method Selection Decisions**

Decision making in choosing a contraceptive device needs to consider the fertility needs and health conditions of the prospective contraceptive user. Not only that, counseling can also help to understand the conditions or characteristics of various contraceptive methods and be able to choose contraceptives that suit the needs and health conditions of contraceptive users (Siti Amallia & Yessy Octa Fristika, 2022).

### **Couples of Childbearing Age (PUS)**

A good age to use implant contraception is reproductive age, namely 20-35 years. The direct target is to reduce the PUS fertility rate (aged 15-49 years) where the woman's age is an important variable that has an influence on the use of contraceptives (Alvinasyrah, 2021).

In fertility calculations that use a limit of 15-49 years, in family planning activities those in the 45-49 group are no longer the target of family planning. This is motivated by the idea that those in the 45-49 year age group have a very small chance of giving birth. Family planning acceptors/family planning participants are couples of childbearing age (PUS) whose husband/wife is using or is using one of the modern contraceptive methods/methods in the year the family data collection is carried out. In this sense, it does not include traditional contraceptive methods such as massage, herbal medicine and also does not include natural birth control methods such as periodic abstinence, interrupted intercourse and so on (Susanti, 2022).

### **Education**

Education consists of primary education, secondary education and higher education. Higher education makes a major contribution to economic growth because it is directly related to social employment and training. Education is an important factor for women's fertility levels and the use of family planning contraception. Education makes the younger generation understand the concept of a planned family. Some people decide to have family

planning because of their high level of education. They also aim to combine career and family life (Ji et al., 2023)

### **Income**

Income according to economics is the maximum value consumed by a person in a period with the expectation of the same situation at the end of the period as the original situation (Lubis, 2022).

### **Husband's Support**

Husband's support is something that the husband does in response to his wife's pregnancy which can cause inner calm and feelings of joy in the wife (Ahmalia & Parmisze, 2018). According to theory, support in using intrauterine device contraception is divided into 4 parts, namely informational support, instrumental support, emotional support and appreciation support. Informational support includes providing advice, suggestions, knowledge, and information and guidance (Pinamangun et al., 2018)

### **Role of Family Planning Officer**

Family Planning Officers consisting of Family Planning Instructors and Family Planning Field Officers (PLKB). PLKB is responsible for implementing national family planning outreach, service, assessment and development activities. PKB and PLKB are pioneers in implementing family planning in this field, and their mission is not only to mobilize the community to participate in national family planning work. However, at the same time, we also work together with all parties to improve the quality of life and welfare of the community (Restiyani & Murjana Yasa, 2019).

### **METHODS**

Research Design is a type of associative research with a quantitative approach. Associative research is research that aims to determine the relationship between one variable and other variables (Luar et al., 2019). The quantitative approach is a type of research that is based on using questionnaires and a number of mathematical/statistical analysis methods whose results become the basis for making decisions or conclusions. Quantitative emphasizes more empirical aspects originating from phenomena in the field or based on behavior in the field, which is then used as a research benchmark (Zaluchu, 2020). In this research, a simultaneous and partial associative analysis will be carried out on the variables of education,

income, husband's support and the role of family planning officers on the decisions of couples of childbearing age (PUS) in selecting contraceptives in West Denpasar District.

## RESULTS AND DISCUSSION

### Analysis Results

#### Descriptive Analysis

The variables examined in this research are Education (X1), Income (X2), Husband's Support (X3), Role of Family Planning Officers (X4), and EFA Decisions in Choosing Contraception (Y), a description of the data for each variable is presented in Table 4.10.

**Table 4.10 Results of Descriptive Statistical Analysis**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Education	100	9.00	19.00	13.7900	2.23966
Income	100	2000000.00	5300000.00	3523000.0000	756234.02396
Husband's Support	100	1.00	1.00	1.0000	.00000
Role of Family Planning Officer	100	3.67	5.00	4.0567	.24643
Decision	100	.00	1.00	.8800	.32660
Valid N (listwise)	100				

Source: *Processed Data, 2024 (Attachment)*

Table 4.10 describes that the Education variable has a maximum and minimum value of 19.00 and 9.00 respectively with an average of 13.7900 and a standard deviation of 2.23966. The Income variable has a maximum and minimum value of 5300000.00 and 2000000.00 respectively with an average of 3523000.0000 and standard deviation 756234.02396. The Husband's Support variable has a maximum and minimum value of 1.00 and 1.00 respectively with an average of 1.0000 and standard deviation 0.0000. The Family Planning Officer Role variable has a maximum and minimum value of 5.00 and 3.67 respectively with an average of 4.0567 and standard deviation 0.24643. The Decision Variable has a maximum and minimum value of 1.00 and 0.00 respectively with an average of 0.8800 and standard deviation 0.32660.

