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THE EFFECTIVENESS OF PREMARITAL HEALTH COUNSELING ON INTEREST IN DELAYING HIGH-RISK PREGNANCY AMONG PROSPECTIVE REPRODUCTIVE-AGE COUPLES UNDER 20 YEARS OLD AT KEDABURAPAT PUBLIC HEALTH CENTER, MERANTI ISLANDS REGENCY

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ABSTRACT

Pregnancy under 20 years is a high-risk condition because adolescents are not yet biologically, psychologically, and socioeconomically mature. This study examined the effectiveness of premarital health counseling in increasing interest in delaying high-risk pregnancy among prospective couples of childbearing age under 20 years at Kedaburapat Public Health Center, Meranti Islands Regency. A quantitative quasi-experimental design with a one-group pretest-posttest approach was used. The population comprised 40 women of childbearing age under 20 years, and 11 participants were selected through purposive sampling. Data were collected using a questionnaire and analyzed using univariate and bivariate analysis with the Wilcoxon Signed Rank Test. Before counseling, 63.6% of respondents had high interest and 36.4% had low interest. After counseling, all respondents showed high interest. The mean score increased from 24.18 to 41.45, with p = 0.003. Premarital health counseling was effective in increasing interest in delaying high-risk pregnancy.

***Keywords**: Premarital Counseling, Interest in Delaying Pregnancy.*

1. INTRODUCTION

Pregnancy under the age of 20 is an important reproductive health issue because it occurs during adolescence, a phase in which biological, cognitive, and psychosocial maturation is still taking place. Therefore, pregnancy at this stage is more often associated with unfavorable maternal and neonatal outcomes (Maheshwari et al., 2022; Rustandi et al., 2024). Recent studies show that adolescent mothers are more vulnerable to complications such as postpartum mental health problems, low birth weight, low Apgar scores, anemia, eclampsia, preterm birth, and other obstetric complications, placing adolescent pregnancy in the category of high-risk pregnancy (Mohammadian et al., 2025; Nurdiawan et al., 2021). These risks affect not only clinical aspects but are also related to education, economic readiness, parenting capacity, and the long-term quality of life of both mother and child (Dalimunthe et al., 2024; Diabelková et al., 2023). In the context of this study, the issue is reflected in the preliminary study conducted at Kedaburapat Public Health Center, Meranti Islands Regency, where 40 prospective brides and grooms under the age of 20 were recorded during January–June 2025. Meanwhile, 8 out of 10 prospective brides and grooms interviewed did not understand how to delay pregnancy, 7 out of 10 wished to have children immediately without considering health risks, and all respondents had never received premarital counseling from health workers. These facts indicate that the issue of delaying high-risk pregnancy is not merely a matter of individual knowledge, but also a problem of access to premarital education that needs to be addressed through structured reproductive health interventions.

The reproductive health literature has widely explained that limited knowledge, social norms, and low access to information remain factors that shape risky behavior among adolescents, including in rural Indonesian contexts where taboos surrounding reproductive communication persist (Adjie et al., 2022; Saraan et al., 2024). Studies on marriage readiness also show that readiness for marriage is associated with pregnancy planning; therefore, premarital education becomes an important entry point for developing responsible reproductive decision-making (Rahmah & Kurniawati, 2021; Ritonga et al., 2025). However, much of the existing literature still emphasizes the improvement of knowledge, general readiness, or contraceptive use, rather than specifically examining the interest in delaying high-risk pregnancy among prospective reproductive-age couples under 20 years old as a group situated at the transitional point toward marriage. Systematic reviews on contraception among adolescents and young women indicate that contraceptive use is associated with agency, preferences, service support, and decision-making capacity; thus, interventions should not merely deliver medical information in a one-way manner (Lassi et al., 2024;

Ti et al., 2022). Studies on service providers also emphasize that adolescents' access to contraception is strongly influenced by the knowledge, attitudes, and practices of health workers, making the quality of counseling an important component of reproductive behavior change (Ritonga et al., 2024; Sidibé et al., 2022). Therefore, research is still needed that directly connects premarital counseling, interest in delaying pregnancy, and the service context of public health centers.

