

Role of Adolescents' Reproductive Health Information and Counselling Program towards Knowledge and Attitude in Pregnancy Planning among Adolescent Female in Malang City

Dini Eka Pripuspitasari¹, Sri Andarini², I Wayan Agung Indrawan³

¹ Midwifery Master Program Fakultas Kedokteran Universitas Brawijaya

^{2,3}Fakultas Kedokteran Universitas Brawijaya

Jalan Veteran, Ketawanggede, Kecamatan Lowokwaru, Kota Malang, Jawa Timur 65145

Email¹: bidandinieka@gmail.com

Abstract

Each adolescent will experience changes related to reproductive health problems. The growth and sexual maturity drive happens earlier in women rather than in men. KPAI survey data in 2017 states that 97% of adolescents in Indonesia have watched pornographic films and 93.7% have ever done kissing, petting, and oral sex. Malang City Health Office noted in 2014, 139 teenagers aged less than 18 years have been pregnant and increased to 176 cases in 2015. This condition implies that adolescent in Malang city has a big risk of experiencing morbidity and mortality related to the condition of maternal pathology. Following this kind of problem, BKKBN established the Reproductive Health Information and Counselling Program (PIK-KRR) as a platform for young people to prepare for a family life. Through that program, each adolescent female will receive support to understand the substance of pregnancy planning, which includes the physical, psycho-social, and social economy aspects. The main objective is that each adolescent female will postpone the age of marriage and pregnancy before they are able to fulfill those essential aspects. The aim of this research is to understand the role of the Reproductive Health Information and Counselling Program in its relation—to the knowledge and the attitude of adolescent females towards pregnancy planning in Malang city. This research applies the comparative observational design by using a proportional sampling technique for 350 students of selected high schools who provide such program and 350 students of selected high schools who do not provide such program. The instrument used for data collection is the questionnaire that has gone through validity and reliability tests. The research data are then analyzed and interpreted by SPSS window release computer program version 23. The results of the knowledge scoring with the category of lack of knowledge in the high school without PIK-KRR group showed the biggest difference compared to that of in the high school group with PIK-KRR. This proves that PIK-KRR contributes meaningfully to the knowledge of high school students. Likewise in the high school groups that have the PIK-KRR, the category of female students with a positive attitude is greater than that of high schools that do not have PIK-KRR. This proves that the presence of PIK-KRR has a significant influence on attitudes in pregnancy planning in adolescents in Malang City. This study shows that there is a significant difference in knowledge and attitude ($p=0,00 < \alpha=0,05$) between the two categories. This result explains that the Reproductive Health Information and Counselling Program have significant roles in forming the knowledge and the attitude of adolescent female regarding the pregnancy planning.

Keywords: PIK-KRR, adolescent, planning, pregnancy

Abstrak

Setiap remaja akan mengalami perubahan yang berhubungan dengan masalah kesehatan reproduksi. Dorongan pertumbuhan dan kematangan seksual terjadi lebih awal pada wanita daripada pria. Data survey yang dilakukan KPAI pada tahun 2017 menyebutkan bahwa 97% remaja di Indonesia pernah menonton film porno, dan 93,7% pernah melakukan ciuman, petting dan oral seks. Dinas Kesehatan kota Malang mencatat pada tahun 2014 terdapat 139 remaja berusia kurang dari 18 tahun telah hamil dan meningkat menjadi 176 kasus pada tahun 2015. Kondisi ini berarti bahwa remaja putri di kota Malang memiliki resiko besar untuk mengalami morbiditas dan mortalitas terkait kondisi patologi maternal. Menindaklanjuti permasalahan semacam ini, BKKBN membentuk Program Informasi dan Konseling Kesehatan Reproduksi Remaja (PIK-KRR) sebagai upaya penyiapan kehidupan berkeluarga bagi remaja. Sehingga diharapkan setiap remaja putri

