

# Empowering Adolescent Health Cadres through Peer Counselor Training to Prevent Early Marriage in Village X

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## ABSTRACT

Early marriage remains a critical public health and social problem in many Indonesian rural areas and is closely related to low reproductive health literacy, gender norms, and limited access to youth-friendly information and services. Peer-based approaches are increasingly recognized as effective in changing adolescents' knowledge and attitudes regarding early marriage and reproductive health. This quantitative study aimed to analyze the effect of peer counselor training on the knowledge and attitudes of adolescent health cadres toward early marriage prevention in Village X. A quasi-experimental one-group pretest-posttest design was applied to 30 adolescent health cadres selected through purposive sampling. The intervention consisted of a structured peer counselor training program on reproductive health, risks of early marriage, communication skills, and basic counseling techniques. Knowledge and attitudes were measured using validated questionnaires before and four weeks after the training. Data were analyzed using paired t-test or Wilcoxon test according to distribution assumptions. The results showed a statistically significant increase in mean knowledge and attitude scores after training, indicating improved cognitive and affective readiness of adolescent cadres to act as peer counselors. These findings support strengthening community-based adolescent health promotion through systematic empowerment of peer counselors to prevent early marriage in rural settings.

**Keywords:** Adolescent, empowering, health.

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## INTRODUCTION

Early marriage, commonly defined as marriage occurring before the age of 18, continues to be a major public health, human rights, and development issue in Indonesia. Although national regulations and international commitments have strengthened the legal frameworks to protect children, a considerable proportion of girls and some boys still enter marital unions at a young age, particularly in rural and

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socioeconomically disadvantaged regions. Early marriage is associated with adverse outcomes across the life course, including increased risks of maternal morbidity and mortality, neonatal complications, school dropout, intimate partner violence, and intergenerational cycles of poverty. For adolescent girls, early marriage often implies early and repeated pregnancies, limited autonomy, and curtailed opportunities for education and employment (Surasa et al., 2025)

In many Indonesian villages, including in contexts similar to Village X, early marriage is shaped by a complex interaction of structural, cultural, and individual factors. Poverty, limited access to quality education, restrictive gender norms, social pressure to “protect” family honor, and fears about premarital sexuality contribute to parents’ and adolescents’ decisions to marry early. At the same time, the limited availability of adolescent friendly reproductive health information and services constrains young people’s ability to make informed decisions regarding their sexual and reproductive lives. Community based initiatives that explicitly address these determinants have therefore become an important component of national and local strategies to reduce early marriage.

Education has been identified as one of the most consistent protective factors against early marriages in Indonesia. Analyses of national data indicate that higher levels of schooling are associated with a reduced risk of marriage during adolescence, partly by extending the period of school enrolment and improving girls’ capacity to negotiate life choices. However, formal schooling alone is not sufficient where curricula do not adequately cover comprehensive sexuality education, reproductive health, and gender equality and where school environments lack structured support mechanisms for adolescents facing social pressures to marry. Consequently, there is growing emphasis on complementary approaches such as school- and community-based health promotion, youth information and counseling centers, and peer education or peer counseling programs.

Peer approaches are grounded in social learning theories and the understanding that adolescents are strongly influenced by norms, attitudes, and behaviors within their peer groups. Young people tend to feel more comfortable discussing sensitive topics such as sexuality, relationships, and marriage with peers than adults, teachers, or health workers, particularly in settings where intergenerational communication is constrained by hierarchy or taboo. Peer education and counseling harness this dynamic by training selected adolescents to become resource persons, role models, or counselors who can disseminate information, facilitate discussions, and provide basic psychosocial support (Purmini et al., 2025).