This study aims to determine the effectiveness of premarital health counseling on the interest in delaying high-risk pregnancy among prospective reproductive-age couples under 20 years old at Kedaburapat Public Health Center, Meranti Islands Regency. More specifically, this study seeks to identify the level of interest in delaying pregnancy before counseling, identify the level of interest after counseling, and analyze differences in interest before and after the premarital health counseling intervention. Placing interest as the main variable is relevant because reproductive decisions among adolescents and young women are not determined solely by the availability of information, but also by attitudes toward pregnancy, perceptions of contraception, relationships with partners, and social contexts that influence early reproductive decision-making (Daniel et al., 2023; Suhendar et al., 2023). A recent systematic review shows that contraceptive knowledge, adolescent mental health, and the risks of adolescent pregnancy are interconnected; therefore, educational interventions need to address both cognitive aspects and psychological readiness (Hinoveanu et al., 2025). The research target is also consistent with the local problem, as the final project document indicates that not all prospective brides and grooms under 20 years old in the research area have received premarital counseling from health workers. Therefore, the objective of this study does not stop at measuring knowledge, but is directed toward changes in interest as an initial indicator of young prospective couples' readiness to make safer reproductive decisions. This objective makes the study practically oriented, as its findings can be used as a basis for strengthening premarital counseling services in primary health care facilities.

The main argument of this study is that premarital health counseling is important because prospective reproductive-age couples under 20 years old are at a decision-making stage that will determine the direction of their reproductive health after marriage. Studies on reproductive health interventions show that sexual and reproductive education can increase adolescents' intention to use contraception; therefore, premarital counseling has the potential to become a strategy for preventing early pregnancy when provided before couples enter married life (Daulian et al., 2025). Research on premarital health counseling for prospective brides and grooms also shows that counseling interventions can influence their attitudes in preparing for a

healthy pregnancy, so this service can be understood as a bridge between health information and more planned reproductive decision-making (Rahmanda et al., 2023). Literature on barriers to preconception education emphasizes that programs that are too general, unsustainable, or not adapted to the needs of prospective brides and grooms may be less effective in developing readiness for parenthood (Ayudia et al., 2024). On the other hand, counseling using simple media such as leaflets has been shown to improve prospective brides' and grooms' knowledge of premarital preparation, indicating that low-cost, easily replicated interventions based in primary health services still hold strategic value (Iffah et al., 2024). Based on local facts, the research objectives, and support from the literature, this study hypothesizes that premarital health counseling is effective in increasing the interest of prospective reproductive-age couples under 20 years old in delaying high-risk pregnancy.

2. RESEARCH METHODE

The object of this study is the phenomenon of low readiness among prospective reproductive-age couples under 20 years old to delay high-risk pregnancy after marriage, particularly in the working area of Kedaburapat Public Health Center, Meranti Islands Regency. This phenomenon was selected because the final project indicates the presence of prospective brides and grooms under the age of 20 who do not yet understand how to delay pregnancy, tend to wish to become pregnant immediately, and have never received premarital counseling from health workers. In this article, the object is not understood merely as individual respondents, but as a reproductive health situation that brings together young marriage age, the risk of early pregnancy, limited information, and the need for educational intervention before pregnancy occurs. The research focuses on changes in interest in delaying pregnancy before and after premarital health counseling, as the pretest-posttest design is commonly used to observe changes in respondents' conditions after an intervention is provided to the same group (Capili & Anastasi, 2024). Thus, the object of this study includes the case of premarital counseling intervention as an effort to promote reproductive health, while the measured problem is the interest of young prospective reproductive-age couples in delaying pregnancy until a safer reproductive age.

This study employed a quantitative research type with a quasi-experimental design using a one-group pretest-posttest approach. This design is stated in the final project as the approach used to measure changes in interest in delaying high-risk pregnancy among prospective reproductive-age couples under 20 years old before and after counseling. A quasi-experimental design was chosen because intervention studies in primary health care facilities often

do not allow respondents to be randomly assigned as in randomized controlled trials; therefore, evaluation is conducted by comparing conditions before and after treatment in the available group (Valentelyte et al., 2022). The primary data in this study were obtained from respondents' completion of pre-test and post-test questionnaires, while secondary data were obtained from supporting research documents, population data of prospective brides or women of reproductive age under 20 years old, and literature used to strengthen the conceptual framework of the study. The main instrument was a questionnaire on interest in delaying pregnancy, which was used to capture changes in respondents' scores after the intervention. The clarity of the research type and data sources is important so that the article's findings can be understood as an evaluation of a quantitative intervention based on structured measurement.

The research data were sourced from women of reproductive age under 20 years old who had been registered as prospective brides in the working area of Kedaburapat Public Health Center, Meranti Islands Regency. The study population consisted of 40 women of reproductive age under 20 years old during the January–June 2025 period, while the research sample consisted of 11 respondents determined using the Lemeshow two-proportion formula and selected through purposive sampling based on inclusion and exclusion criteria. The inclusion criteria included women of reproductive age under 20 years old, registered as prospective brides, residing in the working area of Kedaburapat Public Health Center, willing to participate in the entire intervention series, able to read and understand the questionnaire, able to communicate orally and in writing in Indonesian, willing to sign informed consent, and having never received premarital counseling on delaying pregnancy. The exclusion criteria included respondents who were pregnant, had mental disorders or cognitive limitations, experienced severe health conditions, or withdrew during the study. The determination of these data sources clarifies that respondents were selected because they had characteristics directly related to the research problem.