akan menunda usia pernikahan dan kehamilan usia dini sebelum ia mampu memenuhi substansi perencanaan kehamilan. Penelitian ini bertujuan untuk mengetahui peran keberadaan PIK-KRR terhadap pengetahuan dan sikap tentang perencanaan kehamilan pada remaja putri di kota Malang. Penelitian ini menggunakan desain observasional komparatif dengan menggunakan teknik proporsional sampling pada 350 siswi SMA yang memiliki PIK-KRR dan 350 siswi SMA yang tidak memiliki PIK-KRR. Instrumen untuk mengumpulkan data menggunakan kuesioner yang telah melalui uji validitas dan reliabilitas. Hasil penelitian dianalisis dan diinterpretasikan menggunakan program komputer SPSS window release versi 23. Hasil skor pengetahuan dengan kategori pengetahuan kurang pada kelompok SMA tanpa PIK-KRR menunjukkan selisih terbesar dibanding dengan kelompok SMA yang memiliki PIK-KRR. Hal ini membuktikan bahwa PIK-KRR memberikan kontribusi yang berarti untuk pengetahuan pada siswi SMA. Demikian pula pada kelompok SMA yang memiliki PIK-KRR, kategori siswi dengan sikap positif lebih besar dibandingkan dengan SMA yang tidak memiliki PIK-KRR. Hal ini membuktikan bahwa adanya PIK-KRR memberikan pengaruh yang signifikan terhadap sikap dalam perencanaan kehamilan pada remaja di Kota Malang. Hasil penelitian ini membuktikan bahwa terdapat perbedaan pengetahuan dan sikap yang signifikan ($p=0,00 < \alpha=0,05$) pada kedua kelompok penelitian. Hasil ini menjelaskan bahwa PIK-KRR memiliki peran penting dalam membentuk pengetahuan dan sikap pada remaja putri terkait perencanaan kehamilan.

Kata Kunci: PIK-KRR, remaja, perencanaan, kehamilan

BACKGROUND

The adolescents will experience a condition where they will face reproductive health problems related to the puberty process. The growth and sexual drive occur earlier in women rather than in men. It indicates that women are more reproductively and sexually mature than men.¹ In 2016, the number of adolescents in the world was more than 1 billion, of which 85% of them were in developing countries.² Data from the population census in Indonesia, in 2010, showed that the number of adolescents aged 10-24 years was 64 million (27.6% of the total population in Indonesia). While on the data recorded by the East Java Central Statistics Agency in 2015, the number of adolescents reached 3,476,757 people (15.43% of the total population in Java). In Malang city, the number of adolescents was 227,187 (27.72% of the total population in Malang).³³

Sexual activity places adolescents at various risks of reproductive health problems. In correlation with the early adulthood stage, an adolescent female who is pregnant under the age of 18 has a higher risk of experiencing morbidity related to maternal pathology. Yang *et al.* stated that there was an increased chance of mortality among unplanned pregnancies.⁴

Following this issue, the government

through the BKKBN establishes the Reproductive Health Information and Counselling Program (PIK-KRR)⁵. The existence of the PIK-KRR is important to help adolescents obtain comprehensive information and services related to preparing family life.⁶

The role begins by giving information of pregnancy planning to adolescent female. Adolescent female from an early age must be able to empower herself to determine when she will be ready to be pregnant. Therefore she will also be responsible for her decision to get married and get pregnant later.⁷

With good prior knowledge and understanding regarding pregnancy, an adolescent female will postpone the age of marriage and pregnancy before she is able to fulfill the 3 aspects of pregnancy planning, which are: physical, psychosocial and socio-economic.⁸

Regarding the KRR's contents, so far education on planning pregnancy in adolescents has received less attention since it is still considered taboo to be discussed in public. The level of knowledge related reproductive health, one of which is related to pregnancy, is one of the major factors that can influence adolescent attitudes toward pregnancy itself. Based on this, the PIK-KRR as one of the KRR's education media is expected to increase the access of

adolescents to the education of pregnancy planning. Adolescents must know the ideal conditions for pregnancy, therefore each pregnancy should be planned in order to reduce all risks.⁹

Following this issue, education related to pregnancy planning needs to be emphasized in the PIK-KRR implementation. Hence, the aim of this study is to understand the role of the PIK-KRR and its relations to the knowledge and the attitudes of an adolescent female towards pregnancy planning in Malang city.