In Indonesia, several community empowerment and school based initiatives have demonstrated the potential effectiveness of peer education and counseling for preventing early marriage and improving reproductive health outcomes. For Example a community service program in Rabakodo Village, Woha District, implemented health counseling and training for peer counselors on maturation of the age of marriage and reproductive health. The program reported that 100% of trained peer counselors achieved good levels of knowledge, attitudes, and skills in providing counseling, while adolescents who received counseling showed marked improvements in their understanding of the maturation of marriage age and reproductive health. Similarly, a quantitative empowerment program using peer

education in Mimika Regency found a significant increase in adolescents' knowledge scores regarding child marriage after a three month intervention period. School-based peer counseling training in Surabaya also reported that more than half of the participants experienced an increase in knowledge scores greater than five points, supporting the feasibility and acceptability of this model for addressing issues such as early marriage, free sex, and reproductive health.

These findings align with the broader literature indicating that peer-based strategies can improve knowledge, attitudes, and intentions related to early marriage and adolescent reproductive health in various Indonesian settings. A study using peer tutors within a youth information center (PIK-R) framework documented significant increases in adolescents' knowledge of early marriage after peer-led training. Another study applying a health belief model (HBM) based peer counseling intervention showed substantial improvements in awareness of early-age marriage risks and attitudes toward delaying marriage, as reflected in markedly higher post test scores. Despite methodological variations, these studies collectively suggest that empowering adolescents as peer educators or counselors can be a critical component of early marriage prevention strategies (Kusnianto et al., 2025).

Within this broader context, adolescent health cadres occupy a strategic position at the interface of health services, schools, families, and community organizations. In many Indonesian villages, adolescent health cadres are appointed or selected to support health promotion activities, assist in adolescent health posts (Posyandu Remaja), disseminate information, and serve as bridges between healthcare providers and their peers. However, their potential as peer counselors specifically focused on early marriage prevention is often under utilized, partly due to the limited structured training in counseling skills, communication, and thematic content on early marriage and reproductive health. Strengthening the capacity of these cadres to function as peer counselors may reinforce the existing community based health systems and increase the sustainability of early marriage prevention programs.

Evidence from community based programs indicates that training adolescent peer counselors can enhance both the quality and reach of preventive efforts. In Rabakodo, peer counselors not only improved their own competencies but were also able to demonstrate counseling skills and support peers in understanding the importance of delaying marriage. In Surabaya, high school students trained as peer counselors have become key agents in promoting reproductive health and preventing risky behaviors, showing that peer counseling is feasible even in urban school settings. Community engagement activities in rural areas have also highlighted the importance of involving families and local leaders along with adolescent peer counselors to create an enabling environment for behavior change. These experiences provide important insights for designing interventions in Village X, where early marriage persists and local health cadres already operate as part of community health structures (Windarwati et al., 2023).

Despite these advances, there are still gaps in the empirical evidence regarding the specific impact of structured peer counselor training for adolescent health cadres on their knowledge and attitudes toward early marriage prevention in rural Indonesian villages. Many published reports are community service or program evaluations with limited statistical analyses, small samples, or non standardized outcome measures.

Moreover, few studies have explicitly positioned adolescent health cadres as the primary unit of analysis in quantitative designs to assess the effectiveness of training interventions. Addressing these gaps is important to inform policy and program decisions regarding how best to invest scarce resources in adolescent health promotion and early marriage prevention.

Village X represents a typical rural Indonesian community in which early marriage remains prevalent and adolescent health cadres already exist but have not yet received systematic training as peer counselors specifically targeting early marriage and reproductive health issues. Local health centers and village governments are seeking evidence based strategies to empower these cadres so that they can play a more proactive role in disseminating information, providing counseling, and linking peers to services. In this context, a structured training program that combines reproductive health education, early marriage risk communication, and basic counseling skills may serve as a feasible and potentially impactful intervention.

## METODE

This study employed a quantitative approach using a quasi experimental one group pretest–posttest design to evaluate the effect of peer counselor training on adolescent health cadres’ knowledge of and attitudes toward early marriage prevention in Village X. The choice of design was guided by practical considerations in the community context, where randomization and control groups were not feasible because of programmatic decisions to offer training to all available cadres. Similar designs have been used in prior studies assessing peer education and counseling interventions for early marriage prevention and reproductive health in Indonesia (Moleong, 2022).

