

## THE EFFECTIVENESS OF PEER EDUCATOR PROGRAMS ON ADOLESCENT ATTITUDES IN PREVENTING UNWANTED PREGNANCY

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### Abstract

Unwanted pregnancy (UP) among adolescents has been a serious issue that affected physical, psychological, and social health. One effective educational approach to raise adolescent awareness on pregnancy prevention was through peer educator programs. This study aimed to determine the effectiveness of peer educator programs in changing adolescent attitudes toward preventing unwanted pregnancy. This research used a quasi-experimental method with a pretest-posttest control group design. The study was conducted at SMA Negeri 2 Muara Badak from January to March 2025. The sample consisted of 60 eleventh-grade students selected using purposive sampling and divided equally into an intervention group and a control group (30 each). The intervention group received peer educator-led education over three sessions, while the control group received no intervention. The research instrument was a validated and reliable closed-ended questionnaire consisting of 10 Likert-scale items (1–5) assessing adolescent attitudes. Data were collected before and after the intervention and analyzed using paired t-test and independent t-test with SPSS. There was a significant increase in attitude scores in the intervention group from  $30.1 \pm 4.2$  to  $39.2 \pm 3.8$  ( $p = 0.000$ ), while the control group showed no significant change, increasing only from  $30.6 \pm 4.0$  to  $31.2 \pm 4.1$  ( $p = 0.071$ ). The comparison of posttest scores between groups also showed a significant difference ( $p = 0.001$ ). The peer educator program proved effective in improving adolescent attitudes toward unwanted pregnancy prevention. Peer-based interventions are recommended as a strategic method in adolescent reproductive health education.

**Keywords:** Peer Educator, Adolescent Attitude, Unwanted Pregnancy, Reproductive Health

### 1. Introduction

Unwanted pregnancy among adolescents had been a global problem with serious physical, psychological, and social implications. Adolescents who experienced pregnancy without planning were at risk of pregnancy complications, school dropout, social stigma, and psychological disorders. According to WHO (2021), approximately 16 million adolescent girls aged 15–19 years gave birth every year, with the majority occurring in developing countries including Indonesia. Data from BKKBN (2022) indicated that the rate of unwanted pregnancies among Indonesian adolescents remained high and required urgent attention.

This situation was supported by UNICEF (2022), which reported that Indonesian adolescents still faced many challenges in accessing adolescent-friendly reproductive health information and services. The Ministry of Health (2023) stated that the lack of age-appropriate education contributed to this issue.

One of the contributing factors to the high rate of unwanted pregnancy was the low level of adolescent knowledge and attitudes regarding reproductive health. Effective promotive and preventive efforts were needed to equip adolescents with accurate information and appropriate decision-making skills. One approach considered effective was the peer educator program. In this program, adolescents were trained to deliver reproductive health education to their peers using a communicative and relatable method.

Peer education emerged as a significant strategy in reducing unwanted adolescent pregnancy by increasing reproductive health literacy and promoting preventive behavior among teenagers (Cinthya Riris & Purnamayanti, 2021; Da Cunha & Tuapel, 2022). This approach leveraged peer influence to disseminate information and model healthy behavior, making it a potentially effective tool in reducing adolescent pregnancy rates. The approach had been proven to enhance knowledge, attitudes, and behavioral intentions among female adolescent groups in various settings (Taufik & Hasibuan, 2020).

This study aimed to examine the effectiveness of peer educator programs in improving adolescent attitudes toward preventing unwanted pregnancy. The results were expected to serve as a basis for designing school-based educational interventions to raise awareness and encourage positive adolescent attitudes toward reproductive health.

## 2. Methods

This study used a quantitative approach with a quasi-experimental design, specifically a pretest-posttest control group design. The research was conducted from January to March 2025 at SMA Negeri 2 Muara Badak.

The population consisted of all eleventh-grade students, totaling 120. A total of 60 students were selected through purposive sampling and divided into two groups: 30 in the intervention group and 30 in the control group. The intervention group received reproductive health education from trained peer educators in three sessions, while the control group received no intervention during the study.

The instrument used was a validated and reliable questionnaire containing 10 attitude statements using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Data were collected before and after the intervention. The collected data were analyzed using paired t-tests to determine changes within each group and independent t-tests to compare between groups. Statistical analysis was performed using SPSS software.

