

DETERMINANT FACTORS COUPLES TO AVOID HAVING MORE CHILDREN IN BALI PROVINCE

*Putu Ayu Indrayathi^{1,2,4}, Putu Erma Pradnyani^{2,5}, Istiana Marfianti², Luh Putu Sinthya Ulandari¹, Anastasia Septya Titisari³, Luh Kadek Ratih Swandewi³

¹Faculty of Medicine, Universitas Udayana, 80234 Denpasar, Bali, Indonesia

²Center for Public Health Innovation, Faculty of Medicine, Universitas Udayana, 80234 Denpasar, Bali, Indonesia

³National Population and Family Planning Board of Bali Province, 80234 Denpasar, Bali, Indonesia

⁴Doctoral School of Health Sciences, University of Debrecen, 4032 Debrecen, Hungary

⁵Health Polytechnic Kartini Bali, 80234 Denpasar, Bali, Indonesia

*Corresponding Author: Putu Ayu Indrayathi ; Email: pa_indrayathi@unud.ac.id

Published by Fakultas Kesehatan Masyarakat Universitas Airlangga

ABSTRACT

Keywords:

age,
children,
reproductive

The number of married women and men who no longer want children in Bali Province is consistent with a relatively high contraceptive prevalence rate (CPR) of 67%, higher than the national average of 64%. The large proportion of couples of reproductive age (CRA) who no longer want children either at the national or provincial level in Bali is an interesting thing to be analyzed further to see the factors that influence it. This study investigated secondary data of the 2017 Indonesia Demography and Health Survey (IDHS) in Bali Province. The variables studied included socio-demographics and desire to have children. The sample size was 271 married women (15-49 years). We found that the age of women of reproductive age (WRA), occupation of WRA, number of children alive, and ideal number of children are the four significant factors that influence the desire to have no more children in married couples. Based on these findings, a better family planning program can hopefully be made in the Bali province.

ABSTRAK

Kata kunci:

usia,
anak,
subur

Banyaknya wanita dan pria usia subur yang tidak menginginkan anak lagi di Provinsi Bali yang sejalan dengan tingkat penggunaan kontrasepsi (CPR) yang cukup tinggi, yaitu sebesar 67%, lebih tinggi dibandingkan angka nasional yaitu 64%. Besarnya proporsi Pasangan Usia Subur (PUS) yang sudah tidak menginginkan anak lagi baik di tingkat nasional ataupun Provinsi Bali menjadi suatu hal yang menarik untuk dianalisis lebih lanjut untuk melihat faktor yang mempengaruhinya. Penelitian ini merupakan analisis data sekunder Survei Demokrasi dan Kesehatan Indonesia (SDKI) 2017 di Provinsi Bali. Variabel yang diteliti adalah karakteristik sosial demografi wanita usia subur dan keinginan memiliki anak. Besar sampel adalah 271 wanita usia subur (15-49 tahun). Penelitian ini menemukan bahwa faktor - faktor yang berpengaruh signifikan dengan keinginan tidak memiliki anak lagi pada pasangan usia subur adalah usia dari Wanita Usia Subur (WUS), pekerjaan WUS, jumlah anak hidup dan jumlah anak ideal. Nantinya diharapkan dengan mengetahui hal tersebut dapat dibuat program perencanaan keluarga berencana yang lebih baik lagi di Provinsi Bali.

INTRODUCTION

A high population will become a burden for a country if it is not balanced with quality resources. Indonesia is one of the most populous countries globally after the People's Republic of China, India, and the United States

(1,2). It can be seen from the results of the Population Census in 2010, where the total population of Indonesia was 237,641,326 people. The population living in urban areas is 49.79% (118,320,256 people) and in rural areas as much as 50.21% (119,321,070 people) (3). Which means that the population in

Indonesia has been rising significantly and is projected to reach 304.9 million in 2035. One way to reduce the very rapid population growth rate is by controlling the birth rate (2).

The government, through the National Population and Family Planning Board, has implemented the Family Planning program since 1970 (4). To achieve these main objectives, the National Population and Family Planning Board arranged the 2015-2019 Strategic Plan (Renstra), which contains: reducing the total birth rate (TFR); increasing the prevalence of modern contraception (CPR); reducing the unmet need for family planning (unmet need); increasing active family planning participants who use the Long-Term Contraception Method and reducing the rate of contraceptive discontinuation (5).