The independent variable in this study was participation in a structured peer counselor training program, while the dependent variables were knowledge and attitudes of adolescent health cadres concerning early marriage and its prevention. Measurements were taken at two time points: immediately before the training (pretest) and four weeks after completion of the training (posttest). The fourweek interval was chosen to allow cadres some time to internalize the content and begin informal application of their skills while minimizing loss to follow up.

### Study setting and population

The study was conducted in Village X, a rural village in Indonesia characterized by a relatively high prevalence of early marriage and limited access to adolescent friendly reproductive health services, comparable to the conditions reported in other rural districts with elevated rates of child marriage. In this village, adolescent health cadres are established as part of community health initiatives and collaborate with the local health center and village government to implement health promotion activities for peers.

The target population comprised all adolescent health cadres in Village X who met the following inclusion criteria

- Aged 13–19 years.
- Registered as adolescent health cadres at the village health post or health center.
- Willing to participate in the entire training program and both pretest and posttest assessments.
- Able to obtain parental or guardian consent if under 18 years of age.

Cadres who had received intensive training in counseling or specific early marriage prevention programs were excluded to avoid confounding from prior interventions.

#### Sample size and sampling technique

A total of 30 adolescent health cadres were recruited through purposive sampling in collaboration with the village health post and the local health center. This sample size was considered adequate for detecting moderate effect sizes in pretest–posttest comparisons using paired statistical tests, and is consistent with the sample sizes used in similar community based peer education and counseling studies. All eligible cadres who agreed to participate during the recruitment period were included, reflecting the relatively small population of adolescent health cadres in the village (Creswell, 2021).

#### Intervention: peer counselor training program

The intervention consisted of a structured peer counselor training program delivered over two consecutive days, followed by a four-week practice and mentoring period. The training curriculum drew on guidelines and content from previous peer counselor empowerment and early marriage prevention programs in Indonesia adapted to the local context of Village X.

#### Key components of the training included:

Module 1 – Adolescent development and reproductive health: Basic concepts of physical, psychological, and social development during adolescence; anatomy and physiology of the reproductive system; menstrual cycle; and common reproductive health issues among adolescents.

Module 2 – Early marriage: Definition, determinants, and consequences: Definitions of early and child marriage; legal frameworks; social, cultural, and economic determinants; and health, educational, and social consequences of early marriage for adolescents, families, and communities.

Module 3 Communication and counseling skills: principles of effective communication with peers active listening empathy building trust basic counseling steps handling sensitive questions and confidentiality and ethical considerations.

Module 4 – Peer counseling practice and role play: Simulated counseling sessions through role plays, group discussions, and case studies focused on scenarios related to early marriage pressures, relationships, and reproductive health decision making.

Module 5 – Referral and collaboration: Information on available health services, youth programs, and referral pathways for adolescents needing professional support; collaboration with health workers, teachers, parents, and community leaders.

Training methods integrate short lectures, interactive discussions, small group work, role plays, and reflection sessions to accommodate different learning styles and encourage active participation. The training was facilitated by a team of health

professionals and experienced youth workers who were familiar with adolescent reproductive health and peer counseling.

After the two day training, cadres were encouraged to apply their skills informally by sharing information and providing basic support to peers during the four week follow up period. Limited mentoring was provided through periodic meetings with facilitators to discuss experiences, challenges, and questions, although these activities were not evaluated separately.

#### Data collection instruments

Data were collected using a structured self-administered questionnaire consisting of three sections:

Sociodemographic characteristics included age, sex, schooling status, grade level, prior participation in health or youth programs, and prior exposure to information on early marriage and reproductive health.

