

Increasing Modern Contraceptive Use among Early Marriage Partners: An Experimental Study in Rural Indonesia

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ABSTRACT

Adolescent fertility is an important issue in terms of health and social because it is related to the level of morbidity and mortality of mothers and children. The results of the 2017 IDHS show that 7% of women aged 15-19 are already mothers, 5% have given birth, and 2% are pregnant with their first child. The data shows that adolescents are already sexually active, but still have an understanding of low reproductive health. This can be anticipated by increasing the participation of adolescents in accessing contraception. The purpose of this study was to determine the effectiveness of community-based health communication models that developed to improve access to information and public knowledge related to contraceptive methods in young married couples in Rembang Regency. This research used Research and Development design with a quasi-experimental data collection method. The population in this study were adolescents who married at a young age in Rembang District, while the study sample was adolescents who married young in Sedan and Kragan villages (intervention group), Menoro and Ngasinan (control group). Quantitative data analysis of this study is univariate, bivariate, and multivariate, while for qualitative data use grounded theory. The effectiveness test showed significant data for knowledge ($p = 0.000$), attitudes ($p = 0.003$), access to information (0.012), preferences ($p = 0.001$), and access to contraception ($p = 0.000$). It can be concluded that the community-based health communication model can improve knowledge, attitudes, access to information, preferences, and access related to contraception in young married couples.

Keywords: Early Marriage, Contraceptive Use, Communication, Community Based

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INTRODUCTION

The shape of the population pyramid owned by Indonesia is similar to the population pyramid in most developing countries, which reflects the transitional age structure. Countries with this population structure reflect the decline in fertility rates in the region. Factors that can cause changes in the condition of the population structure in an area are the population growth rate (LPP) along with the components that influence it, namely fertility, mortality, and migration. Decreased fertility and infant mortality rates will have an impact on changes in age structure, such as the population of children under five (0-4 years) and the age of children (5-9 years) which are increasingly shrinking in number, while adolescents (10-19 years) and population ages adults (20-29 years) will tend to increase¹.

Indonesia experienced a demographic bonus in 2020-2035 as a result of the demographic transition process that developed for the success of the family planning program that was able to reduce fertility and improve the quality of health and the success of other development programs. Understanding the meaning of demographic bonuses, it is people who are young or younger generation who are players in this demographic bonus. In their hands the direction and progress of Indonesia will be determined, whether it really becomes a "threat" or "opportunity". That is, this becomes a threat when this young generation is not prepared seriously, correctly, in a planned manner, and its implementation is guarded carefully and responsibly².

The results of the IDHS showed that the trend of adolescent fertility in Indonesia was declined. In 1997, around 12.2% of adolescents had raised a family, 9.4% had given birth to a child and 2.7% were pregnant with their first child. The 2002/2003 IDHS showed a decrease to 10.4% of adolescents who had given birth or were pregnant with their first child. In 2007, 6.6% of

adolescents had given birth and 1.9% of adolescents were pregnant with their first child. Meanwhile, the 2012 IDHS results showed an increase in adolescent fertility, the percentage of female adolescents aged 15-19 who had given birth and became pregnant with their first child was 10%³.

Various local and international studies had shown that socio-demographic characteristics of adolescents had a relationship with adolescent fertility. One of the main factors is early marriage. As many as 7.4% of women in Indonesia marry at the age of 15-19 years and 49.9% of women get married at the age of 20-24 years. The first age of women having sex at the age of 15 years was 3.2%, age 18 years was 22.60%, age 20 years was 39.90%, and age 22 years was 48%. Women who live in rural areas tend to have marriages and first sexual relations at a younger age than women in urban areas. The median age of marriage and first sex increases with increasing knowledge and economy³.

The high rate of early marriage raises various health problems. Pregnant women under the age of 18 have a 35% to 55% higher risk of having a baby with a low birth weight baby (LBW) compared to mothers over the age of 19 years. The infant mortality rate is 60% higher in mothers who are under 18 years of age. Children of young mothers have a 28% greater risk of death under 5 years. This illness and death are caused by poor maternal nutrition, physical and psychological immature mothers, lack of community access and access to reproductive health services and a high risk of infectious diseases⁴.