#### Model Fit Test

##### 1) *Hosmer and Lemeshow's*

If the Hosmer and Lemeshow test shows a probability value ( $P\text{-value}$ )  $\leq 0.05$  (significant value) it means that there is a significant difference between the model and the observed values so that the model cannot be used to predict the observed values. If the Hosmer and Lemeshow test shows a probability value ( $P\text{-value}$ )  $\geq 0.05$  (significant value) it means that there is no significant difference between the model and the data or it could be said that the model can be used to predict the observed value.

**Table 4.11 Results of Model Fit Test Analysis**

<b>Hosmer and Lemeshow Test</b>			
Step	Chi-square	df	Sig.
1	9,562	8	,297

Source: Processed Data, 2024 (Attachment)

Based on Table 4.12 obtained from the results of the regression analysis, it shows that the results of the *Hosmer and Lemeshow Goodness of Fit Test* obtained a chi-square value of 9.562 with a significance level of 0.297. The test results show that the probability value (*P-value*)  $\geq 0.05$  (significant value), namely  $0.297 \geq 0.05$ , then  $H_0$  is accepted. This indicates that there is no significant difference between the model and the data so that the regression model in this study is feasible and able to predict the observed values.

2) *2 Log Likelihood*

**Table 4.12 Overall Model Fit**

<i>2 log likelihood</i>					
Block number = 0			Block number = 1		
Step 0	1	76,039	Step 1	1	62,261
	2	73,436		2	53,146
	3	73,385		3	51,263
	4	73,385		4	51,096
	5	73,385		5	51,095
			6	51,095	
			7	51,095	

Source: Processed Data, 2024 (Attachment)

*fit* test results in Table 4.13 above show that the *-2 log likelihood* at the beginning (block number = 0) and the *-2 log likelihood* at block number = 1 have decreased, this shows that the regression model is good.

**Simultaneous Regression Significance Test**

**Table 4.13 Simultaneous Regression Significance Test Results**

<b>Omnibus Tests of Model Coefficients</b>				
		Chi-square	df	Sig.
Step 1	Step	22,290	4	<.001
	Block	22,290	4	<.001
	Model	22,290	4	<.001

Source: Processed Data, 2024 (Attachment)

Based on the table above, it is known that the  $\chi^2$  - square value is  $22,290 >$  provide a real influence on the model, or in other words the model is declared fit. So that the variables of education level, income, husband's support, and the role of family planning officers



simultaneously have a significant influence on the decision to choose contraception in West Denpasar District.

**Partial Regression Significance Test**

**Table 4.14 Partial Regression Significance Test Results**

		Variables in the Equation					
		B	S.E	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Education	-.258	,175	2,179	1	,140	,772
	Income	3,782	1,823	4,304	1	,038	43,901
	Husband's Support	3,124	1,208	6,691	1	,010	22,747
	Role of Family Planning Officer	1,989	,824	5,827	1	.016	7,310
	Constant	-61,739	27,618	4,997	1	,025	,000

a. Variable(s) entered on step 1: Education, Income, Husband's Support, Role of Family Planning Officer.

Source: Processed Data, 2024 (Attachment)

Based on Table 4.15 of the Wald test results above, the following equation can be formulated:

$$Li = \ln \frac{Pi}{1-Pi} = (-61,739) - (-0,258) - 3,782 - 3,124 - 1,984 \dots \dots \dots (4.1)$$

$$SE = (27,618) (0.175) (1.823) (1.208) (0.824)$$

$$Sig = (0.025) (0.140) (0.038) (0.010) (0.016)$$

Information:

- Li : Contraception Selection Decision: Y = 1 (MKJP); Y = 0 (non-MKJP)
- 61,739 : Intercept
- 0.258 : Education Variable Coefficient
- 3.782 : Income Variable Coefficient
- 3.124 : Coefficient of Husband's Support Variable
- 1.984 : Variable coefficient for the role of family planning officers