Limiting the number of new births in the population is not an easy thing because children are one of the main goals of married couples. Having children is an individual right and cannot be prohibited by the government. Especially with the assumption in society that the more children, the more fortune they get. However, this assumption is not in accordance with current conditions. The increasing competitiveness in getting jobs means everyone is struggling to get optimal income (6). The more the number of children, the greater the burden of life that the parents must bear. Having many children is prone to problems both in society in general and within the family sphere. Many problems will arise for the community with the increasing population, especially socioeconomic problems such as unemployment, increasing crime, and insufficient health and education services (7). Meanwhile, it also causes many issues for families, including repeated pregnancies, which will increase the risk of the health of mothers and babies and less optimal growth and development of children so that the child becomes stunted (8).

Even though having many children has many risks, some parents still choose to do so. Data from the Indonesia Demography and Health Survey (IDHS) in 2017 show that 16% of married women (15-49 years old) and 17% of married men (15-54 years old) preferred to add children immediately, and 20% of women and 21% of men say they want to have more children within two years. More than half of women (52%) and men

(53%) stated that they no longer want children or have been sterilized (9).

The results of the national IDHS are not much different from the results obtained in Bali Province. The results of the 2017 IDHS in Bali Province show that 13% of currently married women aged 15-49 years and 14% of married men aged 15-54 years say they want to have more children immediately. As many as 21% of women and 19% of men stated that they wanted to add children within two years, and more than half of women (61%) and men (63%) indicated that they did not want any more children (5). The data on the number of married women and men who do not want children anymore are in line with the relatively high level of contraceptive use in Bali, which is 67%, higher than the national percentage of 64%. As many as 55% of currently married women use modern contraceptive methods, 13% use traditional contraceptives, 22% use Long-Term Contraception Method, and 11% have unmet needs for family planning. This impacts the birth rate, where the fertility rate in Bali Province has decreased, from 1.9 in the 2012 IDHS to 1.6 in the 2017 IDHS (5).

Decision to have how many children is influenced by several things such as visits by family planning officers who motivate the norms of a happy and prosperous small family and the tendency of parents to interpret children's presence (children's values) (10). Other studies suggest that the factors affecting couples of reproductive ages (CRA) are the number of hours worked, socioeconomic status and age of first marriage, family planning programs, education level, employment status, and health problems (11,12).

The large proportion of couples of reproductive age who no longer want children at the national or provincial levels of Bali is an interesting matter for further analysis. It also indicates a shift in fertility preferences among couples of reproductive age, especially the number of children. Analysis of the characteristics of the CRA and the factors that influence the decision not to have children again will provide a comprehensive picture for policyholders in the field of population and family planning to develop further strategies in the future. In addition, exploring the influencing factors can show the level of success and evaluation of the family planning program that has been implemented so far.

Therefore, this study aims to look at the factors that influence married couples (married women and their partners) to not want more children in Bali Province by analyzing the 2017 IDHS secondary data.

METHODS

Data

This study analyzes secondary data from the 2017 Indonesia Demography and Health Survey in Bali Province, specifically the dataset for women of reproductive age in Bali Province. The design of this study used a cross-sectional approach, which is a study conducted at a particular time to measure events simultaneously. The sample size is 271 currently married women (15-49 years) in Bali Province, according to the 2017 IDHS data.

Variables

The variables to be examined in this study consist of independent and dependent variables. The independent variables consist of the socio-demographic characteristics of women of reproductive age (WRA) and their partners, the perception of the ideal number of children, the number of children alive, the history of complications during pregnancy and childbirth, exposure to information about family planning, and the use of MKJP contraceptives. The socio-demographic characteristics studied were the age of the WRA, education of the WRA and spouse, occupation of the WRA and spouse, area of residence, and wealth quintile. The age of WRA can be divided into two categories, namely ≤ 35 years and > 35 years. Education for WRA and spouses is the last education when data collection IDHS is divided into two categories: low education, i.e., those who do not go to junior high school, and higher education, i.e., high school to undergraduate. Work can be divided into two, i.e., working and not working. The living area is divided into two, i.e., urban and rural. The income level is divided into two categories, i.e., an upper middle class consisting of middle to very rich quantiles and a lower middle class according to the wealth category of the IDHS.