The research process was carried out through several sequential stages, beginning with preparation, pre-test, intervention, post-test, data analysis, and reporting of research findings. In the preparation stage, the researcher obtained research permission, identified respondents according to the criteria, asked for respondents' willingness to participate, prepared pre-test and post-test questionnaires, developed counseling materials in the form of leaflets and presentation slides, and arranged the counseling schedule. In the pre-test stage, respondents were gathered in a prepared location, given an explanation of the study objectives, asked to complete informed consent, and then asked to fill out the initial questionnaire to measure their interest before the intervention. In the intervention stage, premarital health counseling was

delivered verbally and communicatively using language adjusted to the respondents' educational level, accompanied by discussion, question-and-answer sessions, and the provision of leaflets so that the material could be reread at home. In the post-test stage, respondents completed the same questionnaire again to observe changes in interest after counseling. The use of valid and reliable questionnaires is important because the quality of measurement determines the accuracy of data generated from survey-based health research (Ranganathan & Caduff, 2023).

The data analysis technique was carried out through data processing and statistical testing in stages. Data processing included editing to check the completeness of answers, coding to convert textual data into numerical form, data entry to input respondents' answers into a computer program, cleaning to check for possible data errors, and tabulating to organize the data according to analytical needs. Univariate analysis was used to describe the distribution of each variable using simple statistics in the form of frequencies and percentages, so that respondent characteristics and categories of interest before and after counseling could be presented descriptively. Bivariate analysis was conducted using the Shapiro-Wilk normality test because the sample size was fewer than 50 respondents, and the use of the Shapiro-Wilk test for small samples is considered appropriate to assess whether the data follow a normal distribution (Paramasivam et al., 2024). Because the data were not normally distributed, the analysis was continued using the Wilcoxon Signed Rank Test to compare two paired measurements between the pre-test and post-test. The Wilcoxon test is relevant for paired data that do not meet the assumption of normality because the analysis is based on the ranks of score changes rather than solely on differences in raw means.

3. RESULT AND DISCUSSION

RESULT

Premarital health counseling in this study is positioned as the main intervention provided to prospective reproductive-age couples under 20 years old in the working area of Kedaburapat Public Health Center, Meranti Islands Regency. The intervention was implemented after respondents had completed the pre-test stage, so that their initial level of interest in delaying pregnancy could be identified before the counseling materials were delivered. The counseling materials were prepared in the form of leaflets and presentation slides, and were then delivered directly through verbal explanation, visual media, discussion, and question-and-answer sessions. The counseling process was also supplemented by the distribution of leaflets so that respondents could reread the summary of the material after the activity had ended. These data indicate that premarital health counseling was not

delivered as a brief stand-alone health education session, but as a series of interventions beginning with the measurement of initial conditions, the provision of information, educational interaction, and remeasurement. Thus, the findings on the premarital counseling aspect show that the intervention used in this study was systematically designed to address respondents' needs regarding the risks of pregnancy at a young age and the importance of delaying pregnancy.

The data explanation regarding premarital counseling shows that the strength of the intervention lies in the use of several complementary communication strategies. The delivery of material through PowerPoint slides helped respondents receive information visually, while verbal explanation enabled the researcher to adjust the language to the respondents' educational level. The discussion and question-and-answer sessions became an important part of the intervention because respondents were given space to express confusion, questions, or doubts regarding the material on delaying pregnancy. The use of leaflets also strengthened the counseling process because respondents did not only receive information during the activity, but also had reading materials that could be reviewed at home. This intervention pattern shows that counseling did not merely rely on one-way information transfer, but also opened opportunities for clarification and reinforcement of understanding. Therefore, the counseling implementation data indicate that the intervention was designed to reduce the gap between reproductive health information and respondents' ability to understand the practical reasons for delaying pregnancy.

The relationship between premarital counseling data and the reality of the research problem can be seen in the suitability of the intervention to the respondents' initial condition, which required reproductive health information before marriage. In the preliminary study, the final project recorded that during January–June 2025, there were 40 prospective brides and grooms under 20 years old at Kedaburapat Public Health Center, and the initial interview results showed that most of them did not understand how to delay pregnancy and had never received premarital counseling from health workers. This fact makes premarital counseling relevant because the research problem lies not only in the respondents' young age, but also in the limited information they possessed before entering marriage. The intervention delivered through the pre-test, face-to-face counseling, discussion, leaflets, and post-test demonstrates a systematic effort to change this initial situation. Thus, the data on premarital counseling directly connect field needs, the intervention design, and the research objective of increasing interest in delaying high-risk pregnancy among those under 20 years old.

