



What are the Obstacles in Achieving Ideal Family Size in Reproductive Age Couples?

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ABSTRACT

The world situation with full of demands and limitations during the current pandemic can bring negative impacts on family. Family face burdens of daily needs for family life's. Regarding to this condition, the ideal family size which is couple who has no more than two children, is an entity that needs to be considered to ensure the survivability of family. This study aimed to determine factors that related and predict the ideal family size for reproductive age couples in East Java. This study was quantitative study with cross-sectional approach. Data used in this study was secondary data from the Family Data Collection in 2021. Sampling technique was saturation sampling on reproductive age couples in 38 cities and regencies of East Java. Dependent variable was ideal family size. Independent variable was ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, exposure to social media information, exposure to printed media information, and exposure to mass media information. Data analysis used multiple linear regression test. The study result stated variables that were related and had contribution in predicting ideal family size in reproductive age couples were ideal marriage age ($p=0.001$), participation in modern contraception ($p=0.001$), preference for ideal number of children ($p=0.001$), exposure to electronic media information ($p=0.018$), and exposure to mass media information ($p=0.009$). Based on these results, it is hoped that several intervention programs can be arranged by related institutions, targeted in the field that are in accordance with the study results.

INTRODUCTION

The current world situation is full of demands and limitations. Pandemic due to corona virus disease has become one of the triggering factors for various changes and upheavals.^{1,2} During the pandemic, there were restrictions in several sectors of life such as economic, educational, social, and environmental sectors. These conditions bring negative impact on society and family in particular.³

Various restrictions and changes in current daily life conditions lead family to face the needs and burdens of daily family life.^{4,5} In economic sector, there have been various changes and adjustments such as reduction in workforce, increase in basic necessities costs, increase in service providers expense, and reduction in workers' income.⁶ This situation brings impact on family's economic condition related to its ability to meet various needs of daily life and increase the burden of family expenses.⁷

Data on a global scale shows that it had negative cost of the global economy around 2 trillion dollars in 2021.⁸ 1 out of 5 workers around the world lost their job during the pandemic.^{9,10} Healthcare costs also increased globally. During the pandemic, there were almost 1 billion people who spent more than 10 percent of their household budgets on health.^{11,12} In Indonesia, the amount of workers affected by the COVID-19 pandemic in 2020 were 35 million people. Economic growth in Indonesia reached 0.5%. Poverty rate in March 2020 rose to 9.78% compared to March 2019 (9.41%). There were 70.53 percent of the population in Indonesia claimed to experience the decrease in income during the pandemic. There was an increase in the number of poor people from 3.02 million to 5.71 million people in Indonesia during the Pandemic.¹³⁻¹⁵ In East Java Province, there was an increase of 363.1 thousand poor people in the year before the pandemic so that the number of poor people in East Java during the pandemic reached 4,419.10 thousand people (11.09 percent). There were also 5,348 workers from 210 companies that were laid off and 32,365 workers from 555 employee companies were laid off during the pandemic.¹⁶ In health sector, there have been adjustments to the pandemic situation, such as limited health services, difficulty in accessing health facilities, and increase in health costs that

need to be paid by families as users of health services due to the massive spread of COVID-19 virus in the society.¹⁷

In this current condition, the ideal family size which is couple with no more than two children is entity that needs to be considered to ensure the survivability of family.^{18,19} In order to be able to adapt with the situation due to the current pandemic and to meet various needs of family life, a nuclear family size which consisted of the ideal number of children is needed. Family that has too many children (big size family) tends to have greater burden of living needs in various aspects of life that need to be met during pandemic, compared to family that has ideal family size that consist of one or two children.²⁰ In 2021, Indonesia had more than 10 million families with non-ideal family size in which they have more than two children in their family. Those families belong to various provinces in Indonesia including East Java. In East Java Province of Indonesia, there were more than 1 million families that had non-ideal family size in which they had more than two children in their family.²¹ Those families with more than two children tend to experience great challenges in meeting families' educational, health and economic needs.^{21,22}

Family tends to have ideal number of children and form ideal family size when they are exposed to several conditions. Couples who marry at the ideal age tend to have careful consideration in physical and psychological aspects in determining their family size.²³ Couples who use modern family planning contraception also tend to have ideal number of children by using modern contraception that have fairly high effectiveness.²⁴ The Amount of children and family size can also be determined by couples' preference about the number of children they want to have in their family.²⁵ Family exposure to information from various media also tends to be related to the family size formed by each family.²⁶ Family who is exposed to information about reproductive health, child growth and development, the impact and benefits of contraception, family planning, and other various informations related to family development tend to have ideal number of children.^{27,28}

Based on several previous explanations, the ideal family size is an important thing to be

studied further in order to help family in maintaining its life during difficult situation due to the recent pandemic. This study aimed to find out what factors are related and predict the ideal family size for couples in East Java.