In Indonesia the percentage of women in the age group of 15-19 years who did not use contraception reached 51.9%. In addition, men's participation in the use of contraceptives is still very minimal. Based on preliminary reports of the 2012 IDHS, in Indonesia only 2% of married couples use contraceptives for men. In addition, in

Rembang District the percentage of active contraceptive use is 80.2% while couples of childbearing age who do contraceptive use only 38.3%⁵.

The rate of early marriage in Central Java is 19.92%. In 2016 there were at least 30,128 submissions for dispensations for early marriage under 16 years with various factors underlying them. According to SRPJM data (2017), as many as 22.1% of teenagers in Central Java do not know the impact of early marriage. Rembang is a rural area in Central Java with a high rate of early marriage and teenage pregnancy⁵.

The problem in this study is how to increase the use of modern contraception in young married couples. Based on these problems, researchers sought to develop a community-based health communication intervention program using the principle of community empowerment.

The principles of community empowerment include: 1). Developing community potential, 2) Community contribution in health development, 3) Developing mutual cooperation, 4) Working together with the community, 5) Community-based Information and Education Communication, 6) Partnerships, and 7) Decentralization.

MATERIALS AND METHODS

Research and development according to Gay (1990) is a business or activity to develop an effective product, and not to test the theory. This study examines developing a model of community-based health communication interventions related to contraceptive methods in young married couples. The design of this study can be seen in the following figure:

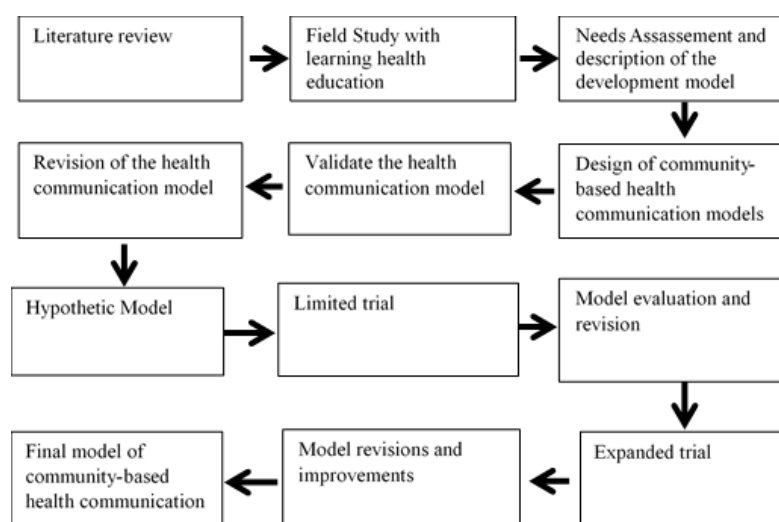


Figure 1. Design of RnD study

For retrieval of research data using quasi-experimental with control design. Baseline activities will be carried out in 4 villages, but only 2 villages will receive intervention. Then endline activities will also be carried out again in 4 villages. The study will also make it possible to observe the long-term effects of interventions after two months without any intervention that has passed in 4 villages.

Qualitative data collection is carried out by means of Focus Group Discussion (FGD) which will involve participants as follows: Young married couples (4 boys and 4 girls), Family Planning reach staff (2 people), Representatives of religious leaders (2 people), BKKBN Representative (2 people), Health center representatives (2 people), and Representative of Health Service (2 people).

Quantitative surveys will be conducted on young married couples in the intervention and control villages: Krangan Village (30 people), Sedan Village (30 people), Rembang Village (30 people), and Sarang Village (30 people).

The baseline activity will consist of quantitative and qualitative methods. For the questionnaire, participants will be given a copy of the questionnaire and asked to complete it at the agreed time. Four participants will be selected by the research team for the FGD. Participants will be randomly selected from the attendance list. The discussion will be led by a research team. This FGD will be

guided by a series of pre-determined questions that cover issues regarding reproductive health and contraception. Endline activities use questionnaires and FGD guidelines that are the same as the baseline stage. Endline will be done after the intervention to see how the intervention model works in the community. The results will be analyzed compared to the control villages.