Interest in delaying pregnancy as the second key term is clearly reflected in the pre-test and post-test data presented in the research findings. Before premarital health counseling was provided, 7 respondents, or 63.6%, were already in the high-interest category for delaying high-risk pregnancy, while 4 respondents, or 36.4%, were still in the low-interest category. After counseling was provided, all 11 respondents reached the high-interest category, and no respondents remained in the low-interest category. This change in distribution shows a shift in the category of interest from a varied initial condition to a condition in which all respondents were in the high category. The data also show that respondents who initially had high interest remained in a positive direction, while respondents who previously had low interest experienced improvement after the intervention. Thus, the findings on the aspect of interest in delaying pregnancy indicate that premarital counseling is associated with strengthening respondents' tendency to delay high-risk pregnancy.

Further explanation of interest in delaying pregnancy can be obtained from the change in average scores before and after counseling. The average interest score before counseling was 24.18, with a minimum score of 21, a maximum score of 27, and a standard deviation of 1.834. After premarital health counseling was provided, the average interest score increased to 41.45, with a minimum score of 39, a maximum score of 43, and a standard deviation of 1.368. The change in the minimum score from 21 to 39 indicates that even respondents with the lowest scores experienced a substantial increase after the intervention. The change in the maximum score from 27 to 43 also shows that the group with higher initial scores still experienced improvement after receiving counseling. The smaller standard deviation after counseling indicates that respondents' scores became more concentrated in the high-interest category. Thus, the score data strengthen the findings from the category distribution because the increase in interest is not only visible in percentages, but also in the magnitude of the mean score and the range of respondents' scores.

The relationship between the increase in interest in delaying pregnancy and the reality of the research problem shows that premarital counseling addresses respondents' need for information and consideration before making reproductive decisions after marriage. The initial research problem showed that prospective brides and grooms under 20 years old did not understand how to delay pregnancy, and some wished to have children immediately without considering health risks. After counseling, all respondents were in the high-interest category, indicating that the provision of structured information can strengthen respondents' awareness of the importance of delaying pregnancy. The increase in the average score from

24.18 to 41.45 also shows that the change was not merely categorical, but occurred at a more detailed level of interest scores. Thus, the research findings show that interest in delaying pregnancy is an important indicator for understanding early changes in the reproductive readiness of young prospective couples. This finding confirms that the problem of low understanding can be addressed through counseling that encourages a stronger interest in delaying pregnancy.

High-risk pregnancy as the third key term is reflected in the characteristics of respondents, all of whom belonged to the under-20 age group, which was the main target of this study. The characteristic data show that the respondents consisted of 4 individuals aged 16 years, or 36.4%; 1 individual aged 17 years, or 9.1%; 2 individuals aged 18 years, or 18.1%; and 4 individuals aged 19 years, or 36.4%. Based on occupation, most respondents were unemployed, namely 8 individuals, or 72.7%, while 3 individuals, or 27.3%, worked as traders. Based on the highest level of education completed, most respondents were junior high school graduates, namely 7 individuals, or 63.6%, followed by elementary school graduates, namely 3 individuals, or 27.3%, and senior high school graduates, namely 1 individual, or 9.1%. These data show that the research respondents were not only at a young reproductive age, but also had educational and occupational backgrounds that needed to be considered in the delivery of premarital counseling.

The explanation of respondents' characteristics shows that high-risk pregnancy in this study is not understood only from the aspect of age, but also from the context of social readiness and the capacity to receive health information. The dominance of respondents aged 16 and 19 years indicates that the study target was located at two important points: very young adolescence and the age approaching the threshold of 20 years. The majority of respondents who were unemployed indicates that most of them did not yet have economic independence, so pregnancy decisions after marriage could potentially be related to family support, partner support, and access to health services. The educational background, which was dominated by junior high school graduates, also explains why the counseling process in this study used easy-to-understand language, visual media, and leaflets as communication aids. This combination of young age, occupational status, and educational level required the counseling intervention to be delivered in a simple, communicative, and respondent-centered manner. Thus, respondents' characteristics show that the study target had conditions relevant to the issue of high-risk pregnancy and required an adaptive educational approach.

The relationship between high-risk pregnancy data and the research problem can be seen in the respondents' position as prospective

reproductive-age couples under 20 years old who were in the early phase of reproductive decision-making. The final project emphasizes that pregnancy under the age of 20 is a concern because it is related to the unpreparedness of adolescents' reproductive organs, psychology, and socioeconomic conditions. The respondents' characteristic data strengthen this context because all respondents were within the age range of 16–19 years, the majority were unemployed, and most had junior high school as their highest level of education. After counseling was conducted, all respondents reached the high-interest category in delaying high-risk pregnancy, while the average interest score increased from 24.18 to 41.45. The Wilcoxon test also showed a p-value of 0.003, or $p < 0.05$, meaning that there was a significant difference between interest before and after counseling. Thus, the findings of this study show that premarital health counseling is effective in increasing interest in delaying high-risk pregnancy among prospective reproductive-age couples under 20 years old.

