

The Relationship Between Knowledge, Attitude, and Peers with Premarital Sexual Behavior Among Adolescents

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ABSTRACT

Introduction: Premarital sexual activity among adolescents remains a pressing reproductive health issue, carrying risks that range from unintended pregnancy and sexually transmitted infections, including HIV/AIDS, to a variety of psychological and social consequences. A number of factors are believed to shape this behavior, among them how much adolescents know about reproductive health, the attitudes they hold, and the influence exerted by their peer groups.

Objectives: This research was carried out to examine the connection between knowledge, attitude, and peer influence and premarital sexual behavior among Grade XI students at SMA Negeri 4 Kupang.

Method: A quantitative, cross-sectional design was employed. Of a total student population of 432, 205 respondents were selected through non-probability purposive sampling. Data were gathered by questionnaire and examined using univariate description alongside bivariate Chi-Square testing at a significance threshold of $\alpha = 0.05$.

Results: The findings revealed that most respondents fell into the poor-knowledge group (53.7%), held negative attitudes (61.0%), and belonged to the poor or peer-influenced category (56.1%). Bivariate testing confirmed statistically meaningful associations between knowledge and premarital sexual behavior ($p = 0.049$), attitude and premarital sexual behavior ($p = 0.011$), and peer influence and premarital sexual behavior ($p = 0.021$).

Conclusion: That stronger knowledge, healthier attitudes, and a more positive peer environment are each linked to a reduced likelihood of premarital sexual activity. Strengthening reproductive health education, supporting adolescent character development, and reinforcing parental and community supervision through collaboration among schools, families, and health workers are recommended as ways to help prevent premarital sexual behavior among adolescents.

Keywords: Knowledge, Premarital Sexual Behavior, Attitude, Peers.

INTRODUCTION

Adolescence is a lively, formative stage of life marked by heightened social exploration, curiosity about the opposite sex, and a strong pull toward trying new experiences — conditions that can leave young people vulnerable to risk-taking, including premarital sexual activity, early sexual debut, unprotected intercourse, and having multiple partners, all of which raise the likelihood of sexually transmitted infections (Satrio Putro et al., 2021).

Risky sexual behavior among adolescents remains widespread globally. According to 2024 World Health Organization figures, roughly 9.3%, or 3.7 million, adolescents worldwide had already engaged in sexual intercourse. Within Indonesia, about 5.5% of male and 0.7% of female adolescents aged 15–19 reported having had premarital intercourse, a pattern associated with elevated rates of abortion and unplanned pregnancy. A separate survey conducted by the National Population and Family Planning Board found that nearly 92% of dating adolescents had held hands, 82% had kissed, and 63% had touched a partner's body. In East Nusa Tenggara specifically, an estimated 29–31% of adolescents reported premarital intercourse, and 39% gave birth between ages 15 and 19; meanwhile, records from the Kupang City Health Office show the share of pregnant women under 20 climbing from 1.5% in 2023 to 9.6% in 2024.

A preliminary survey involving guidance counselors and Grade XI students at SMA Negeri 4 Kupang found that most students still lacked adequate knowledge and appropriate attitudes concerning risky sexual behavior, and had only a limited grasp of how peer relationships shape unsafe sexual conduct. Because adolescents form strong emotional bonds with their peers, those peer groups can become a powerful channel for both protective and harmful influences on sexual behavior.

This situation is concerning, given that adolescence is a transitional period often accompanied by role confusion, a need for affection, and limited readiness to take on responsibility. Premarital sexual behavior among adolescents is thought to stem from a mix of internal and external factors, which is why a more thorough, well-rounded approach to delivering reproductive health information to this age group is needed. This study therefore aims to analyze how knowledge, attitude, and peer influence relate to premarital sexual behavior among Grade XI students at SMA Negeri 4 Kupang, with the goal of generating insights that schools, health workers, and parents can use to help curb risky sexual behavior among adolescents.

MATERIALS AND METHODS

This research applied a quantitative approach using a cross-sectional design, intended to establish the relationship between the independent variables knowledge, attitude, and peer influence and the dependent variable, adolescent premarital sexual behavior, all measured at a single point in time. The study took place among Grade XI students at SMA Negeri 4 Kupang in April 2026. The study population comprised all 432 Grade XI students at the school. Sample size was calculated with the Slovin formula using a 5% margin of error, yielding 205 respondents. A non-probability, purposive sampling technique was used, with inclusion criteria limited to Grade XI students aged 15–18 who were willing to participate and present during data collection; students who were absent, did not complete the questionnaire fully, or declined to take part were excluded.

Data were collected using a structured questionnaire covering four variables: knowledge, attitude, peer influence, and premarital sexual behavior. Knowledge was assessed with multiple-choice items and grouped into poor (<56%), sufficient (56–75%), and good (76–100%) categories. Attitude was measured on a Likert scale and classified as negative (<50%) or positive (≥50%). Peer influence was categorized as poor/influenced (≥50%) or good/not influenced (<50%). Premarital sexual behavior

was classified as not-at-risk (<50%) or at-risk ($\geq 50\%$). Analysis proceeded in two stages: a univariate stage to describe the frequency distribution of each variable, followed by a bivariate stage using the Chi-Square test to examine relationships between the independent and dependent variables at a significance level of $\alpha = 0.05$. Ethical approval for this study was granted by the Health Research Ethics Committee of the Faculty of Medicine, Universitas Nusa Cendana (approval number UN02260628), and all participants provided informed consent prior to data collection.

RESULTS

This research was conducted among Grade XI students at SMA Negeri 4 Kupang, an A-accredited public senior high school in Kupang City, drawing a sample of 205 from a population of 432.