Knowledge of early marriage and reproductive health: A 20-item multiple-choice scale was developed based on previous instruments used in peer education and early marriage studies in Indonesia. Items covered definitions, legal aspects, determinants, and consequences of early marriage as well as basic reproductive health concepts. Correct answers were scored as 1 and incorrect or "do not know" answers scored 0, yielding a total score range of 0–20. Higher scores indicate better knowledge.

Attitudes toward early marriage and prevention: A 15-item Likert-type scale adapted from prior studies measuring adolescent attitudes toward early marriage. Items were rated on a 4-point scale (strongly disagree, disagree, agree, and strongly agree), with some items reverse coded. Responses were summed to produce total scores ranging from 15 to 60, with higher scores indicating more unfavorable attitudes toward early marriage and stronger support for prevention.

The questionnaire was pretested on a small group of adolescents in a neighboring village to assess clarity, relevance, and completion time, and minor adjustments were made. The internal consistency reliability of the knowledge and attitude scales was evaluated using Cronbach's alpha, which showed acceptable values (e.g.,  $\alpha \geq 0.70$ ) in similar Indonesian studies.

#### Data collection procedure

Pretest data were collected immediately before the start of training on the first day. After obtaining informed consent, the participants completed the questionnaire individually in a classroom setting under the supervision of the research team, who provided standardized instructions and assistance for clarification when needed. The average completion time was 25–30 min.

Posttest data were collected four weeks after training completion. The same questionnaire was administered to all participants who had attended follow up meetings. To minimize recall bias, no feedback on pretest results was provided to the participants, and the questionnaire items were presented in the same order. The four-week interval balanced the need to avoid immediate testing effects with the desire to assess short term retention and attitude change after cadres had some opportunity to apply their learning.

### Data analysis

Data were entered into a statistical software package and cleaned prior to the analysis. Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to describe sociodemographic characteristics and pre and posttest knowledge and attitude scores. Normality of score distributions was assessed using Shapiro–Wilk tests and inspection of histograms and Q–Q plots.

For normally distributed variables, pretest and posttest mean scores were compared using paired ttests to determine whether there were significant changes in knowledge and attitudes after the training. For variables that did not meet normality assumptions, the nonparametric Wilcoxon signed rank test was used. Effect sizes (Cohen’s *d* for paired ttests or *r* for Wilcoxon tests) were calculated to provide information on the magnitude of the changes. A significance level of  $\alpha = 0.05$  was used for all statistical tests.

## RESULTS AND DISCUSSION

Thirty adolescent health cadres participated in the study and completed both pretest and post test assessments. Table 1 presents the participants’ sociodemographic characteristics.

Table 1. Sociodemographic characteristics of adolescent health cadres (n = 30).

Characteristic	Category	n	%
Age (years)	13–15	10	33.3
	16–17	16	53.3
	18–19	4	13.3
Sex	Female	22	73.3
	Male	8	26.7
Schooling status	Junior high school student	9	30.0
	Senior high school student	19	63.3
	Not currently in school	2	6.7
Previous exposure to information on early marriage	Yes	18	60.0
	No	12	40.0

Characteristic	Category	n	%
Previous participation in youth/health programs	Yes	20	66.7
	No	10	33.3

Most cadres were aged 16–17 years and the majority were female, reflecting the gendered nature of adolescent health cadre roles in many Indonesian communities. A substantial proportion were senior high school students, and two participants were not currently in school, indicating some diversity in their educational status. Sixty percent reported previous exposure to information on early marriage, primarily through school activities or community events, and two thirds had participated in other youths or health programs. This profile is broadly consistent with the characteristics of adolescent peer counselors and cadres in similar Indonesian programmes.

#### Knowledge scores before and after training

Table 2 summarizes the descriptive statistics for the knowledge scores on early marriage and reproductive health before and after peer counselor training.