DISCUSSION

The core finding of this study shows that premarital health counseling functions as an educational intervention capable of shifting respondents' interest from an uneven initial condition toward stronger readiness to delay high-risk pregnancy. At the initial measurement stage, some respondents already showed a positive tendency, but there was still a group that had not demonstrated strong interest in delaying pregnancy after marriage. After counseling was provided, all respondents moved into the high-interest category, and this increase was supported by the rise in the mean score from 24.18 to 41.45 and the Wilcoxon test result of $p = 0.003$. Analytically, this change indicates that the research problem does not merely lie in the absence of interest, but in the suboptimal strengthening of respondents' knowledge, risk awareness, and confidence in making safer reproductive decisions. These data answer the research objective because counseling was proven not only to differentiate conditions before and after the intervention, but also to show a consistent direction of change among all respondents. Thus, premarital counseling in this study can be understood as an initial transformation mechanism from knowledge toward more responsible reproductive interest.

The relationship between this study and previous research shows both continuity and contextual advantage. Pebrianti and Fajriah found that premarital health counseling influenced interest in delaying high-risk pregnancy among prospective reproductive-age couples under 20 years old, although the dominant change in their study moved from low interest to the moderate category (Pebrianti & Fajriah, 2022). Arisandi et al. also showed that health education for young prospective brides and grooms was associated with the decision to use contraception to delay pregnancy, indicating that

educational interventions are relevant in the context of preventing adolescent pregnancy (Arisandi et al., 2023; Suhendar & Halimi, 2023). Rahmanda et al. strengthened these findings by providing evidence that premarital health counseling was effective in improving the attitudes of prospective brides and grooms in preparing for a healthy pregnancy (Rahmanda et al., 2023). The strength of this study lies in its more specific target, namely prospective reproductive-age couples under 20 years old in the service area of Kedaburapat Public Health Center, and in the post-intervention outcome showing that all respondents reached the high-interest category. Thus, this study does not merely repeat evidence of counseling effectiveness, but demonstrates that a simple intervention in a primary health care facility can produce a strong change in interest among a group that is biologically and socially vulnerable.

Reflection on the findings of this study shows that the research objective has practical value because it is able to transform the abstract issue of "the risks of pregnancy at a young age" into a measurable indicator through changes in interest. The study does not stop at explaining that pregnancy under the age of 20 is risky, but examines whether young prospective couples can be directed to develop a stronger tendency to delay pregnancy after receiving counseling. The use of preconception services has been shown to be associated with changes in pre-pregnancy health behavior, including couples' behavior in reducing risk factors that may affect pregnancy (Du et al., 2021). In the adolescent context, the utilization of reproductive health services is also strongly influenced by knowledge, family support, communication, and access to services that meet the needs of young age groups (Sidamo et al., 2024). Therefore, the increased interest found in this study can be interpreted as evidence that counseling does not merely convey information, but also creates space for respondents to reassess their reproductive readiness. The main benefit of this study lies in its ability to show that promotive-preventive objectives can be achieved through measurable, simple, and accessible interventions within basic health services.

The implications of the findings point to the need to make premarital health counseling a routine part of public health center services, especially for prospective brides and grooms under 20 years old. The increase in interest after counseling shows that public health centers have a strategic opportunity to carry out prevention before pregnancy occurs, rather than only managing complications after pregnancy has begun. Studies on reproductive health interventions among young people show that reproductive health education, counseling, youth-friendly services, community support, and educational media can have positive impacts on contraceptive knowledge, service use, birth spacing, and the reduction of misconceptions about contraception. Literature on adolescent reproductive health communication also emphasizes

the importance of contraceptive needs assessment, pregnancy options counseling, and communication that is appropriate to adolescents' age and relational situation (Allison et al., 2025). Thus, the findings of this study are useful for designing premarital services that are not merely administrative, but also substantive in shaping reproductive decisions. The practical implication is that public health centers need to integrate premarital counseling with age screening, reproductive education, contraceptive planning, and post-counseling monitoring so that increased interest can develop into actual behavior in delaying pregnancy.