MATERIALS AND METHOD

This research is a comparative observational study with a cross-sectional study design. Comparisons were made between groups of high school students, who held and did not hold the PIK-KRR program and they were observed simultaneously. The population in this research was 227.187 adolescent female from various high schools in Malang. The number of samples was calculated using the Krejcie-Morgan table formula, which resulted in 350 female students as the total sample. Proportional sampling technique was applied selecting the 350 female students from selected high schools that held PIK-KRR program and 350 female students from selected high schools, that did not held that program.

There are three inclusion criteria in this study. They are selected high schools that have PIK-KRR *Tahap Tegak*; the participants should be female students of first and second levels of public/private high schools in Malang; the selected participants also should have a certificate or be recorded attending KRR training; besides, the selected participants are willing to take part in this research and agreed to provide complete answers to all questions on the questionnaires.

Research data went to various processes including editing, coding, scoring

and tabulating. Data distribution measurements were carried out first before analyzing the data, using the Kolmogorov Smirnov test, and it was found that the data were not normally distributed. Therefore, the research data were analyzed using the Mann-Whitney test. The data of this study were interpreted utilizing the SPSS windows version 23 computer program.

RESULTS

Respondent characterizations

Table 1. Frequency distribution of respondent's ages

| Age | Total | Percentage (%) |
|-------|-------|----------------|
| 15 | 25 | 3,6 |
| 16 | 337 | 48,1 |
| 17 | 322 | 46 |
| 18 | 16 | 2,3 |
| Total | 700 | 100 |

Reference: *Primary Data* (2018)

Characteristic of respondents in table 1 shows that most of the respondents' ages were 16 years (48.1%). Those data have a scale ratio and are followed by *t-test* to find out the distribution of the data, with the following results:

Table 2. Distribution of respondents' ages

| Variable | Group | Group | <i>p-value</i> |
|----------|----------------------|-------------------------|----------------|
| | with PIK-KRR (n=350) | without PIK-KRR (n=350) | |
| Age | | | |
| (year) | 16,47±0,56 | 16,45±0,65 | 0,757 |

The results in table 2 show that there is no difference in the mean of the respondent's ages ($p = 0.757 < \alpha = 0.05$) in the two different groups among age of 16 years.

Table 3. Characteristics of Respondents

| Variable | Group with PIK-KRR (%) | Group without PIK-KRR (%) | p-value |
|---------------------|------------------------|---------------------------|---------|
| | Relationship status | | |
| - In a relationship | 14 (4%) | 65 (18,57%) | |
| - Single | 336 (96%) | 285 (81,43%) | |
| Total : | 350 | 350 | 700 |
| Parental status | | | 1,000 |
| - Divorce | 29 (8,3%) | 30 (8,6%) | |
| - Marriage | 321 (91,7%) | 320 (91,4%) | |
| Total : | 350 | 350 | 700 |
| Parental income | | | 0,09 |
| - Low | 44 (12,57%) | 61 (17,43%) | |
| - High | 306 (87,43%) | 289 (82,57%) | |
| Total : | 350 | 350 | 700 |

Reference: *Primary Data* (2018)

Table 4. The role of PIK-KRR in its relations to the knowledge of adolescent female towards pregnancy planning in Malang city

| Variable | Knowledge | | | | | | | | | | | |
|-----------------|-----------|-------------|-------------|------------|--------------|-------------|-------------|------------|----------------|-------------|-------------|------------|
| | Physical | | | | Psychosocial | | | | Socio-economic | | | |
| | Good | Fair | Poor | p-value | Good | Fair | Poor | p-value | Good | Fair | Poor | p-value |
| PIK-KRR | 0,00* | | | | 0,00* | | | | 0,00* | | | |
| With PIK-KRR | 154 (22%) | 170 (24,3%) | 26 (3,7%) | | 163 (23,3%) | 169 (24,1%) | 18 (2,6%) | | 112 (16%) | 205 (29,3%) | 33 (4,7%) | |
| Without PIK-KRR | 112 (16%) | 136 (19,4%) | 102 (14,6%) | | 72 (10,3%) | 162 (23,1%) | 116 (16,6%) | | 99 (14,1%) | 91 (13%) | 160 (22,9%) | |
| Total | 266 (38%) | 306 (43,7%) | 128 (18,3%) | 700 (100%) | 235 (33,6%) | 331 (47,3%) | 134 (19,2%) | 700 (100%) | 211 (30,2%) | 296 (42,3%) | 193 (27,6%) | 700 (100%) |

Based on table 2, it was found that there was a clear value ($p\text{-value} = 0,000 < \alpha = 0.05$) in relationship status in the two study groups. Whereas parental status and parental income had no differences ($p < \alpha = 0.05$) in the two study groups.