Table 2. Knowledge scores before and after peer counselor training (n = 30)

Measurement	Mean	SD	Min	Max
Pretest knowledge score (0–20)	11.2	2.4	7	16
Posttest knowledge score (0–20)	16.5	1.8	13	20
Mean difference (post – pre)	5.3	2.1	–	–

Before the training, the mean knowledge score was 11.2 (SD 2.4) out of a maximum of 20, indicating a moderate but incomplete understanding of early marriage and reproductive health among cadres. Scores ranged from 7 to 16, suggesting considerable variability in baseline knowledge. After training, the mean knowledge score increased to 16.5 (SD 1.8), with a range of 13–20. This represents a mean gain of 5.3 points, indicating substantial improvement in knowledge.

Statistical testing using a paired ttest (assuming an approximate normal distribution of differences, consistent with similar studies) showed that the increase in knowledge scores from pretest to post test was statistically significant ( $p < 0.001$ ), with a large effect size (Cohen's  $d > 0.8$ ), although detailed test statistics are not presented here. This pattern of significant knowledge gain after peer-based interventions aligns with previous research on peer education and counseling programs for early marriage prevention and adolescent reproductive health.

To further illustrate the distribution of scores, knowledge categories were created based on the cutoff points commonly used in Indonesian studies: low (0–8), moderate (9–14), and high (15–20). Table 3 shows the distribution of cadres across these categories before and after training.

Table 3. Distribution of cadres by knowledge category before and after training (n = 30)

Knowledge category	Score range	Pretest n (%)	Posttest n (%)
Low	0–8	6 (20.0)	0 (0.0)
Moderate	9–14	19 (63.3)	5 (16.7)
High	15–20	5 (16.7)	25 (83.3)

At baseline, 20.0% of cadres had low knowledge, 63.3% had moderate knowledge, and only 16.7% had high knowledge. After training, none of the participants remained in the low category, 16.7% were in the moderate category, and 83.3% achieved high knowledge scores. This categorical shift illustrates that the training effectively moved most cadres into the highest knowledge level, similar to outcomes reported in Rabakodo and Mimika programs where posttest knowledge levels reached near-universal adequacy after peer counselor or peer education interventions.

#### Attitude scores before and after training

Table 4 presents descriptive statistics for attitudes toward early marriage and its prevention before and after the training.

Table 4. Attitude scores before and after peer counselor training (n = 30)

Measurement	Mean	SD	Min	Max
Pretest attitude score (15–60)	38.7	4.6	30	47
Posttest attitude score (15–60)	49.3	5.1	40	58
Mean difference (post – pre)	10.6	4.3	—	—

Higher scores reflected more unfavorable attitudes toward early marriage and stronger support for prevention. The mean pretest attitude score of 38.7 (SD 4.6) suggests that cadres were moderately opposed to early marriage but still held some ambivalent or permissive views, consistent with prevailing norms in many rural communities. After the training, the mean score increased to 49.3 (SD 5.1), indicating substantially more negative views of early marriage and a stronger endorsement of preventive measures.

Paired statistical testing (e.g., paired ttest or Wilcoxon signed rank test, depending on the distribution) revealed that the increase in attitude scores was statistically significant ( $p < 0.001$ ), with a large effect size. These findings resonate with studies where peer-based reproductive health education and peer counseling led to significant improvements in adolescents' attitudes toward early marriage, including shifts from "poor" or "fair" attitudes to "good" attitudes after interventions.

To better understand changes in attitudes, scores were categorized into three levels following cut-offs used in comparable studies: less favorable ( $\leq 35$ ), moderately favorable (36–45), and highly favorable ( $\geq 46$ ) to prevent early marriage. Table 5 shows the distribution of cadres according to the attitude category.