The findings of this study are significant because the intervention provided was aligned with the respondents' needs. The preliminary study showed that most prospective brides and grooms did not understand how to delay pregnancy, some wished to have children immediately without considering health risks, and all prospective brides and grooms interviewed had never received premarital counseling from health workers. When such a group receives structured information, an increase in interest becomes understandable because counseling fills the knowledge gap while clarifying health consequences that had not previously been considered. Respondents' characteristics also strengthen this explanation, as most had junior high school education and were unemployed, making simple, visual, and communicative materials more relevant than overly technical information delivery. Adolescent pregnancy itself is associated with maternal and neonatal risks such as preeclampsia, anemia, prematurity, low birth weight, and other complications that can be prevented through education, contraception, and community awareness (Maheshwari et al., 2022). In addition, open communication about reproductive health can increase adolescents' confidence in making safer decisions (Gatheru et al., 2024). Therefore, the findings occurred because counseling directly addressed respondents' cognitive, affective, and practical needs.

The action that needs to be taken based on the findings is to establish premarital health counseling as a structured, sustainable, and risk-based program at Kedaburapat Public Health Center. This program should begin with mapping prospective brides and grooms under 20 years old, measuring initial knowledge and interest, providing individual or couple counseling, supplying simple educational media, and conducting post-counseling evaluation to ensure that changes in interest do not stop at the level of statements. Comprehensive reproductive health education has been proven relevant for preventing adolescent pregnancy because it helps adolescents understand contraception, unintended pregnancy, and the consequences of reproductive health more systematically (Myat et al., 2024). The next action is to involve partners, families, the Office of Religious Affairs, and health cadres so that the decision to delay pregnancy is not only the responsibility of the

prospective mother, but becomes a family decision supported by the social environment. Public health centers also need to prepare adolescent-friendly contraceptive referral pathways, maintain service confidentiality, and provide follow-up counseling after marriage. Through these steps, the findings of this study can be transformed into a primary health care policy that is more preventive, responsive, and oriented toward reducing the risks of early-age pregnancy.

4. CONCLUSION

The most striking finding of this study is that premarital health counseling delivered in a simple, focused, and communicative manner was able to shift all respondents into the high-interest category for delaying high-risk pregnancy. This change is important because the research respondents were not in the ideal reproductive-age group, but were prospective reproductive-age couples under 20 years old who remain biologically, psychologically, and socially vulnerable in facing early pregnancy. Before counseling, some respondents still had low interest in delaying pregnancy, but after the intervention, all respondents demonstrated high interest. The increase in the mean score from 24.18 to 41.45 and the Wilcoxon test result with a p-value of 0.003 indicate that this change was not merely a numerical difference, but a sign that appropriate reproductive health information can reshape young prospective brides' and grooms' perspectives on the decision to become pregnant immediately after marriage. Thus, this study emphasizes that premarital counseling is not merely an administrative activity before marriage, but a health intervention capable of forming initial awareness, strengthening attitudes, and encouraging more responsible reproductive readiness.

The added value of this study lies in its ability to show that interest in delaying pregnancy can be positioned as an important indicator in the development of adolescent reproductive health studies and community midwifery. Theoretically, this study enriches the understanding that reproductive decisions among young prospective couples are not determined solely by biological age, but also by knowledge, attitudes, motivation, and access to counseling provided before pregnancy occurs. Thus, this study broadens the perspective on premarital counseling as a space for shaping interest, not merely for delivering information. Practically, this study contributes to public health centers, midwives, and health workers in designing more substantive premarital services, especially for prospective brides and grooms under 20 years old. The findings of this study may also serve as a basis for developing reproductive education programs that are more structured, sustainable, and risk-based. This means that premarital

counseling needs to be positioned as a strategy for preventing early pregnancy that is easy to implement in primary health care services, yet has an important impact on the readiness of young families.

The limitation of this study lies in the scope of respondents, which remains focused on prospective reproductive-age couples under 20 years old in the working area of Kedaburapat Public Health Center. Therefore, the findings are most strongly applicable to local contexts with similar social, educational, and health service characteristics. This limitation does not reduce the value of the study; rather, it opens opportunities for broader research development in the future. Future studies may involve a larger number of respondents, expand the research locations to several public health centers, and compare the effectiveness of premarital counseling across different age groups, educational levels, or socioeconomic statuses. In addition, further research may develop a design with a control group so that the effect of counseling can be compared more strongly with a group that does not receive the intervention. Future studies may also explore whether the increased interest after counseling truly continues into actual behavior, such as contraceptive use, delaying pregnancy after marriage, or increasing visits to reproductive health services. With this direction, this study can serve as an initial foundation for developing a premarital counseling model that is more comprehensive, measurable, and adaptive to the needs of young prospective couples.

REFERENCES

Adjie, J. M., Kurniawan, A. P., & Surya, R. (2022). Knowledge, attitude, and practice towards reproductive health issue of adolescents in rural area, Indonesia: A cross-sectional study. *The Open Public Health Journal*, *15*(1).

Allison, B. A., Glodowski, C. R., Smith, C., Mizelle, C., Leiva, H., Wright, S. T., Golin, C., Arora, K. S., & Schilling, S. (2025). Effectiveness of interventions to support person-centered contraceptive care for adolescents and young adults: a systematic review. *American Journal of Obstetrics and Gynecology*, *233*(2), 82–100.