Least significant different test (LSD test)

This study aims to determine the role of PIK-KRR through measuring differences in knowledge and attitudes of adolescent female related to healthy pregnancy planning, which includes the physical, psycho-social and socio-economic aspects. The Kolmogorov-Sirnov test was used to determine whether the distribution of the data was normal or not. The test resulted p-value = $0,000 < \alpha = 0.05$, which means that the data were not normally distributed. Therefore, the statistical test used for processing this data was the Mann-Whitney test.

Table 4 and Table 5 show that there are significant differences in the knowledge and attitudes, which include physical, psycho-social and socio-economic aspects toward planning a healthy pregnancy in the two study groups. Both have the same p-value, which is $0,000 < \alpha = 0.05$. This shows that the existence of the PIK-KRR has a significant influence on knowledge and attitudes of adolescent female related planning healthy pregnancies.

Notes:

* *Mann-Whitney* test

If $p\text{-value} < \alpha=0,05$, there is no significant different, and

if $p\text{-value} > \alpha=0,05$, there is a significant different

Tabel 5. The role of PIK-KRR in its relations to the attitude of adolescent female towards pregnancy planning in Malang city

| Variable | Attitude | | | | | | | | |
|----------|----------|---------|----------------|--------------|---------|----------------|----------------|---------|----------------|
| | Physical | | | Psychosocial | | | Socio-economic | | |
| | P | N | <i>p-value</i> | P | N | <i>p-value</i> | P | N | <i>p-value</i> |
| PIK-KRR | | | 0,00* | | | 0,00* | | | 0,00* |
| With | 261 | 89 | | 266 | 84 | | 290 | 60 | |
| PIK-KRR | (37,3%) | (12,8%) | | (38%) | (12%) | | (41,4%) | (8,6%) | |
| Without | 203 | 147 | | 199 | 151 | | 204 | 146 | |
| PIK-KRR | (29%) | (21%) | | (28,4%) | (21,6%) | | (29,2%) | (20,8%) | |
| Total | 464 | 236 | 700 | 465 | 235 | 700 | 494 | 206 | 700 |
| | (66,3%) | (33,7%) | (100%) | (66,4%) | (33,6%) | (100%) | (70,5%) | (29,5%) | (100%) |

Notes:

* *Mann-Whitney* test

If $p\text{-value} < \alpha=0,05$, there is no significant different, and

if $p\text{-value} > \alpha=0,05$, there is a significant different

P = positive

N = negative

DISCUSSION

1. Characteristics of adolescent female in this study are measured based on age, courtship status, marital status, and parental income.

The age of adolescent female in this study is considered to influence pregnancy planning from the biology aspect. Couples in the ideal category to get pregnant in terms of age are in the range of 20-35 years for women and 25-30 years for men, since in that range, the condition of the reproductive organs is at its most optimal period.⁷

Relationship status is a factor that will influence pregnancy planning from cultural and environmental aspects. Pleasant sexual experiences during courtship will lead to the assumption that sexual behavior is a fun activity to do with their partners and the assumption that sexual behavior is a symbol of maturity status. Parental supervision

is needed as a control for the social environment since adolescences will spend more time with their friends.¹¹

This study shows that relationship status resulted in significant differences in the two study groups. This means the existence of the PIK-KRR plays a role in influencing adolescents' perspectives in terms of dating. It is a stimulus to encourage each adolescent to rethink the impact and risk of dating.

Parental status is a factor that is considered to affect pregnancy planning from the aspect of psychology. Xaferius (2012) states that children who face parent divorce process will experience insecure relationships, such as anger and disbelief in their parents¹². This condition will cause tenuous relationships between parents and children. Therefore, there is a chance that adolescents will fall into improper relationships and the unwanted pregnancy occurs.¹³

Parental income is considered to influence pregnancy planning from socio-economic and demographic aspects. Marriage in a young age can happen due to the family lives in poverty. Therefore, in order to help the family, adolescent female will be married to a person who is considered capable of covering the daily needs of the family.¹⁴

2. The role of PIK-KRR in its relations to physical knowledge of adolescent female toward pregnancy planning in Malang city.