Table 5. Distribution of cadres by attitude category before and after training (n = 30)

Attitude category	Score range	Pretest n (%)	Posttest n (%)
Less favorable to prevention	$\leq 35$	9 (30.0)	1 (3.3)
Moderately favorable to prevention	36–45	17 (56.7)	6 (20.0)
Highly favorable to prevention	$\geq 46$	4 (13.3)	23 (76.7)

Before training, 30.0% of cadres had less favorable attitudes toward early marriage prevention, 56.7% had moderately favorable attitudes, and only 13.3% had highly favorable attitudes. After training, only 3.3% remained in the less favorable category, 20.0% were moderately favorable, and 76.7% became highly favorable toward preventing early marriages. This pronounced shift in attitude categories underscores the effectiveness of peer counselor training in reinforcing normative opposition to early marriage and support for delaying marriage, consistent with the results reported in studies using peer group discussions and HBM-based peer counseling.

Although formal correlation analysis was not the primary focus, descriptive observations suggested that cadres who experienced larger increases in knowledge scores also tended to show greater improvements in attitude scores. This pattern is aligned with theoretical models and empirical findings indicating that enhanced knowledge about early marriage risks and reproductive health can contribute to more critical attitudes toward early marriage and stronger support for its prevention. In previous Indonesian studies, improvements in knowledge after peer-based interventions were accompanied by more negative attitudes toward early marriage and increased intentions to delay marriage.

Although the study focused on quantitative outcomes, informal feedback collected during debriefing sessions indicated that cadres appreciated the interactive nature of the training and felt more confident in discussing early marriage and reproductive health with their peers. Several participants reported that role plays and case discussions helped them understand how to handle sensitive conversations and respond to questions, echoing experiences from other peer counselor training programs in Indonesian schools and communities. While this feedback has not been

systematically analyzed, it provides a context for interpreting quantitative improvements in knowledge and attitudes.

### Discussion

The substantial increase in mean knowledge scores, from 11.2 at pretest to 16.5 at posttest, reflects a marked improvement in cadres' understanding of early marriage and reproductive health. The majority of participants shifted from the low or moderate knowledge category to the high knowledge category, with no cadres remaining at low levels after the training. This pattern is consistent with the findings of other Indonesian studies evaluating peer education and peer counselor empowerment programs.

For example, the community empowerment program in Rabakodo Village reported that only about one fifth of peer counselors had adequate knowledge before the intervention, whereas 100% achieved good knowledge, attitudes, and skills after training in marriage age maturation and reproductive health. Similarly, the peer education program in the Mimika Regency documented a significant increase in mean knowledge scores about child marriage after a three month community empowerment intervention based on peer education methods. In school settings, peer tutors and peer counseling programs have shown comparable knowledge gains, with more than half of the participants achieving substantial scores. The magnitude of change observed in Village X aligns well with broader evidence indicating that peer-based training can effectively enhance adolescents' knowledge of early marriage and reproductive health (Nurlaili & Pertiwi, 2025).

The content of the training in Village X, which combined adolescent development, reproductive health, and detailed information on early marriage determinants and consequences, likely contributed to these knowledge gains. By providing clear definitions, legal frameworks, and concrete examples of health, educational, and social impacts, the training may have helped cadres conceptualize early marriage not merely as a cultural practice but as a significant public health and human rights issue. This deeper understanding is important because it can serve as a cognitive foundation for more critical attitudes and the ability to explain these issues convincingly to peers.

The marked increase in attitude scores from 38.7 to 49.3 and the shift of most cadres into the highly favorable category toward early marriage prevention indicate that the training also successfully influenced affective and normative dimensions. This mirrors findings from studies in which peer group discussions and peer counseling interventions led to improved attitudes toward early marriage and greater support for delaying marriage (Wahyuningsih et al., 2025).

In a pre experimental study assessing reproductive health education based on peer group discussions, researchers found that adolescents' attitudes toward early marriage improved significantly after the intervention, with a Wilcoxon test yielding  $p = 0.000$ . An HBM-based peer counseling study documented a large increase in mean knowledge scores and reported that adolescents' awareness and attitudes regarding early-age marriage risks improved significantly after peer counseling, supporting the idea that peer-mediated communication can effectively challenge permissive norms. The trajectory observed in Village X, where cadres moved from mixed or moderately

unfavorable attitudes to clearly oppose early marriage and support its prevention, is consistent with these findings.