The collected data will be analyzed using descriptive statistics, inferential statistics, and qualitative descriptive approaches. The results of the FGD and in-depth interviews were qualitative data. Therefore, the data will be analyzed using a qualitative descriptive approach. The majority of data from questionnaires will be entered into excel spreadsheets and analyzed through descriptive statistics and inferential statistics.

RESULT AND DISCUSSION

From the figure 2 it is known that the causes of these problems are due to adolescent factors, parental factors, community cultural factors, and economic factors. The low level of knowledge of adolescents, parents, and the community is thought to be a major factor in the high reproductive health problems in adolescents including the low use of contraception in couples of childbearing age. In addition, there is also a culture that considers contraceptive use to conflict with religious values.

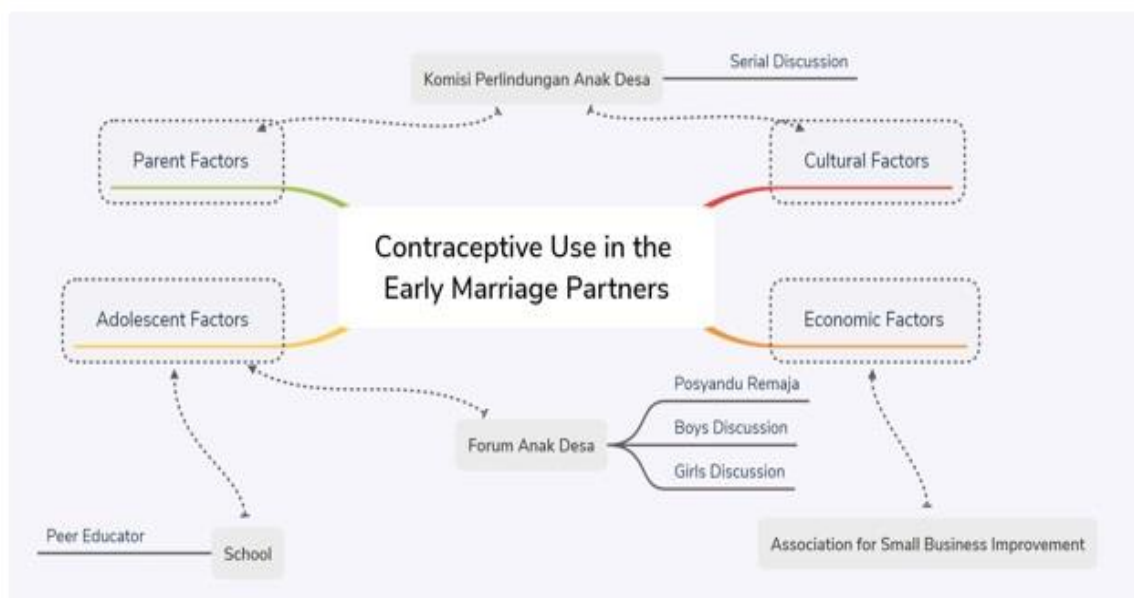


Figure 2. Qualitative Analysis of Contraceptive Use in the Early Marriage Partners

From the results of the study found the potential of social capital to overcome these problems. Social capital is a resource that is owned by the community in the form of norms or values that facilitate and build cooperation through a harmonious and conducive network of interaction and communication. Thus the health communication model that is suitable is developed using a social bounding approach. Social bounding is, the type of social approach with the characteristics of a strong bond (the existence of social glue) in a social system. Social bounding is generally in the form of values, culture, perceptions, and traditions or customs.

There are three elements, components, resources and important elements in the development of a community-based communication model, namely trust, values and norms and networks. Trust is the hope that grows in a society that is shown by the existence of honest, orderly, and cooperative behavior based on shared norms. Values and norms are the basic things found in the process of social interaction. Values and norms refer to how individuals should act in society. Norms are formed through tradition, history, charismatic figures who build a procedure for the behavior of a person or a group of people, in which rules will arise which can govern personal interests and group interests. The network is formed because it comes from the same region, similar political or religious beliefs, genealogical relationships, and others. The formation of community networks for model development needs to be organized in a container with special treatment.