MATERIAL AND METHOD

This study was quantitative study with cross-sectional design and conducted in May 2022. Data used in this study was secondary data gathered from the Family Data Survey of East Java Province in 2021 who involved 6,309,132 married couples of reproductive age across 38 cities and regencies in East Java. Data were selected through saturated sampling in which the number of samples taken in the study were equal to the number of total population. Data were analyzed by using multiple linear regression test and partial correlation test. Univariate data was presented to determine the frequency distribution, bivariate data was presented to determine the correlation between variables, and multivariate data was presented to determine the prediction of dependent variable based on independent variables in this study.

The secondary data was obtained from National Population and Family Planning Board. The original survey which was the Family Data Survey in 2021, had obtained ethical clearance from the National Population and Family Planning Board Ethical Review Committee. Since this study was a secondary analysis and the individual consideration such as name and address were not included, so the institutional review board approval was not required.

RESULTS

Table 1 showed that most of respondents were contraception user (64.01%). Most of the respondents were couples with children above 5 years old (70.44%). There were 87.97% respondents with prosperous economic status and had proper living condition (52.42%). Based on the education, respondents who had lower education than junior high school level were 33.31%, while the rest of them were respondents with higher education level than junior high school.

From Table 2, it was known that there were two variables that had not significant correlation with ideal family size. Exposure to social media

information ($p=0.958$) and exposure to printed media information ($p=0.273$) had significant levels more than 0.05 ($p>0.05$), it mean that exposure to social media information and exposure to printed media information did not have correlation with ideal family size after the other variables were controlled or made by constant. Ideal age of marriage ($p=0.001$), participation in modern contraception ($p=0.001$), preferences for the ideal number of children ($p=0.001$), exposure to electronic media information ($p=0.018$), and exposure to mass media information ($p=0.009$) less had significance level than significance value 0.05. It meant that all these variables had significant correlation with ideal family size.

Table 3 showed the results simultaneously that there was significant correlation between ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, exposure to social media information, exposure to printed media information, and exposure to mass media information with ideal family size ($p=0.001$). There was strong correlation between ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, exposure to social media information, exposure to printed media information, and exposure to mass media information with ideal family size by 99%. While the contribution of ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, exposure to social media information, exposure to printed media information, and exposure to mass media information simultaneously to ideal family size was 99%, and 1% was influenced by variables that was not examined in this study.

From the results of data analysis, predictions of ideal family size could be made based on the ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, and exposure to mass media information. Prediction through regression equation was $Y = 199,157 + 0.184 (X1 \text{ ideal age of marriage}) + 0.386 (X2 \text{ participation in modern contraception}) + 0.173 (X3 \text{ preferences for the ideal number of children}) - 0.076 (X4 \text{ exposure$

to electronic media information) + 0.096 (X5 exposure to mass media information). This meant that if variables of ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, and exposure to mass media information were considered constant, the state of ideal family size would be 199,157.

Table 1. Characteristics of Respondents

Characteristics	n = 6,309,132	%
Contraception Use		
User	4,025,165	64.01
Not User	2,283,963	36.03
Age of Couple's Children		
Under 5 Years Old	1,868,117	29.62
Above 5 Years Old	4,441,015	70.44
Economic Status		
Pre-Prosperous	759,058	12.03
Prosperous	5,550,074	87.97
Living Place Status		
Proper	3,307,390	52.42
Not Proper	3,001,742	47.58
Education		
Junior High School	2,101,712	33.31
Senior High School	4,207,420	66.69

Source: Secondary Data, 2021

DISCUSSION

From the results of study, it was found that ideal family size was related and can be predicted with ideal age of marriage, participation in modern contraception, prefer-

ences for the ideal number of children, exposure to electronic media information, and exposure to mass media information simultaneously. All these variables had significant correlation with the ideal family size so that it can be used to predict it. Taken together, the ideal age of marriage, participation in modern contraception, preferences for the ideal number of children, exposure to electronic media information, and exposure to mass media information serve as factors that facilitate the existence of ideal family size in couples of childbearing ages.

Couples who marry at the ideal age, use modern contraception, have ideal child preferences, obtain information from electronic media and mass media, and tend to have ideal number of children. The results of this study were in accordance with study conducted by Arsyad and Nurhayati's which stated that age at first marriage, exposure to information media, and preferences to have ideal number of children are related to the number of children owned by couples.²⁹

In addition, other studies also stated similar results with the above results. This study stated that age at first marriage, education and information exposure, preferences to have ideal number of children, and use of contraception have significant correlation with couples' ideal number of children.^{30,31}

Table 2. Bivariate Analysis Results

Variables	Control Variables	Sig.	R
Ideal Marriage Age (IMA) * Ideal Family Size	PMC, PIN, EMI, MMI, SMI, PMI	0.001	0.698
Participation in Modern Contraception (PMC) * Ideal Family Size	IMA, PIN, EMI, MMI, SMI, PMI	0.001	0.914
Preference for Ideal Number of Children (PIN) * Ideal Family Size	IMA, PMC, EMI, MMI, SMI, PMI	0.001	0.596
Exposure to Electronic Media Information (EMI) * Ideal Family Size	IMA, PMC, PIN, MMI, SMI, PMI	0.018	-0.415
Exposure to Mass Media Information (MMI) * Ideal Family Size	IMA, PMC, PIN, EMI, SMI, PMI	0.009	0.454
Exposure to Social Media Information (SMI) * Ideal Family Size	IMA, PMC, PIN, EMI, MMI, PMI	0.958	0.010
Exposure to Printed-material Information (PMI) * Ideal Family Size	IMA, PMC, PIN, EMI, MMI, SMI	0.273	-0.200