**Discussion**

**The Influence of Education on EFA Decisions in Contraceptive Choice**

Based on the results of partial analysis, education has a negative and insignificant effect on the decision to choose contraception in West Denpasar District. Based on the results of the partial regression significance test, it can be seen that the significance value is 0.140 with a negative coefficient value of -0.258. The probability value of the respondent's education level is 0.435. This means that if the education level increases by one year, the

probability of the respondent's decision to choose contraception will decrease by 0.435 assuming other factors are held constant. The p-value of the respondent's education level is  $0.140 > 0.05$ . This means that the education variable causes the decision to choose contraception with a probability value of 0.435. So based on the research results, education has no partial effect on PUS decisions in choosing contraception in West Denpasar District, which shows insignificant results with a negative correlation.

### **The Influence of Income on EFA Decisions in Contraceptive Selection**

Based on the results of partial analysis, income has a positive and significant effect on the decision to choose contraception in West Denpasar District. Based on the results of the partial regression significance test, it can be seen that the significance value is 0.038 with a positive coefficient value of 3.782. The probability value of the respondent's income level is 0.978. This means that if the income level increases, the probability of the respondent's decision to choose contraception will decrease by 0.978 assuming other factors are held constant. The p-value of the respondent's income level is  $0.038 < 0.05$ . This means that the income variable causes the decision to choose contraception with a probability value of 0.978. So, based on the research results, income partially influences EFA decisions in choosing contraception in West Denpasar District, which shows significant results with a positive correlation.

### **The Influence of Husband's Support on EFA Decisions in Choosing Contraception**

Based on the results of partial analysis, husband's support has a positive and significant effect on the decision to choose contraception in West Denpasar District. Based on the partial regression significance test, it can be seen that the significance value is 0.010 with a positive coefficient value of 3.124. The probability value of husband's support is 0.958. This means that respondents who receive husband's support have a higher chance of making contraceptive decisions. The p-value of husband's support is  $0.010 < 0.05$ . Respondents who received husband's support had a higher chance of choosing contraception compared to those who did not receive husband's support, namely 0.958. So based on the research results, husband's support partially influences the PUS decision in choosing contraception in West Denpasar District which shows significant results with a positive correlation.

## **The Influence of the Role of Family Planning Officers on EFA Decisions in Choosing Contraception**

Based on the results of partial analysis, the role of family planning officers has a positive and significant influence on the decision to choose contraception in West Denpasar District. Based on the results of the partial regression significance test, it can be seen that the significance value is 0.016 with a positive coefficient value of 1.989 with the probability value of the family planning officer role variable being 0.880. This means that the stronger the perception of the role of family planning officers, the probability of the role of family planning officers in West Denpasar District will increase by 0.880 assuming other factors are held constant. The p-value for the role level of family planning officers is  $0.025 < 0.05$ . This means that the variable role of the family planning officer causes the decision to choose contraception. So based on the research results, the role of family planning officers partially influences the PUS decision in choosing contraception in West Denpasar District which shows significant results with a positive correlation.

## **CONCLUSIONS AND SUGGESTIONS**

### **Conclusion**

Based on the results of the analysis of the analysis of factors influencing the decision of couples of childbearing age (PUS) in choosing contraception in West Denpasar District, it can be concluded:

1. Education has a negative and insignificant effect on the decisions of couples of childbearing age (PUS) in choosing contraception in West Denpasar District.
2. Income has a positive and significant effect on the decisions of couples of childbearing age (PUS) in choosing contraception in West Denpasar District.
3. Husband's support has a positive and significant effect on the decision of couples of childbearing age (PUS) in choosing contraception in West Denpasar District.
4. The role of family planning officers has a positive and significant influence on the decisions of couples of childbearing age (PUS) in choosing contraception in West Denpasar District.

### **Suggestion**

Based on the conclusions that have been obtained, several suggestions can be given, namely:

1. Health workers, especially nurses, both in community health centers and hospitals or clinics, to improve education programs about contraceptives and contraceptive

counseling for families, especially husbands, so that they can monitor contraceptives for their wives.

2. It is hoped that the Denpasar City BKKBN can collaborate more with the Community Health Centers, Hospitals and BPS to prioritize information and counseling services about contraception.
3. It is hoped that society and families will increase the role of husbands in selecting and using contraceptives and eliminate the notion that contraception is only a wife's problem.

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