The models developed in this study are health communication through the Forum Anak Desa (Village Children Forum), Komisi Perlindungan Anak Desa (Village Children Protection Commission), Peer Educators in Schools, and Association for Small Business Improvement. Activities in Forum Anak Desa are in the form of Posyandu Remaja, Reproductive Health Discussion for Boys, and for Girls. Activities in the Komisi Perlindungan Anak Rembang are in the form of a series of discussions about the pattern of adolescent care, adolescent problems, serve complaints and services if there are problems experienced by adolescent. Peer educator activities in the school include the selection of peer educators, counseling, education, and

group discussions. For economic problems carried out with business development utilizing existing local potential.

For the analysis of quantitative results using the Wilcoxon test. From the statistical test results obtained data knowledge (pvalue = 0,000), attitudes (pvalue = 0.003), access to information (0.12), preferences (0.001), and access to contraception (0,000).

Knowledge

The test statistics section shows the Wilcoxon test results, based on the Wilcoxon test it is known that the significance value is 0,000 ($p < 0.05$) which means there is an increase in the knowledge score obtained by respondents before and after the intervention is given. This shows that the effective community-based communication model is used to increase respondents' knowledge.

Good respondent's knowledge about contraception will influence them in choosing the method / contraception that will be used including freedom or freedom of choice, compatibility, whether or not effective choice, comfort and safety, also in choosing a more appropriate place of service because of better insight, so that awareness they are high to continue to take advantage of service.

This is in line with previous research which shows that there is a relationship between knowledge and the use of an IUD (p value = 0.036). According to him, knowledge occurs after people sensing a certain object. Sensing occurs through the five human senses, namely the sense of sight, hearing, smell, taste and touch. Most of the knowledge is obtained through the eyes and ears. Knowledge or cognitive is a very important domain in shaping action⁶. In line with previous research, based on the results of the chi square statistical test showed that there was no significant relationship between maternal knowledge about contraceptive methods with the selection of hormonal and non-hormonal contraception in Majalaya Health Center in Bandung Regency with a p -value of $0.423 > 0.05$ ⁷. In contrast to other studies which state that knowledge is not related to the use of contraceptive contraception (p = 0.448). The results of his research said that fertile age couples who have sufficient knowledge will choose long-term method of contraception because family planning participants more often get information from various

sources such as social media, electronics, magazines and so on and more use of contraceptive services and couples of fertile age who the level of knowledge is mostly lacking using contraceptives and utilizing 25 (62.5%), this is due to the lack of knowledge about contraception is limited and only on contraceptives used in couples of childbearing age. While couples of childbearing age who have sufficient knowledge and do not utilize contraceptive services can be caused by other factors where the husband does not support using these contraceptives⁸.

Attitude towards Behaviour

Based on Wilcoxon test known significance value of 0.003 ($p < 0.05$) which means that there are differences in attitudes obtained by respondents before and after the intervention was given. At the initial pretest the respondents' attitudes toward negative contraception, after community-based communication interventions occurred, the assertion became open and positive. Respondents' attitudes are influenced by knowledge, education, economy, social status, family, religion, and values. Knowledge of contraception is actually intended to make teenage respondents more permissive to premarital sexual relations because teenagers now have good knowledge and attitude towards contraception. Respondents' attitudes like or dislike the use of contraceptives. This attitude is often obtained from one's own experience or from imitating others who are closest. Other studies from the results of Bivariate Analysis that have been done using chi square test obtained p-value of 0.002, it can be concluded that the p-value $< \alpha$ so that H_a is accepted which means there is a relationship between adolescent attitudes with the use of contraception in street children in Pamulang Permai. In this study adolescent attitudes often refer to peer experiences which are not necessarily true and healthy experiences. Because the influence of peers is greater in bad practice, they will also follow it and eventually their reproductive health practices are bad⁹. In line with previous studies with a p value of 0.034 which means there is a relationship between the attitudes of respondents with the behavior of using contraceptives. Inadequate behavior in the use of contraceptives is found in the group of mothers' attitudes toward family planning that do not support by 57.1%, compared to the group's attitude of mothers towards family planning that supports by 31.3%¹⁰.

Information Access

Based on Wilcoxon test known significance value of 0.012 ($p < 0.05$) which means there is an increase in access to information obtained by respondents before and after the intervention was given.

