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## ADOLESCENT REPRODUCTIVE EDUCATION MODULE: INCREASING THE KNOWLEDGE OF PELAMUNAN VILLAGE COUNSELORS

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### ABSTRACT

The well-being of society depends on family harmony, which requires planning before marriage, Data from UNICEF records around 115 million married boys under 18 years old, with reproductive health impacts on girls married in adolescence. Early marriages in Indonesia have multifaceted detrimental impacts, spanning psychological, social, and health domains. Teenagers entering matrimony early often grapple with emotional challenges amid household responsibilities, contributing to a surging divorce rate in this demographic. Moreover, early marriage poses serious risks to reproductive health, particularly for teenage girls, leading to complications like premature birth, bleeding, and low birth weight infants, escalating maternal and infant mortality rates. To mitigate these issues, an analysis evaluates the impact of providing education through e-modules to enhance teenagers' knowledge of family planning. Employing a Quasi Experiment pre-test post-test design with a control group, the study focuses on 17 peer counselors in the Kramatwatu Family Planning Hall area, revealing a substantial knowledge improvement from 61.47 to 75.59 after education. Statistical tests, with a significant p-value of 0.000 ( $\leq 0.05$ ), conclude a significant increase in knowledge among peer counselors. Future research should explore developing peer counseling modules covering diverse topics beyond family planning to comprehensively address adolescents' needs.

**Keywords:** preparation for family life, peer counselor, module, peer counseling

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### INTRODUCTION

The well-being of society depends on family harmony, which requires planning before marriage. A study by Setiyani (2022) emphasizes the importance of planning to create a harmonious and prosperous family (Setiyani et al., 2022). However, the phenomenon of adolescent marriage is still a serious problem in Indonesia, although BKKBN recommends the mature age for marriage in women 20-25 years and men 25-30 years (Apriani et al., n.d.; Kusumawati, 2023). Data from UNICEF records around 115 million married boys under 18 years old, with reproductive health impacts on girls married in adolescence (Malhotra & Elnakib,

2021; Sari & Firdaus, 2022). Indonesia has the 10th highest rate of early marriage in the world, and the 2019 revision of the Marriage Law raised the marriage age of women with parental consent to 19 (Ames et al., 2024; Kusumawati, 2023). The phenomenon of "spinsters" in society, especially in rural areas, gives a negative perception of unmarried adolescent girls at the age of puberty (Rahman & Yuandari, 2020; Taye et al., 2023). Early marriage in Indonesia has psychological, social, and health impacts, such as increasing divorce rates and reproductive health risks (Rahman & Yuandari, 2020).

The government, through BKKBN, seeks to provide adolescents with information about family planning through the PIK / R program. This program aims to prepare adolescents as prospective productive-age residents and prospective parents who can build quality families (Adriani & Yustini, 2021; Ariayudha et al., 2020). Data shows that families built by adolescents without preparedness are vulnerable to fractured relationships, physical violence, and divorce (Fothergill, 1998). Banten Province, with a high adolescent population, shows a high rate of early marriage, especially in rural areas (People's Welfare Statistics, 2018);(Hasanah et al., 2021). In some cases, such as in Serang Regency, Religious Court reports recorded applications for dispensation of underage marriage, citing parental concerns about promiscuity (Schrieber, n.d.). Education before building a household is emphasized, especially in adolescents (Eccles et al., 1997). Phenomenological studies show that adolescent couples who marry in adolescence often lack emotional maturity and lack understanding in living family life (Nailaufar & Kristiana, 2018). Therefore, a good understanding of family life planning preparation from adolescence is needed to prevent an increase in early marriage rates and high divorce cases (Maarif et al., 2020). They are analyzing the effect of education with adolescent reproductive health modules on increasing peer counselors' knowledge about family life planning at the Kramatwatu KB Extension Center in 2022.

They know the picture of peer counselor knowledge before being given education with modules and leaflets, Knowing the picture of differences in knowledge after being given education with modules and leaflets, Analyzing the average difference in improvement between the group of counselors who were given education using modules and the group of counselors who were given education using leaflets. Modules and leaflets on adolescent reproductive health at the Kramatwatu KB Extension Center in 2022 are the focus of this research. The study aims to analyze the effect of education on increasing peer counselors' knowledge about family life planning. By starting the study by knowing the overview of the initial knowledge of peer counselors before receiving education through modules and leaflets, this study also intends to evaluate differences in knowledge after providing education. Through average analysis, this study aimed to investigate the difference in knowledge improvement between groups of counselors who received education using modules and leaflets. Thus, this study contributes to understanding the impact of education on peer counselor knowledge in the context of family life planning at the Kramatwatu KB Extension Center.