The results of this study state that the existence of PIK-KRR provides a different level of physical knowledge related to planning a healthy pregnancy of adolescent female in Malang. PIK-KRR brings a deep understanding to the adolescents regarding the importance of physical preparation before they decide to get pregnant. Hence, they become more responsible by preparing their physical maturity before getting married and pregnant. This is supported by Ariyani (2013) who found a significant difference in the knowledge level of adolescents before and after participating in the PIK-KRR.¹⁵ ¹⁵The study proved that the PIK-KRR is effective to be used as one of the teenagers' reproductive health education media.

3. The role of PIK-KRR in its relations to psychosocial knowledge of adolescent female toward pregnancy planning in Malang city

The results of this study show that the existence of the PIK-KRR provides a difference psychosocial knowledge regarding pregnancy planning. PIK-KRR is a medium to encourage adolescents to reach the maturity of their psychosocial aspects. Hence, they will be ready and responsible for a well-planned marriage and pregnancy. Research conducted by WHO in 2015 reports that maternal education of preparing pregnancy is important and makes prospective mother feels well-prepared to undergo their pregnancy.¹⁶

Another research conducted by Enita in 2015 confirmed that counseling program

for adolescent groups could work on improving their knowledge¹⁷. Similarly, the PIK-KRR is a modification of the classical counseling form. This program is expected to not only provide more knowledge but also depth information by involving groups to be more dominant in the implementing process of this program.

4. The role of PIK-KRR in its relations to socio-economic knowledge of adolescent female toward pregnancy planning in Malang city

The results of this study show that the existence of the PIK-KRR provides a different socio-economic knowledge regarding pregnancy planning. PIK-KRR is a medium, which provides a fundamental knowledge before the adolescents deciding to get married and pregnant. There are several important aspects that must be considered so marriage and pregnancy will lead to a good life for a family member.

One of these aspects is the obligation to preparing socio-economic aspects including education and job. These two components are the minimum aspects that must be owned by each couple before deciding to get married and get pregnant. This understanding is expected to be achieved through the PIK-KRR program.

Formal education helps every adolescent develop their knowledge and skills, so that they can survive amid the competition in the world of work, as well as being well-prepared for marriage and pregnancy.¹⁹

Various efforts were made to encourage adolescents to complete their education; in this case, the main focus was the adolescent females. This is important in order to improve the resilience of adolescent reproductive health, especially in the context of planning a healthy pregnancy.¹⁸ Formal education will help each adolescent develop knowledge and skills, and therefore they will survive in the competitive world and have a good preparation to planning for their marriages and pregnancies later.¹⁹

5. The role of PIK-KRR in its relations to attitude from a physical perspective of adolescent female toward pregnancy planning in Malang city.

The results of this study show that PIK-KRR can influence a positive attitude from the physical perspective regarding planning a healthy pregnancy for adolescent female in Malang. This is indicated from a high percentage of positive attitudes in the selected high schools that provide PIK-KRR program.

This result is in line with the research conducted by Walgito in 2015. He studied the factors, including the level of knowledge that influences the attitude building. Knowledge can be obtained from various methods both with formal and informal education, for example through counseling. Counseling given to adolescents can change their attitudes from negative to positive.¹⁹

PIK-KRR is a modification of classical counseling techniques into more varied models and its contents are also more empowering for the youth group itself. With this distinctive strategy, hopefully, a positive attitude can be achieved in various aspects of reproductive health in adolescent groups.²⁰

Judging from the physical aspect, planning a healthy pregnancy can be assessed by various indicators, including the ideal age, health status before marriage and pregnancy, pre-conception of nutrition needed, the function of reproductive organs and TT immunization. All these indicators need to be known and they also need to be responded with a positive attitude. A positive attitude towards all these indicators is one manifestation of the success of the PIK-KRR.⁸

6. The role of PIK-KRR in its relations to attitude from psychosocial perspective of adolescent female toward pregnancy planning in Malang city.