The perception of the ideal child and the number of children alive can be divided into two categories, i.e., fewer than or equal to

two children and more than two children. A history of complications during pregnancy and childbirth was categorized into two, i.e., had and never. Pregnancy complications consist of bleeding, the wrong position of the baby, tightness, fatigue, fever, swelling of the limbs, convulsions or fainting, and others. Meanwhile, delivery complications consist of bleeding, fever, stress or depression, and others. Being exposed to information about family planning can be divided into two, i.e., exposed and unexposed. It is said that they were exposed to information if the WRA answered that they had received information about family planning from electronic or printed media or socialization. The use of Long-Term Contraception Method can be divided into four, i.e., using an Intra-Uterine Device (IUD), implants, sterilization, and not using Long-Term Contraception Method. The dependent variable in this study is does not want more children. The desire to not have any more children is when women of reproductive age and their partners no longer want children (have done sterilization).

Statistical Analysis

The data collected from this secondary data were analyzed by univariate and multivariate means. Univariate analysis was carried out to obtain the distribution of the variables studied in descriptive statistics (frequency, percentage, mean, and standard deviation), bivariate analysis used a simple logistic regression test to find out the association between the independent and dependent variables. A multivariate test with multiple logistic regression analysis with the backward method was carried out to determine the combined effect of the independent variables on the dependent variable. The multivariate test was carried out by including variables that had a p value < 0.25 in the results of the univariate analysis. The result of multivariate analysis is said to have a significant effect if the p value is < 0.05 .

Ethics Statement

This research has received an ethical acceptance permit No/UN14.2.2.VII.14/LT/2021 from the Research Ethics Commission of the Faculty of Medicine, Udayana University/Sanglah Hospital Denpasar.

RESULTS

Secondary data analysis was carried out on 271 currently married women (aged 15-49 years), and most (59.04%) no longer wanted children. Based on the characteristics of the respondents, it can be seen that most of the WRA's age is over 35 years of age, with most of their education being higher education (higher than high school) and working.

The respondents' spouses (husbands) are mostly highly educated and higher than high school (76.75%) and work. Judging from the wealth quintile, most respondents and their spouses are in the upper-middle class and live

in rural areas. Most living children are fewer than or equal to two people, believing that the ideal child is ≤ 2 people. In history of WRA during pregnancy and childbirth, some women with women had a history of complications, and most admitted that they had been exposed to information about family planning. Complete details can be seen in Table 1.

One component of population growth in an area is fertility (birth rate). Bali Province is one of the provinces with a Total Fertility Rate (TFR) which has continued to decline since 2012 from 1.9 to 1.6 in 2017. This figure of 1.6 shows that the Balinese population on average has 1-2 children.

Table 1. Socio-Demographic Characteristics of Childbearing-age Women in Bali Province

Variable	(n=271) Frequency (%)
Age of WRA	
≤35 years old	125 (46.13)
>35 years old	146 (53.87)
Education of WRA	
Low	88 (32.47)
High	183 (67.53)
Education of spouse	
Low	63 (23.25)
High	208 (76.75)
Occupation of WRA	
Working	225 (83.03)
Not working	46 (16.97)
Occupation of spouse	
Working	267 (98.52)
Not working	4 (1.48)
Residence	
Urban	87 (32.10)
Rural	184 (67.90)
Wealth level	
Lower middle	88 (32.47)
Upper middle	183 (67.53)
The number of children alive	
≤ 2 children	180 (66.42)
> 2 children	91 (33.58)
Perception of the ideal number of children	
≤ 2 children	194 (71.59)
> 2 children	77 (28.41)
Exposure to information about family planning	
Unexposed	113 (41.70)
Exposed	158 (58.30)
Complication during pregnancy	
Yes	215 (79.34)
No	56 (20.66)
Complication during childbirth	

Variable	(n=271) Frequency (%)
Yes	174 (63.97)
No	98 (36.03)
The use of Long-Term Contraception Method	
IUD	33 (12.18)
Implant	16 (5.90)
Sterilization	4 (1.48)
None	218 (80.44)
Desire to not have any more children	
Yes	111 (40.96)
No	160 (59.04)

The assumption that many children means much fortune is attached to the beliefs of previous societies. The general public does not realize that the more children there are, the more burdens the parents have to bear, especially material burdens. Parents with many children must spend more on their family members' lives, health, and education than parents with fewer family members (1). The results of study reveal that women's marriage age, woman's income forgone for having children, social security benefit at retirement age and the pecuniary costs of having children are significantly and negatively related to desired fertility, while woman's cultural views toward fertility are significantly and positively related to their desired fertility (13). Conditions like this will also impact the broader level of life, namely the level of society where the increasing population will cause social problems such as unemployment, crime, and health and education inequality (1,8).