## RESEARCH METHODS

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The research design applied in this study is an experiment pre-test post-test design with the control group (Dugard & Todman, 1995; González-Alonso et al., 2020). This study used two groups: treatment and control groups. The first group, or treatment group, received education on preparing family life planning using the Peer Counseling Module. Meanwhile, the second group received education using adolescent reproductive health material books. Both groups' knowledge measurements of family planning preparation were conducted before and after treatment to assess increased knowledge. This research was conducted at the KB Extension Office of Pelamunan Village, Kramatwatu District, Serang Regency, in December 2022. The affordable population is all PIK R peer counselors in the working area of the KB Extension Center, Kramatwatu District, Serang Regency. The sampling technique uses total sampling, namely all PIK R peer counselors in the KB Extension Center work area.

The data collection method involves the use of research questionnaires as primary data (Mazhar et al., 2021). Secondary data was obtained from the number of PIK R peer counselors in the KB Extension Center of the Kramatwatu District working area. The research procedure begins by asking for a research recommendation letter from an educational institution, then asking for research permission from the supervisor of PIK R SMA/Sesetara or the head of the KB Extension Center of Kramatwatu District. Data collection was carried out by taking records of active peer counselor data PIK R after obtaining permission. Data processing involves the stages of data editing, coding on questionnaire sheets, tabulating data, and processing data using SPSS software version 16.0. Data cleaning is carried out to ensure the correctness of the data entered into the data processing engine. Data analysis was done using bivariate analysis to determine the meaning of the processed data. This study aims to investigate the effect of education using the Peer Counseling Module and adolescent reproductive health material books on increasing peer counselors' knowledge about family life planning at the Kramatwatu KB Extension Center in 2022.

## RESULTS AND DISCUSSION

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Overview of Increasing Knowledge of Peer Counselors in the Control Group Before and After Education Was Given on Family Life Planning in Pelamunan Village in 2022.

**Table 1. Frequency Distribution of Increasing Knowledge of Peer Counselors in the Control Group Before and After Education on Family Life Planning in Pelamunan Village in 2022**

Knowledge	Before		After	
	N	%	N	%
Good	4	23.5%	8	47.1%
Enough	8	47.1%	9	52.9%
Less	5	29.4%	-	-
<b>Total</b>	17	100%	17	100%

Based on table 1, the increase in knowledge of peer counselors in the control group before education was given most had sufficient knowledge as many as 8 people (47.1%) and some others had good knowledge 4 people (23.5%) and 5 people had less knowledge 5 (29.4%). Meanwhile, after being given education, it increased to 9 people having sufficient knowledge (52.9%) and 8 people having good knowledge (47.1%). Overview of Increasing Knowledge of Peer Counselors in the Intervention Group Before and After Education Was Given on Family Life Planning in Pelamunan Village in 2022.

**Table 2. Frequency Distribution of Increasing Knowledge of Peer Counselors in the Intervention Group Before and After Education on Family Life Planning in Pelamunan Village in 2022.**

Knowledge	Before		After	
	N	%	N	%
Good	4	25.0%	14	87.5%
Enough	9	56.3%	3	17.6%
Less	3	18.8%	-	-
<b>Total</b>	16	100%	17	100%

Based on table 2, the increase in knowledge of peer counselors in the intervention group before education was given most had sufficient knowledge as many as 9 people (56.3%). Meanwhile, after being given education, the majority had good knowledge as many as 14 people (87.5%). The Effect of Increasing Peer Counselor Knowledge in the Control Group Before and After Education on Family Life Planning in Pelamunan Village in 2022.