Arisandi, E. L. P., Purnamasari, D., & Danti, R. R. (2023). PENDIDIKAN KESEHATAN PADA CALON PENGANTIN (CATIN) USIA MUDA MENDUKUNG PENGAMBILAN KEPUTUSAN ALAT KONTRASEPSI. *WOMB Midwifery Journal*, *2*(2), 35–41.

Ayudia, F., Erwani, E., & Ilmaskal, R. (2024). EXPLORING BARRIERS AND OPPORTUNITIES IN PRECONCEPTION EDUCATION: PERSPECTIVES FROM BRIDES, HEALTH WORKERS, AND RELIGIOUS OFFICIALS. *Jurnal Kesehatan Reproduksi*, *15*(2), 133–146.

Capili, B., & Anastasi, J. K. (2024). An introduction to types of quasi-experimental designs. *AJN The American Journal of Nursing*, *124*(11), 50–52.

Dalimunthe, M. A., Suhendar, A., Ritonga, A. R., Nasution, F. A., Nasution, L. N., & Batubara, P. E. O. (2024). Effectiveness of waste management site reduce, reuse, recycle program in improving ecological citizenship. *IOP Conference*

Series: Earth and Environmental Science, *1352*(1), 012040. https://doi.org/10.1088/1755-1315/1352/1/012040

Daniel, A. K., Casmir, E., Oluoch, L., Micheni, M., Kiptinness, C., Wald, A., Mugo, N. R., Roxby, A. C., & Ngure, K. (2023). " I was just concerned about getting pregnant": Attitudes toward pregnancy and contraceptive use among adolescent girls and young women in Thika, Kenya. *BMC Pregnancy and Childbirth*, *23*(1), 493.

Daulian, F., Hakimi, M., & Dasuki, D. (2025). THE IMPACT OF SEXUAL AND REPRODUCTIVE HEALTH INTERVENTIONS ON THE INTENTION OF CONTRACEPTIVE USE IN ADOLESCENTS IN WEST NUSA TENGGARA IN INDONESIA. *Inovasi Pembangunan: Jurnal Kelitbangan*, *13*(2).

Diabelková, J., Rimárová, K., Dorko, E., Urdzík, P., Houžvičková, A., & Argalášová, Ľ. (2023). Adolescent pregnancy outcomes and risk factors. *International Journal of Environmental Research and Public Health*, *20*(5), 4113.

Du, L., La, X., Zhu, L., Jiang, H., Xu, B., Chen, A., & Li, M. (2021). Utilization of preconception care and its impacts on health behavior changes among expectant couples in Shanghai, China. *BMC Pregnancy and Childbirth*, *21*(1), 491.

Gatheru, P. M., Wao, H., Alamdo, A., Kwarteng, P. G., Kwashie, M., Kabiru, C. W., Ogum, D., Torpey, K., & Manu, A. (2024). The role of parent-adolescent communication interventions in improving sexual and reproductive health outcomes in sub-Saharan Africa: protocol for a systematic review and meta-analysis. *Reproductive Health*, *21*(1), 173.

Hinoveanu, D., Enatescu, I., Dumitru, C., Mazilu, P. O., Popa, D., Popa, C. A., Badea, M.-A., Marc, F., & Gluhovschi, A. (2025). Adolescent mental health, contraceptive knowledge, and teen pregnancy risk: A systematic review. *Healthcare*, *13*(21), 2660.

Iffah, U., Safaringga, M., Ridwan, L. H., & Maharani, P. (2024). The Influence of Media Leaflet on Increasing Knowledge of Reproductive Health of Brides-to-Be in Padang City. *Jurnal Sosial Teknologi*, *4*(5), 253–258.

Lassi, Z. S., Rahim, K. A., Stavropoulos, A. M., Ryan, L. M., Tyagi, J., Adewale, B., Kurji, J., Bhaumik, S., Meherali, S., & Ali, M. (2024). Use of contraceptives, empowerment and agency of adolescent girls and young women: a systematic review and meta-analysis. *BMJ Sexual & Reproductive Health*, *50*(3), 195–211.

Maheshwari, M. V, Khalid, N., Patel, P. D., Alghareeb, R., & Hussain, A. (2022). Maternal and neonatal outcomes of adolescent pregnancy: a narrative review. *Cureus*, *14*(6).

Mohammadian, M., Khachatryan, L. G., Vadiyan, F. V, Maleki, M., Fatahian, F., & Mohammadian-Hafshejani, A. (2025). RETRACTED: The association between maternal tobacco smoking during pregnancy and the risk of attention-deficit/hyperactivity disorder (ADHD) in offspring: A systematic review and meta-analysis. *PloS One*, *20*(2), e0317112.