Through the family planning program launched by the government in 1970, it has attempted to control the rate of population growth, hoping that each PUS will plan pregnancy and birth properly to form a quality family. The government's hope is starting to show results; many people who have been exposed to this program plan to have two children, and couples who already have more children (>2) decide not to have more children by using contraception. It is supported by data obtained by the Bali Provincial IDHS in 2017, which show that nearly half of married women (61%) and married men (63%) state that they do not want more children. Only a tiny proportion of currently married women (39%) and currently married men (37%) still want to add children immediately or within two years.

This figure does not change much from the 2012 IDHS, which shows that 64% of currently married women and 61% of married men do not want more children. The data also show that the contraceptive use rate in Bali Province has increased by 67%, higher than the national rate of 64%.

Based on the secondary analysis of the 2017 IDHS data, married couples have the following characteristics. Respondents of married women aged 15-49 years are in the productive age group, namely 39 years of age with most of their education having graduated from high school, and most of them work in the sales and service sector. The respondent's goal of working is mainly for the family or someone. The spouse of the respondent (husband) is also in the productive age group, namely 42 years of age with most of the education being middle to upper, namely graduating from high school and college with jobs in the industry, services, and sales. Most of the respondents and their spouses are at the economic level of the middle to upper class, with an average of more than two living children. Most of the respondents used Long-Term Contraception Method such as female sterilization, and IUDs, implants. The use of contraceptives is based on a joint decision with a partner, although it was also found that a small proportion of respondents used contraception on the decision of their wife or partner. Respondents and their spouses were mainly exposed to information about family planning through television. Most of the respondents admitted that the decision to use the respondent's income was made by themselves, while the decision to use the husband's income was made jointly with the partner. During pregnancy, a small proportion of respondents

had admitted to experiencing complications such as bleeding, fever, the wrong position of the baby, and shortness of breath.

Meanwhile, during childbirth, most respondents experienced complications such as bleeding and fever.

Table 2. Bivariate Analysis of Factors that are Significantly Related to the Decision of Respondents and their Partners not to have more Children

Variable	Desire to Have More Children		OR	p value	95% CI
	No f (%)	Yes f (%)			
Age of WRA					
≤35 years old	41 (32.80)	84 (67.20)	Reff	0.000	5.15-15.81
>35 years old	119 (81.51)	27 (18.49)	9.03		
Education of WRA					
Low	59 (67.05)	29 (32.95)	1.65	0.064	0.97- 2.81
High	101 (55.19)	82 (44.81)	Reff		
Education of spouse					
Low	33 (52.38)	30 (47.62)	0.71	0.221	0.40-1.24
High	127 (61.06)	81 (38.94)	Reff		
Occupation of WRA					
Working	129 (57.33)	96 (42.67)	Reff	0.208	0.79-3.01
Not working	31 (67.39)	15 (32.16)	1.54		
Occupation of spouse					
Working	158 (59.18)	109 (40.82)	Reff	0.713	0.10-4.97
Not working	2 (50.00)	2 (50.00)	0.69		
Area of residence					
Urban	48 (55.17)	39 (44.83)	0.79	0.374	0.47-1.32
Rural	112 (60.87)	72 (39.13)	Reff		
Wealth level					
Lower middle	51 (57.95)	37 (42.05)	0.93	0.801	0.56-1.57
Upper middle	109 (59.56)	74 (40.44)	Reff		
The number of children alive					
≤2 children	80 (44.44)	100 (55.56)	Reff	0.000	4.54-18.22
>2 children	80 (87.91)	11 (12.09)	9.09		
Perception of the ideal number of children					
≤2 children	125 (64.43)	69 (35.57)	2.17	0.005	1.27-3.72
>2 children	35 (45.45)	42 (54.55)	Reff		
Exposure to information about family planning					
Unexposed	74 (65.49)	39 (34.51)	Reff	0.069	0.38-1.04
Exposed	86 (54.43)	72 (45.57)	0.63		
Complication during pregnancy					
Yes	124 (57.67)	91 (42.33)	0.76	0.371	0.41-1.39
No	36 (64.29)	20 (35.71)	Reff		
Complication during childbirth					
Yes	103 (59.20)	71 (40.80)	1.02	0.945	0.62-1.69
No	57 (58.76)	40 (41.24)	Reff		
The use of Long-Term Contraception Method					
IUD	18 (54.55)	15 (45.45)	Reff		
Implant	12 (75.00)	4 (25.00)	2.5	0.275	0.67-9.39
Sterilization	1 (25.00)	3 (75.00)	0.27	0.288	0.02-2.96
None	129 (59.17)	89 (40.83)	1.21	0.615	0.58-2.52