**Table 3 The Effect of Increasing Knowledge of Peer Counselors in the Control Group Before and After Education on Family Life Planning in Pelamunan Village in 2022**

Knowledge	N	Min-Max	Mean	SD	P-Value
Pre-Test		35-85	61.47	15.183	
Post-Test	17	60-90	75.59	8.993	0,000

Based on table 3 above, it was found that the average knowledge of peer counselors before education was given was 61.47. Meanwhile, the average knowledge of peer counselors after education increased to 75.59. The difference in average knowledge before and after education was 14.09. The results of statistical tests using the T-Test obtained p values of  $0.000 \leq 0.05$  or  $p \leq \alpha$  so that  $H_a$  was accepted or  $H_o$  was rejected, it can be concluded that there is a significant difference in increasing the knowledge of peer counselors in the control group about Family Life Planning. The Effectiveness of Adolescent Reproductive Health Module Education on Increasing Peer Counselors' Knowledge of Family Life Planning in Pelamunan Village in 2022

**Table 5 The Effectiveness of Adolescent Reproductive Health Module Education on Increasing Peer Counselor Knowledge on Family Life Planning in Pelamunan Village in 2022**

Knowledge	Control (Leaflet)	Speakers (Modul)	P-Value
Pre-Test	61.47	65.00	
Post-Test	75.59	82.00	0.000

Table 5 above shows an increase in peer counselor knowledge in the intervention group, from 61.47 to 75.59, with an increase in value of 14.12. In the intervention group, the value was from 65.00 to 82.00, with an increase of 17.00. The results of the control and intervention group (module) found that the use of modules was 2.88 times more effective than the use of leaflet media. The results of statistical tests using the T-test obtained a p-value of 0.000 in the control and intervention groups. So, there is an influence of adolescent reproductive health module education on increasing peer counselors' knowledge about family life planning.

**Increasing Knowledge of Peer Counselors Before and After Reproductive Health Module Education on Family Life Planning in Pelamunan Village in 2022**

Based on Table 2, the increase in knowledge of peer counselors in the intervention group before education was given, most had sufficient knowledge, as many as 9 people (56.3%).

Meanwhile, after being given an education, the majority had good knowledge, as many as 14 people (87.5%). Knowledge is the result of knowing, and the process of knowing occurs after people sense a certain object. Sensing occurs through sight, hearing, smell, taste, and touch. The higher a person's knowledge level, the higher the individual's ability to assess a material or object.

In peer counseling activities, counselors must understand the substance of material about reproductive health to help solve problems faced by counselors. However, based on the research results before the intervention, the average knowledge of peer counselors still needed improvement. This can impact the wrong provision of information, lack of interpersonal relationships between counselors and counselors, and wrong in taking action to help solve problems. Education with reproductive health modules can help increase peer counselors' knowledge about family life planning. This can be seen in the post-test questionnaire; the average knowledge of peer counselors who initially had sufficient knowledge increased to the majority having good knowledge.

This is due to the provision of education through the reproductive health module. Counselors who initially do not know become aware and experience a relearning process that can cause changes in the level of knowledge. In addition, a complete summary of the material and easy-to-understand language can encourage peer counselor motivation to read it. The results of this study are in line with research conducted by Yohana (2021) entitled The effectiveness of the HIV/AIDS prevention module for brides-to-be on knowledge and attitudes obtained results before being given an intervention on average have sufficient knowledge and after being given an intervention there is an increase to the majority having good knowledge by 80%.

### **The Effect of Reproductive Health Module Education on Increasing Peer Counselors' Knowledge on Family Life Planning in Pelamunan Village in 2022**

Based on the results of the study, it was found that the average knowledge of peer Based on the study's results, it was found that the average knowledge of peer counselors in the intervention group before education was given was that most had sufficient knowledge of as many as 9 people (56.3%). Meanwhile, after being given an education, the majority had good knowledge, as many as 14 people (87.5%). From these data, the increase in knowledge of peer counselors with the reproductive health module is higher than the increase in knowledge in the control group. The results of statistical tests using the T-Test obtained a p-value of 0.000, so it can be concluded that there is an influence of adolescent reproductive health module education on increasing peer counselors' knowledge about family life planning.

The counseling process's success is determined by peer counselors' skill in building interpersonal relationships with their peers or counselors. A comfortable relationship will make the counselor feel safe to tell his problems. Counselor knowledge is needed to support and help

the counseling process run smoothly. In addition, counselors must know the materials (substances) needed in counseling and understand the information to be conveyed, for example, about family planning, reproductive function health, and diseases related to reproduction. Knowledge of the substance is needed by counselors when providing information to make alternative problem-solving because peer counseling makes adolescents stronger in facing their problems and able to make decisions themselves. However, based on the research conducted by Permasatari (2013), counselors' knowledge in providing answers still needs to be improved so there is no closeness and trust between counselors and counselors (Al Omari, 2019).