Source: Secondary Data, 2021

Table 3. Multivariate Analysis Results

Variables	p-value	B	Sig.	R	R ²
Ideal Marriage Age	0.001	0.184			
Participation in Modern Contraception	0.001	0.386			
Preference for Ideal Number of Children	0.001	0.173			
Exposure to Electronic Media Information	0.018	-0.076	0.001	0.999	0.997
Exposure to Mass Media Information	0.009	0.096			
Exposure to Social Media Information	0.958	0.003			
Exposure to Printed-Material Information	0.273	-0.062			
B Constant : 199.157					

Source: Secondary Data, 2021

Based on the results of this study, it was known that the ideal age of marriage had significant correlation with the ideal family size. Ideal age of marriage is also known as predictor of ideal family size. Couples who marry at the ideal age tend to have ideal number of children than couples who marry in too young or too old ages. In couples who marry in too young ages, the period of women pregnancy and childbirth are more and longer because they have longer period of fertility.

The results in this study were in accordance with the study conducted by Susanti, et al. the study stated that the age of marriage affects fertility and the rate of population growth which is the number of children owned by women of childbearing age aged 15-49 years old.³²

Based on the the results of study, it was known that participation in modern contraception had significant correlation with the ideal family size. Participation in modern contraception is also known as predictor of ideal family size. Couples who use modern contraception tend to have ideal number of children than couples who do not use contraception. Modern contraceptives used by couples help couples plan and have the ideal number of children, due to the high effectiveness of modern contraception.

The results in this study were in accordance with the study conducted by Mursyida et al. the study stated that contraception use affects couples' ideal number of children, along with the wife's age, education, occupation. The study stated that the use of contraception helps couples manage the number of children in an ideal manner.³³

Based on the results of study, it was known that preferences for the ideal number of children had significant correlation with the ideal family

size. Preferences for the ideal number of children are also known as predictors of ideal family size. Couples who prefer the ideal number of children tend to have the ideal number of children than couples who prefer many children. Couples who prefer the ideal number of children tend to be able to carry out their own plan and strategies in having children according to the ideal number that they want in family.

The results in this study were in accordance with previous study. The study stated that the number of children owned by women of childbearing age was influenced by fertility preferences, namely the preference for the number of children that they want to have in their family.³⁴

Based on the results of study, it was known that exposure to electronic media information and exposure to mass media information had significant correlation with the ideal family size. Exposure to electronic media information and exposure to mass media information are also known as predictors of ideal family size. Couples who are exposed to information that is presented through electronic media tend to have ideal number of children than couples who do not receive information or education. With information and education regarding the ideal growth and development of children, family development, maternal reproductive health, family planning programs, and other various informations related to children and family, it can support and facilitate couples in considering the ideal number of children and forming an ideal family size.

Results of this study were in accordance with the study conducted by Sitorus et al. The study stated that the number of children owned by women of childbearing age was influenced by exposure to information about family planning

programs obtained from reading newspapers, listening to the radio, and watching television.^{27,28}

The limitation of this study was about the lack of further exploration and deeper research topics with different and more holistic methods and approaches. It is hoped that research can be carried out with different methods and approaches such as a qualitative approach or by using primary data that gathered directly from the research subjects in the future.

CONCLUSION AND RECOMMENDATION

This study concluded that there were some variables that related and had contribution in predicting ideal family size in reproductive age couples such as ideal marriage age, participation in modern contraception, preference for ideal number of children, exposure to electronic media information, and exposure to mass media information. Based on this study, practical recommendation that can be proposed to the related institutions is to arrange several intervention programs targeted in the field that are in accordance with these study results.

Institution may consider to arrange programs that specifically address the issue of ideal family size by including variables related to ideal family size as explained in this study. Interventions related to ideal marriage age, participation in modern contraception, preference for ideal number of children that can be proposed are to intensify family preparation and planning programs through education, socialization, and intensive assistance directly by field workers or indirectly based on digital platforms. The intervention can be started from the initial phase by targeting teenagers and prospective brides, couples of childbearing ages, and pregnant women. Interventions related to exposure to electronic media information, and exposure to mass media information that can be proposed put target on institution's digital content in which the digital content can be made and contain massive education and socialization about family planning, delivered in creative and variative ways in terms of display, means of delivery, and the content itself.

AUTHOR CONTRIBUTIONS

DJPKH and NS conceived and designed the study; DJPKH conducted study conceptual-

ization and theory; NS analyzed the data; DJPKH wrote the paper. DJPKH = Dian Jayantari Putri K. Hedo; NS = Nicholas Simarmata.

CONFLICTS OF INTEREST

The authors declared no conflict of interest.

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