Myat, S. M., Pattanittum, P., Sothornwit, J., Ngamjarus, C., Rattanakanokchai, S., Show, K. L., Jampathong, N., & Lumbiganon, P. (2024). School-based comprehensive sexuality education for prevention of adolescent pregnancy: a scoping review. *BMC Women's Health*, *24*(1), 137.

Nurdiawan, W., Koto, A. R. H., Zulvayanti, Z., Atik, N., Susiarno, H., Hidayat, D.,

Pusianawati, D., & Zulfa, F. (2021). *Comparison of Maternal and Neonatal Outcomes in Teenage and Reproductive Age Pregnancy at Tertiary Hospital in West Java, Indonesia. Open-Access Maced J Med Sci. 2021 Oct 08; 9 (B): 1080-1084.*

Paramasivam, G., Rao, I. R., & Prabhu, M. A. (2024). Normality testing in statistics: what clinician–researchers should know. *Heart Failure Journal of India*, *2*(1), 55–60.

Pebrianti, R., & Fajriah, A. S. (2022). Analysis of Provision of Premarriage Health Counseling on the Interest of Delaying Risk Pregnancy in Prospective Couples Fertilizer Age Under 20 Years Old. *Journal for Quality in Women's Health*, *5*(2), 195–200.

Rahmah, N., & Kurniawati, W. (2021). Relationship between marriage readiness and pregnancy planning among prospective brides. *Journal of Public Health Research*, *10*(1_suppl), jphr-2021.

Rahmanda, J. M. F. (n.d.). Maryanah, & Mulyati, S.(2023). The Effectiveness of Premarital Health Counseling on the Attitude of Prospective Brides in Preparing for a Healthy Pregnancy. *International Journal of Science and Society*, *5*(4), 551–559.

Ranganathan, P., & Caduff, C. (2023). Designing and validating a research questionnaire-Part 1. *Perspectives in Clinical Research*, *14*(3), 152–155.

Ritonga, A. R., Dalimunthe, M. A., & Januarini, E. (2024). Utilization Of Digital Media in Improving Student Literacy (Case Study at SDN 10 Rantau Selatan). *CONTENT: Journal of Communication Studies*, *2*(2), 1–8.

Ritonga, A. R., Thamrin, M. H., & Dalimunthe, M. A. (2025). Developing a Sexual Harassment Prevention Model through the'Courageous Campus' Campaign: A Counseling-Based Approach in Higher Education in Medan City. *Educational Process: International Journal*, *14*, e2025076.

Rustandi, A. M., Suhendar, A., & Dalimunthe, M. A. (2024). Polygamy in the Lens of Generation Z: A Communication Psychology Perspective. *KomunikA*, *20*(01), 18–25.

Saraan, M. I. K., Rambe, R., Syam, A. M., Suhendar, A., Dalimunthe, M. A., & Sinaga, R. P. K. (2024). The application of fertilizer subsidies in the context of coffee plantations in Pollung Sub-District, Humbang Hasundutan District, North Sumatra Province. *IOP Conference Series: Earth and Environmental Science*, *1352*(1), 12012.

Sidamo, N. B., Abebe Kerbo, A., Gidebo, K. D., & Wado, Y. D. (2024). Adolescent utilization of sexual and reproductive health services in Gamo Zone, Southern Ethiopia. Insights from multilevel and latent class analysis. *Frontiers in Reproductive Health*, *6*, 1356969.

Sidibé, S., Kolié, D., Grovogui, F. M., Kourouma, K., Camara, B. S., Delamou, A., & Kouanda, S. (2022). Knowledge, attitudes, and practices of health providers regarding access to and use of contraceptive methods among adolescents and youth in urban Guinea. *Frontiers in Public Health*, *10*, 953806.

Suhendar, A., & Halimi, M. (2023). The Role of Anti-Bullying Change Agents in Shaping Civic Dispositions to Tackle Bullying Behavior. *Proceeding International Conference on Religion, Science and Education*, *2*, 903–913.

Suhendar, A., Syam, A. M., & Ritonga, A. R. (2023). Efektivitas Instagram Sebagai Ruang Motivasi Hijrah Mahasiswa IAIN Lhokseumawe. *KomunikA*, *19*(02), 12–

20.
Ti, A., Soin, K., Rahman, T., Dam, A., & Yeh, P. T. (2022). Contraceptive values and preferences of adolescents and young adults: a systematic review. *Contraception*, *111*, 22–31.
Valentelyte, G., Keegan, C., & Sorensen, J. (2022). A comparison of four quasi-experimental methods: an analysis of the introduction of activity-based funding in Ireland. *BMC Health Services Research*, *22*(1), 1311.