Counselor knowledge can be increased by education about reproductive health, one of which is using modules. Modules can be used as educational aids in completely crafted materials. According to the existing material, peer counselors can study modules to improve their understanding. Modules provide benefits in increasing the knowledge of peer counselors who can optimize the development of their peers (Fitriyah, 2023). In the module, the summary of the material is explained more specifically so that the counselor can understand the core material in the module and use simple, straightforward language that is easy to understand and remember. So that peer counselors get more detailed and broader information.

According to the researchers' assumptions, the reproductive health module is very effective in increasing the knowledge of peer counselors because the adolescent module can find complete information related to reproductive health to increase the knowledge of peer counselors to provide solutions to counseling problems. In addition, using images or illustration media in modules can encourage and motivate teenagers to read them. The information also influences the increase in counselor knowledge in the module, allowing for an increase after reading it. The results of this study are in line with research conducted by Yohana (2021) entitled. The effectiveness of the HIV/AIDS prevention module for brides-to-be on knowledge and attitudes obtained the results of differences in knowledge in the control group with a mean of 7.02.

There was a significant change after the intervention in the intervention group, with a mean of 8.65. There was a significant difference ( $p < 0.05$ ) between the control and intervention groups in both knowledge (0.000) and attitude (0.000) variables. This indicates that the intervention has a different effect on the two groups. This research is also in line with research conducted by Johariyah (2018) entitled The Effectiveness of Adolescent Reproductive Health Counseling by Providing Modules on Changes in Adolescent Knowledge (Husni et al., 2023). P-value results of  $0.000 < 0.05$  were obtained, which concluded that adolescent reproductive health counseling is effective by providing modules on changes in adolescent knowledge.

Learning modules can increase enthusiasm and motivation and allow counselors to learn independently according to their respective abilities. With the module, the supervisor, who functions as a facilitator and directs the counselor, can provide motivation and learning media

that is effective and easy to understand . With the increase in counselors' knowledge about reproductive health, the discussion process during counseling can run effectively so that counselors get answers to their problems. In addition, peer counselors can provide information about reproductive health while helping their peers recognize problems and realize the need to seek help to solve their problems.

## CONCLUSION

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The study revealed a significant improvement in the average knowledge of peer counselors in the intervention group following reproductive health education. Prior to the education, most counselors had sufficient knowledge, but post-education, the majority demonstrated good knowledge. The increase in knowledge among those exposed to the reproductive health module surpassed that of the control group. Statistical analysis, using the T-Test, resulted in a noteworthy p-value of 0.000, indicating the substantial influence of adolescent reproductive health module education on enhancing peer counselors' understanding of family life planning. The study emphasized the pivotal role of counselors' knowledge in fostering a conducive counseling environment. Although the counselors displayed improvement, deficiencies in providing answers hindered optimal closeness and trust between counselors and peers. The research underscored the effectiveness of reproductive health modules in offering comprehensive and accessible information, aligning with previous studies. Modules not only conveyed detailed information but also employed visuals to engage teenagers, proving instrumental in boosting counselors' knowledge and motivation. The findings reinforced the assumption that reproductive health modules significantly contribute to enhancing peer counselors' proficiency, fostering effective counseling and encouraging proactive problem-solving.

## BIBLIOGRAPHY

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- Adriani, D., & Yustini, T. (2021). Anticipating the demographic bonus from the perspective of human capital in Indonesia. *International Journal of Research in Business and Social Science (2147-4478)*, 10(6), 141–152.
- Al Omari, N. P. (2019). *Explicit listening instruction and listening comprehension scores: A quantitative quasi-experimental study*. Northcentral University.
- Ames, J. L., Anderson, M. C., Cronbach, E., Lee, C., Onaiwu, M. G., Vallerie, A. M., & Croen, L. A. (2024). Reproductive Health Care in Adolescents with Autism and Other Developmental Disabilities. *American Journal of Obstetrics and Gynecology*.
- Apriani, U., Asrori, A., & Purwanti, P. (n.d.). MENINGKATKAN PEMAHAMAN SISWA DALAM MEMASUKI PERSIAPAN BERUMAH TANGGA MELALUI LAYANAN INFORMASI KLASIKAL KELAS XII IPS. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, 7(8).
- Ariayudha, M. K. A., Husodo, B. T., & Prabamurti, P. N. (2020). PERILAKU SEKSUAL PRANIKAH MAHASISWI STUDI KASUS PERGURUAN TINGGI FAVORIT DI KOTA SEMARANG. *Jurnal Kesehatan*