## 3. Results and Discussion

**Table 1.** Frequency Distribution of Respondents by Gender and Age

Respondent Characteristics	Category	Intervention (n=30)	Control (n=30)	Total (n=60)
<b>Gender</b>	Male	12	13	25
	Female	18	17	35
<b>Age</b>	16 years	10	9	19
	17 years	14	15	29
	18 years	6	6	12

Table 1 showed the distribution of respondents based on gender and age in each research group. The majority of respondents were female (58.3%) in both the intervention and control groups. This was consistent with the student population at the school, which was predominantly female. In terms of age, most respondents were 17 years old (48.3%), which was the typical age of eleventh-grade students. The relatively balanced distribution between the two groups in terms of gender and age indicated that the baseline characteristics were fairly homogeneous, thereby minimizing potential bias in the analysis of intervention effectiveness.

**Table 2.** Mean Adolescent Attitude Scores Before and After the Intervention (Likert Scale 1–5)

Group	Pretest (Mean ± SD)	Posttest (Mean ± SD)	p-value (paired t-test)
<b>Intervention</b>	60,2 ± 8,4	78,4 ± 7,6	0,000*
<b>Control</b>	61,1 ± 7,9	62,4 ± 8,1	0,071

\*The total score was assessed from 10 statement items rated on a scale of 1 to 5 (score range 10–50)

Table 2 showed a comparison of the mean attitude scores of adolescents before and after the intervention in both groups. In the intervention group, the attitude score increased from  $30.1 \pm 4.2$  to  $39.2 \pm 3.8$ , with a p-value of 0.000. This indicated a statistically significant difference in adolescent attitudes after receiving education from peer educators. The increase in scores approaching the maximum value (50) reflected a shift in attitude toward a more positive direction.

Meanwhile, in the control group, the score increased only slightly from  $30.6 \pm 4.0$  to  $31.2 \pm 4.1$ , with a p-value of 0.071, which was not statistically significant. This suggested that there was no meaningful change in attitude among adolescents who did not receive the intervention.

These findings were supported by a study by Da Cunha (2022), which showed a significant effect of peer educators on improving reproductive health literacy among adolescents in East Nusa Tenggara, with a p-value of 0.000. Adolescents who were trained as peer educators were not only able to deliver information but also served as role models who enhanced understanding and active engagement in reproductive health discussions.

**Table 3.** Comparison of Posttest Scores Between Intervention and Control Groups (10 Questions, Likert Scale 1–5)

Group	Posttest Mean $\pm$ SD	p-value (independent t-test)
Intervention	$78.4 \pm 7.6$	0,001*
Control	$62.4 \pm 8.1$	

\*Significant at  $p < 0.05$

Table 3 compared the posttest scores between the two groups. The average score in the intervention group was  $39.2 \pm 3.8$ , while the control group only reached  $31.2 \pm 4.1$ , with a p-value of 0.001. This indicated that the difference between the groups was statistically significant and confirmed that the improvement in attitude in the intervention group was indeed the result of the peer educator program. These results supported the literature by Cinthya Riris & Purnamayanti (2021), who, through a literature review, concluded that peer education was effective in building social support, increasing responsibility in sexual decision-making, and reducing the risk of adolescent pregnancy.

In addition, international literature showed that structured peer education programs implemented in school environments were capable of increasing adolescents' intentions to avoid risky sexual behaviors. This was consistent with the findings of LeCroy et al., as reviewed by Cinthya Riris (2021), which found a significant increase in sexual risk prevention intention scores among female adolescents who participated in peer educator-based programs compared to the control group ( $p = 0.001$ ).

Thus, this study aligned with empirical evidence that the peer approach had been proven to improve adolescents' knowledge, attitudes, and literacy regarding reproductive health. Its effectiveness lay in the emotional closeness and trust between adolescents and their peers, as emphasized by Da Cunha (2022), who stated that adolescents were more receptive to and better understood sensitive information when it came from fellow teenagers rather than from adults or professionals.

#### 4. Conclusion

The peer educator program proved to be effective in improving adolescent attitudes toward the prevention of unwanted pregnancy. Educational interventions delivered by peers had a significantly positive impact, as evidenced by the higher post-intervention scores in the intervention group compared to the control group. These findings emphasized the importance of active adolescent involvement in reproductive health promotion, especially through participatory approaches relevant to their social environment.

Schools were encouraged to actively develop and integrate peer educator programs into extracurricular activities or local curriculum to strengthen reproductive health education. Adolescents should have been provided with adequate training and space to become competent and influential peer educators among their peers. Further research could be conducted with broader scope, longer duration, and examination of other variables such as behavioral changes or sexual decision-making skills among adolescents.

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