The results of this study show that PIK-KRR can influence a positive attitude

from the psychosocial aspects regarding planning healthy pregnancy of adolescent female in Malang. It indicates that the PIK-KRR provides positive results on healthy planning aspects from the psychosocial perspective of adolescent female in Malang. It is indicated by a significant difference of psychosocial attitude between the two groups in this study.

In line with these results, Wirakusumah (2014) states that the existence of counseling as an intervention can influence the formation of a person's attitude.²¹ Application of the PIK-KRR can influence the formation of positive attitudes in the adolescent group. PIK-KRR contributes to the improvement of knowledge and the formation of a social environment based on the reproductive health concept. Therefore, this program is crucial in order to develop a positive attitude towards adolescents.²²

Psychosocial maturity will make a woman becomes an independent and responsible person. This woman then will be able to conform herself to various phases of her life, including when she decides to be pregnant. The maturity to get pregnant will have a beneficial influence on the women's and obstetrical health until the birth of the baby. Hence, morbidity even maternal and neonatal mortality will be reducible.²³

7. The role of PIK-KRR in its relations to the attitude from a socio-economic perspective of adolescent female toward pregnancy planning in Malang city.

The results of this study show that PIK-KRR can influence a positive attitude from the socio-economic aspects regarding planning healthy pregnancy of adolescent female in Malang. This is evidenced from the results which showed a significant difference in attitudes in the socio-economic aspects of the two research groups.

Provision of health counseling is proven to influence a person's attitude in addressing various problems. If someone does not get good health counseling, he/she will experience difficulties and even achieve negative effects from health prob-

lems. The study showed that health counseling proved to be positively correlated with the way people address health problems.²⁴

PIK-KRR is a national program from the government that not only contains counseling but also teaches adolescents to be role models for their peers. Therefore, adolescent will react positively when they had interventions related reproductive health aspects. Following that concept, the PIK-KRR certainly has the ability to at least give a positive influence on adolescent attitudes in aspects regarding reproductive health, especially for planning a pregnancy. Furthermore, with this positive attitude, the PIK-KRR will provide comprehensive provisions for each adolescent to understand their reproductive health conditions, so that they will be able to make wise and responsible decisions regarding their pregnancies.²⁵

CONCLUSION

Reproductive Health Information and Counselling Program (PIK-KRR) play a role in providing good knowledge and positive attitude including from physical, psychosocial and socio-economic aspects regarding planning healthy pregnancy of adolescent female in Malang.

This research can be continued by examining the factors that influence healthy pregnancy planning apart from the existence of this program. Then it can be continued by analyzing which factors predominantly affect adolescents in planning their pregnancies later. Besides, another research can also be done by identifying the relationship between the knowledge and attitudes of young women regarding planning a pregnancy.

ACKNOWLEDGMENT

The author would like to thank:

1. Prof.Dr.Muhammad Bisri as the Rector of Universitas Brawijaya Malang along with all of his staff for the opportunities and educational facilities provided while studying in the Mid-

wifery Master Program in Universitas Brawijaya Malang.

2. Dr.dr.Sri Andarini, M.Kes as Dean of the Faculty of Medicine, University of Brawijaya Malang with permission given to the author while studying at the Midwifery Master Program in Universitas Brawijaya Malang and at the same time as the chair of guidance whom has provided direction and advice during the thesis preparation process.
3. Dr.dr.Bambang Rahardjo, Sp.OG (K), as Chair of the Midwifery Master Program at Universitas Brawijaya who has provided author with various supports while studying in the Midwifery Master Program in Universitas Brawijaya Malang.
4. Dr. Muljohadi Sungkono, Sp.OG (K) as chairman of the examiner who has provided corrections, guidance and input during the process of preparing this thesis.
5. Dr.dr.Sri Poeranto, Sp.Par.K, M.Kes as examiners who has provided corrections, guidance and input during the process of preparing this thesis.
6. Dr.dr.I Wayan Agung Indrawan, Sp.OG (K) as a member of the advisory committee who has provided direction and advice during the process of preparing this thesis.
7. Both parents and families who are full of patience provide enthusiasm, prayer and motivation in completing this thesis.
8. All parties who have helped complete this thesis.

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