Bivariate analysis was conducted to determine the factors that were significantly related to the respondent's and partner's decision not to have any more children. Influencing factors can be identified by indicated p value <0.05.

Based on Table 2, it can be seen that the factors that have a significant relationship with the desire to have no more children in a married partner are the age of the respondent, the number of living children, and the ideal number of children ($p < 0.05$). For the

complete bivariate analysis, see Table 2.

Multivariate analysis was conducted to determine the factors most associated (independent) with the desire not to have more children in a married partner. The variables to be analyzed were those with a p value of less than 0.25, namely age of WRA, WRA education, occupation of prostitutes, husband's education, number of living children, the ideal number of children, and exposure to information about family planning.

Table 3. Multivariate Analysis of the Factors most Related to the Desire to have no more Children in Married Partners

Variable	AOR	p value	95% CI
Age of respondent			
>35 years old	7.59	0.000	4.04-14.29
≤35 years old	Reff		
Number of children alive			
>2 children	6.73	0.000	3.10-14.62
≤2 children	Reff		
The ideal number of children			
≤2 children	3.15	0.001	1.56-6.36
>2 children	Reff		
Occupation of WRA			
Not working	3.05	0.009	1.35-7.01
Working	Reff		
Education of WRA			
Low	1.07	0.848	0.52-2.21
High	Reff		
Education of spouse			
Low	0.74	0.432	0.35-1.56
High	Reff		
Exposure to family planning			
Exposed	0.67	0.221	0.35-1.27
Unexposed	Reff		

Based on the results of multivariate analysis, it is known that the most influential variable with the desire to have no more children in a married partner is the age of the respondent more than 35 years old, the number of children alive is more than two children, the perception of the ideal number of children according to the respondent and their partner is fewer than or equal to two children, and non-working women of reproductive age.

Many factors influence why a married couple does not want more children or limit the number of children they have. The results of multivariate analysis show three variables have a very significant relationship with the desire to have no more children in a married partner,

namely the age of the respondent, the number of living children, and the ideal number of children according to the respondent and their partner.

Age was significantly related to the partner's desire to not want another child (OR = 7.40; $p = 0.000$; 95% CI: 3.80-14.42). It can be concluded that the respondent's age >35 years is seven times more likely not to want more children. Women more than 35 years old are considered no longer productive to have children. The best age for pregnancy and childbirth is 20-35 years. Conversely, women under 20 years of age or over 35 years of age are less likely to get pregnant or give birth because pregnancies at that age have a high

risk of complications in pregnancy and childbirth that can cause death (1). Research conducted in Yogyakarta found mothers aged 20-35 years old want more children than the above age group. They consider their age is still appropriate for adding children, and their husbands also agree that they want to add children at any time (14).

The number of children alive had a significant relationship with the partner's desire not to want another child (OR= 6.75; $p=0.000$; 95% CI: 3.06-14.86). It can be concluded that couples who have more than two children have a six times greater chance of not wanting more children. A large number of children causes the unwillingness to have more children. The results of this study are in line with other studies that have been conducted where the number of children a person has is closely related to the desire to have more children and use contraceptives. The number of children affects a person using contraceptives. For respondents who only had one child, not using contraception was because they wanted to add more children. In contrast, respondents who felt that they didn't want to have another child chose to use modern contraception or natural/traditional contraception (1).