Table 1. Characteristics of respondents by age and gender at SMA Negeri 4 Kupang

Characteristic	f	%
Age 15	6	2.9
Age 16	105	51.2
Age 17	83	40.5
Age 18	11	5.4
Total (age)	205	100
Female	116	56.6
Male	89	43.4
Total (gender)	205	100

The results show that among the 205 respondents, the largest share were 16 years old (51.2%) and female (56.6%).

Table 2. Distribution of knowledge, attitude, peer influence, and behavior among respondents

Variable / Category	Frequency	%
Knowledge – Poor	108	52.7
Knowledge – Sufficient	75	36.6
Knowledge – Good	22	10.7
Attitude – Negative	136	66.3
Attitude – Positive	69	33.7
Peers – Poor/Influenced	125	61
Peers – Good/Not Influenced	80	39
Behavior – At Risk	30	14.6
Behavior – Not at Risk	175	85.4

Descriptive analysis shows that the majority of respondents had poor knowledge (108 respondents, 52.7%), a negative attitude (136, 66.3%), and fell into the poor/influenced peer category (125, 61.0%); most also displayed sexual behavior classified as not-at-risk (175, 85.4%).

Table 3. Association between knowledge and premarital sexual behavior

Knowledge	Not at Risk (f/%)	At Risk (f/%)	Total	p-value
Poor	87 / 80.6	21 / 19.4	108	0.049
Sufficient	70 / 93.3	5 / 6.7	75	
Good	18 / 81.8	4 / 18.2	22	
Total	175 / 85.4	30 / 14.6	205	

The Chi-square test produced a p-value of 0.049, below the α threshold of 0.05, indicating a statistically significant association between knowledge and premarital sexual behavior among Grade XI adolescents at SMA Negeri 4 Kupang.

Table 4. Association between attitude and premarital sexual behavior

Attitude	Not at Risk (f/%)	At Risk (f/%)	Total	p-value
Positive	66 / 95.7	3 / 4.3	69	0.011
Negative	109 / 80.1	27 / 19.9	136	
Total	175 / 85.4	30 / 14.6	205	

Here the Chi-square test yielded a p-value of 0.011, again below 0.05, confirming a significant relationship between attitude and premarital sexual behavior among these adolescents.

Table 5. Association between peer influence and premarital sexual behavior

Peers	Not at Risk (f/%)	At Risk (f/%)	Total	p-value
Good/Not Influenced	75 / 93.8	5 / 6.2	80	0.021
Poor/Influenced	100 / 80.0	25 / 20.0	125	
Total	175 / 85.4	30 / 14.6	205	

The resulting p-value of 0.021 falls below the 0.05 threshold, pointing to a significant relationship between peer influence and premarital sexual behavior among Grade XI adolescents at SMA Negeri 4 Kupang.

DISCUSSION

A significant relationship emerged between knowledge and premarital sexual behavior ($p = 0.049$), consistent with findings from Putri (2023) and Mahanani et al. (2025), both of which reported that adolescents with stronger reproductive health knowledge tend to exercise more control over their sexual behavior. Solid understanding of pregnancy risk, sexually transmitted infections, and contraception equips adolescents to grasp the consequences of sexual activity and, in turn, make more responsible choices. This result diverges, however, from Alwi et al. (2023), who found no link between knowledge and premarital sexual behavior a difference the authors attributed to today's adolescents having easy access to information through personal devices.

Attitude also proved significantly associated with premarital sexual behavior ($p = 0.011$), echoing work by Erni et al. (2025) and Sudrajat et al. (2022), which showed that attitudes shaped by limited knowledge tend to be negative and to foster risky behavior. Adolescents who hold firm, positive attitudes toward social boundaries are better equipped to resist pressure or invitations that conflict with their values, whereas a negative attitude toward sexuality heightens vulnerability to risky sexual behavior.

Peer influence was likewise significantly related to premarital sexual behavior ($p = 0.021$), in line with Syafitriani et al. (2022) and Rorintulus et al. (2025), who found that adolescents under strong peer influence face a greater likelihood of engaging in premarital sexual activity. The adolescent need to belong within a social group often leads them to conform to group norms, including behaviors that may conflict with broader social values, making a supportive, healthy peer environment an important protective factor against risky sexual behavior.

Taken together, these findings confirm that knowledge, attitude, and peer influence are all meaningful determinants of adolescent sexual behavior. This points to the need for interventions that address all three factors at once through reproductive health education, character-building, and closer

supervision of the social environment in order to reduce the risk of premarital sexual behavior among adolescents.

CONCLUSIONS

This study found that most Grade XI adolescents at SMA Negeri 4 Kupang had poor knowledge (52.7%), negative attitudes (66.3%), and belonged to the poor/influenced peer category (61.0%), even though the majority of respondents' sexual behavior was classified as not-at-risk (85.4%). Significant relationships were found between knowledge ($p = 0.049$), attitude ($p = 0.011$), and peer influence ($p = 0.021$) and premarital sexual behavior among adolescents: the stronger the adolescents' knowledge and the more positive their attitude and peer environment, the lower their risk of premarital sexual behavior. Schools, health workers, and parents are encouraged to continue strengthening reproductive health education, counseling, and supervision of adolescent social interactions, and future research is recommended to incorporate additional variables such as social media influence, parenting style, and religiosity.

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Availability Of Data And Materials

The data underlying this study are available from the author upon reasonable request, with respondent confidentiality maintained.

Authors' Contributions

The author was solely responsible for the study concept, design, data collection, data analysis, interpretation of results, and preparation of the final manuscript.

Conflict Of Interest

The author declares no conflict of interest in this research or in the writing of this article.

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