The number of sources of information about contraception is quite varied with the minimum number being two and the maximum is six sources of information. The number of sources of information obtained by women of childbearing age is significantly positive correlation with knowledge. This means that the more amount of information, the better the knowledge about contraception.

Previous research shows there is a relationship between family planning staff support in the form of providing information with the choice of non hormonal MKJP contraception (p value = 0.049). The results showed that the support of health workers in the form of providing information related to the use of Non-Hormonal MKJP. Health workers play a role in providing information, counseling and explaining about the main contraceptive tools regarding Non-Hormonal MKJP¹¹. In line with previous research showing the relationship between providing information and using contraceptive services (p

= 0.036). According to him, information obtained from health workers, social media, electronic media, books, advertisements or newspapers and as a source of information obtained. KB staff play a role in providing information, counseling and explanation of contraceptives for acceptors who are still hesitant in using contraceptives and decide to use these contraceptives on the advice of family planning officers⁸. In contrast to other studies which show that there is no relationship between access to information with the intention of using contraceptives. The results of this study indicate that the largest percentages (96.7% and 93.3%) that are sources of contraceptive information are friends / neighbors and family. More than two-fifths of respondents (45.0%) trust the information provided by midwives or doctors who are considered as someone based on their work, education and experience. In addition, almost all respondents (95.0%) received information about the risk of contraception by their information sources. Almost all respondents (98.3% and 96.7%) knew of injection contraceptives and pills¹².

Preference

Based on Wilcoxon test known significance value of 0.001 ($p < 0.05$) which means H_0 is rejected and H_a is accepted, thus it can be concluded that there are differences in preferences obtained by respondents before and after given the intervention.

Respondents who are trying their contraception for the first time will consider the method of installation and its side effects. Respondents will choose a contraceptive method that is easy and not frightening. While in terms of side effects it is also important to consider by respondents. Respondents were worried about the side effects that would be experienced if using certain contraceptives. Safe contraception does not mean that the respondent is using it immediately, but it must also be seen in terms of cost. Although long-term contraception, such as an IUD, is considered the safest, the price of a one-time installation is considered expensive by some respondents. This indicates that contraception is a new requirement that must be met to control fertility.

The low prevalence of contraception reflects the desire to get pregnant or the inability to access family planning services, so that contraceptive needs are not met (unmet need)^{13, 14}.

Contraceptive Use

Based on the Wilcoxon test it is known that the significance value is 0,000 ($p < 0.05$) which means that H_0 is rejected and H_a is accepted, thus it can be concluded that there are differences in Accessing Contraception obtained by respondents before and after intervention is given.

The availability of health services is about the completeness of contraceptives, rooms, and transportation to the place of health facilities (infrastructure) that are used to perform health services, making it easier or convincing for patients to seek treatment or consultation. If the facilities and infrastructure are comfortable and the tools are complete, sterile and varied, there will also be a lot of community interest in using contraceptives.

In line with previous research which shows there is a relationship between the factors of access to services with the use of the IUD (p value 0.0005). Accessibility factors for services that are difficult in the case group of 5,268 times for not using an IUD compared to KB GRT acceptors who are easy to access IUD services¹⁵. In contrast to other studies that show that accessibility constraints do not affect the choice of contraceptive methods (p value =

0.438). Distance to family planning services is one of the factors that can influence the use of contraceptives. Simple regression statistical test results found that there is no effect of accessibility constraints with the selection of contraceptive methods, with a p value = 0.438. Barriers to accessibility have no effect in the choice of contraceptive methods because the proximity to health facilities will make it easier for family planning acceptors to reach and access the services provided¹⁶. The closer the KB services (there are no accessibility barriers), it will make it easier for family planning acceptors to access family planning services¹⁷.

CONCLUSION

The model developed in this study is community-based health communication. The communication model is through the formation of the Village Children Forum (FAD). Village children's forum activities include the Posyandu Remaja, reproductive health reproductive education for boys and girls. This model also approaches adults by forming a Village Children Protection Commission (KPAD). One of KPAD's activities is reproductive reproductive health program for adult groups of men and women. Test the effectiveness of the model showed significant results. Effective models to increase knowledge ($p = 0,000$), attitudes ($p = 0.003$), access to information (0.012), preferences ($p = 0.001$), and access to contraception ($p = 0,000$).

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