The ideal number of children was significantly related to the partner's desire not to want any more children (OR = 3.22, $p = 0.002$, 95% CI: 1.56-6.65). It can be concluded that couples who think the ideal number of children is fewer than or equal to two children are three times more likely not to want more children. The results of this analysis are in accordance with the results of the analysis which state that the number of children who are still alive has a positive effect on the number of children desired by the family (15). The results of the secondary data analysis for the 2017 IDHS show that the average number of living children owned by respondents is 2.65; this figure is comparable to the ideal number of children for married couples, which is 2.25. The decision of a family to have more or fewer children depends on the perception of the ideal number of children. Women who wanted a small number of children tended to delay the birth of their first child compared to women who wanted a large number of children.

The results show several significant relationships between events in women's lives

and their ideal family size, such as: region, women's educational attainment, husband's educational attainment, age at first birth and household wealth status (16). Many Nigerian women desire more than four children, women living in rural area having a higher hazard ratio than the rural areas; this indicates that women living in urban centers have a high desire for not more than four children than those in the rural areas (16). Besides that, wealthy and educated households have lower fertility preferences and younger women within ages 15-29 tend to desire lower fertility than middle-aged women aged 30-49. In line with another study, it suggests that contributing factors to the reduction in fertility were: education level and age at first sex which showed significant contributions on both components of the decomposition, with the other factors also contributing being family size preference, exposure to family planning message and contraceptive use (17).

Many other factors can be explored more deeply related to the couple's decision of reproductive age not to have more children. The transition from the opinion of the previous society that many children brings much luck to become quality, happy and prosperous families with fewer children is also a factor that can influence the decision of PUS not to have any more children. This transition is because the community has been exposed to quite a lot of information about the risks of having children in large numbers, both at the family and community levels.

In addition, the existence of women's empowerment, namely the empowerment of women in determining contraceptive choices, also has a significant effect. Women are no longer only followers or recipients of the dominant husband's decision but also can determine a contraceptive method that is suitable and comfortable for them. The more in-depth information that can be extracted, the more it will provide a clear picture for the government or program planners in taking strategic steps that are more appropriate in controlling the population so that the goal is to form a quality, healthy and prosperous family planning.

This study has several limitations considering that it uses secondary data. The variables studied are adjusted to the existing data so that several variables in the literature which affect unwanted pregnancy cannot be

included. In addition, this study is a cross-sectional study, so there is no causal interpretation (cause-and-effect) that can be produced. However, the results of this study can help The National Population and Family Planning Board (BKKBN) of Bali Province provide a complete and comprehensive picture for policy holders, especially in the field of population and family planning, to formulate future strategies and plans in quality population control and family planning programs, especially in Bali Province. Further analysis is needed to explore other possible factors that have a strong enough influence on the respondent's and partner's decision not to want another child.

CONCLUSIONS AND SUGGESTIONS

Conclusion

The large proportion of couples of reproductive age (CRA) who avoid more children at the national or provincial level of Bali indicates a shift in fertility preferences in CRA, especially the number of children. Factors significantly related to the desire of a married couple not to have more children were the respondent's age (i.e., more than 35 years old), the number of children (i.e., more than two), the women of reproductive age who did not work, and the perception of the ideal number of children (i.e., fewer than or equal to two children).

Suggestion

The findings of this study indicate that four variables have a significant effect on the desire to have no more children in married couples, namely age of WRA, occupation of WRA, number of living children and ideal number of children. Therefore, it is important that health practitioners and the BKKBN improve health education through counseling with a target focus on these four variables for the sustainability and success of the family planning program in Indonesia. The provision of these activities can also be given before the CRA is married, so that it can increase the couple's knowledge about family planning and improving the correct concept and information received by the community, especially couples of childbearing age.

ACKNOWLEDGMENT

The researchers would like to thank The BKKBN of Bali Province, Indonesia and the Center for Public Health Innovation for permitting us to conduct this research. The researchers would also like to thank all parties who have contributed to the accomplishment of this article.