- Masyarakat (Undip)*, 8(4), 540–544.
- Dugard, P., & Todman, J. (1995). Analysis of pre-test-post-test control group designs in educational research. *Educational Psychology*, 15(2), 181–198.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1997). *Development during adolescence: The impact of stage–environment fit on young adolescents’ experiences in schools and in families (1993)*.
- Fitriyah, L. (2023). Enhancing Counseling Services in Secondary Schools Through the Implementation of Training Modules and Counseling Materials for Peer Counselors. *Bulletin of Community Engagement*, 3(2), 175–192.
- Fothergill, A. (1998). The neglect of gender in disaster work: An overview of the literature. *The Gendered Terrain of Disaster: Through Women’s Eyes*, 11–25.
- González-Alonso, F., Guillén-Gámez, F. D., & de Castro-Hernández, R. M. (2020). Methodological analysis of the effect of an anti-bullying programme in secondary education through communicative competence: A pre-test–post-test study with a control-experimental group. *International Journal of Environmental Research and Public Health*, 17(9), 3047.
- Hasanah, U., Pratiwi, R. D., Andriati, R., & Nugraha, D. G. (2021). Early marriage determination of teenagers in Banten Province. *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)*, 7(2).
- Husni, E., Sholehah, K. N. U., & Maharrani, T. (2023). The Effect of Health Education Through The Application “Hi, Teens” On Young Women’s Knowledge and Attitudes About Fluor Albus. *6th International Conference of Health Polytechnic Surabaya (ICoHPS 2023)*, 77–88.
- Kusumawati, E. (2023). Analysis of the Relationship Between the School Principal’s Visionary Leadership and Kindergarten Teachers’ Performance. *Journal of Innovation in Educational and Cultural Research*, 4(1), 89–97.
- Maarif, I. B., Hanifah, H., Agustina, U. W., & Rachman, A. A. (2020). Pendampingan PKBR (Persiapan Kehidupan Berkeluarga Bagi Remaja) Karang Taruna Desa Mojokembang Kabupaten Jombang. *Jumat Pendidikan: Jurnal Pengabdian Masyarakat*, 1(1), 24–27.
- Malhotra, A., & Elnakib, S. (2021). *Evolution in the evidence base on child marriage*.
- Mazhar, S. A., Anjum, R., Anwar, A. I., & Khan, A. A. (2021). Methods of data collection: A fundamental tool of research. *Journal of Integrated Community Health (ISSN 2319-9113)*, 10(1), 6–10.
- Nailaufar, U., & Kristiana, I. F. (2018). Pengalaman menjalani kehidupan berkeluarga bagi individu yang menikah di usia remaja. *Jurnal Empati*, 6(3), 233–244.
- Rahman, R. T. A., & Yuandari, E. (2020). Early Marriage in Banjarmasin: The Impact on Reproductive Health and Prevention Strategy. *International Journal of Clinical Inventions and Medical Sciences (IJCIMS)*, 2(1), 15–19.
- Sari, N., & Firdaus, V. (2022). The Influence of Leadership, Work Environment, and Work Discipline on Employee Performance at the Technical Implementation Unit of the Krian Health Center Service. *Asian Journal of Engineering, Social and Health*, 1(2), 61–94.
- Schrieber, K. E. (n.d.). *Doctor of Musical Arts Portfolio*.
- Setiyani, W., Effendi, M., & Yuldashov, S. O. (2022). Internalization of Local Traditional Values in A Plurality Community: Interreligious Relations in Sawangan, Magelang. *Karsa: Jurnal Sosial Dan Budaya Keislaman*, 30(2), 233–265.

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Taye, A., Wakjira, D., Terefe, G., & Sewmehone, E. (2023). A prospective cross-sectional study on parent–Female adolescent communication towards sexual and reproductive health issues in south west ethiopia: Parent perspective. *International Journal of Africa Nursing Sciences*, 18, 100561.

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