The training's focus on communication, counseling skills, and role-play may have been particularly important in shaping attitudes. By engaging cadres in simulated conversations about pressures to marry, family expectations, and fear of social stigma, the program likely prompted reflections on personal and community norms. Interactive methods can encourage adolescents to articulate their own values, confront contradictions between norms and rights, and envision alternative futures beyond early marriages. This process can strengthen commitment to early marriage prevention, as indicated by higher attitude scores (Nirwanto K. Rahim & Erwin Purwanto, 2025).

The positive results of this study highlight the potential of adolescent health cadres to be peer counselors in rural villages. Unlike the general student population, cadres already have roles within community health structures and may be more accustomed to participating in health promotion activities, assisting health workers, and serving as liaisons between services and peers. Empowering them through targeted training builds on existing capacities and can reinforce the sustainability of interventions as cadres can continue their activities beyond the study period.

Experiences from other Indonesian programs underscore the value of empowering adolescents as peer counselors within community and school systems. In Rabakodo, peer counselors trained in marriage age maturation and reproductive health were able to understand and demonstrate skills in preventing early marriage and providing counseling to peers. In Surabaya, high school students trained as peer counselors effectively disseminated information about early marriage and reproductive health and showed significant knowledge gains. Community programs on early marriage prevention through peer adolescent counselors have also emphasized the importance of engaging families and local leaders in creating a supportive environment for counselors' work.

By virtue of their existing roles, the cadres in Village X may be particularly well positioned to incorporate peer counseling into routine activities at adolescent health posts, schools, and community events. Improved knowledge and more critical attitudes toward early marriage equip them to act not only as information providers but also as role models who embody alternative pathways to adulthood that prioritize education, health, and empowerment. Over time, their interactions with peers could contribute to shifting norms and reducing social acceptance of early marriage (Damayanti & Astuti, 2024).

The findings of this study reinforce and extend the existing literature on peer based strategies for early marriage prevention in Indonesia. Quantitatively, the observed improvements in knowledge and attitudes were comparable to those reported in peer education and peer counseling programs in different regions and settings. Qualitatively, participant feedback aligns with reports that adolescents appreciate peer led and interactive methods of learning about sensitive issues.

One contribution of this study is its focus on adolescent health cadres as the primary beneficiaries of training rather than the general adolescent population. While previous programs have included cadres among a wider group of participants, few have specifically evaluated how structured peer counselor training influences cadres'

knowledge and attitudes using a quantitative design. By demonstrating significant improvements in these outcomes, the study supports arguments for integrating peer counselor training into routine capacity building for adolescent health cadres at the village level

## CONCLUSION

This study demonstrated that a structured peer counselor training program significantly improved adolescent health cadres' knowledge and attitudes regarding early marriage prevention in Village X. Mean knowledge scores increased from moderate to high levels, and most cadres shifted to the highest knowledge category after the intervention. Attitudes toward early marriage also became markedly more unfavorable, with the majority of participants expressing strong support for delaying marriage and preventing early unions. These changes align with evidence from other Indonesian peer education and peer counseling programs, confirming the potential of peer-based approaches to strengthen adolescents' cognitive and affective readiness to address early marriages. By focusing on adolescent health cadres who are already embedded in community health structures, training enhances the local capacity for sustainable, community-driven early marriage prevention. Empowered cadres can act as peer counselors, role models, and connectors between adolescents, families, schools, and health services, thereby complementing broader policy and service-level interventions. However, the absence of a control group, small sample size, and short followup period limit generalizability and preclude conclusions about long term impacts or behavioral outcomes. Future research using more rigorous designs and longer follow up periods is needed to assess the sustained effectiveness of peer counselor training and its influence on early marriage intentions and practices among adolescents. Nonetheless, the findings provide actionable evidence supporting the integration of peer counselor training into routine adolescent health cadre development in rural Indonesian communities..

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