REFERENCES

1. Sohail R. Investing in Family Planning in Pakistan – Road to Redemption. *J Soc Obstet Gynaecol Pakistan* [Internet]. 2018;8(4):201–204. Available from: <http://jsogp.net/index.php/jsogp/article/view/189>
2. Kadarisman M. Family Planning Program in the National Population and Family Planning Board. *Adv Soc Sci Educ Humanit Res* [Internet]. 2019;343:266–269. Available from: <https://doi.org/10.2991/icas-19.2019.54>
3. The National Team for The Acceleration of Poverty Reduction. 2010 Population Census Thematic Information [Internet]. 2010. Available from: <http://www.tnp2k.go.id/articles/informasi-tematik-sensus-penduduk-2010>
4. Central Bureau of Statistics. Indonesian Population by Province, Regency/City and District Population Census 2010 [Internet]. Central Bureau of Statistics. 2010. Available from: <https://www.bps.go.id/publication/2010/10/04/>
5. National Population and Family Planning Board. Indonesia Health Demographic Survey of Bali Province in 2017. 2018.
6. Salvatore D. *International Economics: Trade and Finance*, 11th Edition International Student Version [Internet]. Eleventh E. Wiley. United States of America: Wiley; 2013. 808 p. Available from: <https://www.wiley.com/>
7. Cheema ahmed raza, Firdous S, Touqueer A, Imran M. Family Planning and Fertility Reduction in Pakistan. *xllkogretim Online - Elem Educ Online* [Internet]. 2021;20(5):3617–3627.

- Available from:
<https://www.researchgate.net/>
8. Handayani A, Najib N. Keinginan Memiliki Anak Berdasarkan Teori Pilihan Rasional (Analisis Data SDKI Tahun 2017). *EMPATI-Jurnal Bimbingan dan Konseling* [Internet]. 2019;6(2):31–40. Available from:
<https://doi.org/10.26877/empati.v6i2.4277>
 9. National Population and Family Planning Board. Indonesia Demographic and Health Survey [Internet]. Jakarta; 2017. Available from:
<https://www.bps.go.id/statictable/2020/10/21/2111/laporan-survei-demografi-dan-kesehatan-indonesia.html>
 10. Singh, S., Sedgh, G., and Hussain R. Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes. *Stud Fam Plann* [Internet]. 2010;41(4):241–250. Available from:
<https://doi.org/10.1111/j.1728-4465.2010.00250.x>
 11. Adioetomo, S.M., and Samosir OB. *Dasar-Dasar Demografi*. Adioetomo, Sri Moertiningsih OBS, editor. Jakarta: Salemba Empat; 2010.
 12. Dini LI, Riono P, Sulistiyowati N. Pengaruh Status Kehamilan Tidak Diinginkan terhadap Perilaku Ibu Selama Kehamilan dan Setelah Kelahiran di Indonesia: Analisa Data SDKI 2012. *J Kesehat Reproduksi* [Internet]. 2016;7(2):119–133. Available from:
<http://dx.doi.org/10.22435/kespro.v7i2.5226.119-133>
 13. Wei J, Xue J, Wang D. Socioeconomic Determinants of Rural Women’s Desired Fertility: A Survey in Rural Shaanxi, China. *PLoS One* [Internet]. 2018;13(9):1–18. Available from:
<https://doi.org/10.1371/journal.pone.0202968>
 14. Nurul Aidayasari. Faktor-Faktor yang Mempengaruhi Unmeet Need pada Pasangan Usia Subur (PUS) di Kelurahan Prawirodirjan Yogyakarta [Internet]. Universitas Aisyiyah Yogyakarta; 2017. Available from:
<http://digilib.unisayogya.ac.id/2807/>
 15. Indraswari RR, Yuhan RJ. Faktor-Faktor yang Memengaruhi Penundaan Kelahiran Anak Pertama di Wilayah Perdesaan Indonesia: Analisis Data SDKI 2012. *J Kependud Indones* [Internet]. 2017;12(1):1–12. Available from:
<https://doi.org/10.14203/jki.v12i1.274>
 16. Akeju K, Owoeye T, Ayeni R, Jegede L. Variations in Desired Fertility Preferences among Young and Older Women in Nigeria: Evidence from Demographic Health Survey 2018. *Open Public Health J* [Internet]. 2021;14(1):84–93. Available from:
<https://dx.doi.org/10.2174/1874944502114010084>
 17. Ariho P, Nzabona A. Determinants of Change in Fertility among Women in Rural Areas of Uganda. *J Pregnancy* [Internet]. 2019;2019:1–13. Available from:
<https://doi.org/10.1155/2019/6429171>