

Literature Review: Determinants of Sexual Risk Behavior Among Adolescents

Fatmawati¹, Hamsina², Joy Stevani³, Mordayani⁴, Yenni⁵, Luvi Dian Afriyani⁶

¹Bachelor of Midwifery Program, Universitas Ngudi Waluyo, fatmaerdaerda@gmail.com

²Bachelor of Midwifery Program, Universitas Ngudi Waluyo, hamsinaheriyanto@gmail.com

³Bachelor of Midwifery Program, Universitas Ngudi Waluyo, joystevani710@gmail.com

⁴Bachelor of Midwifery Program, Universitas Ngudi Waluyo, mawanemu21@gmail.com

⁵Bachelor of Midwifery Program, Universitas Ngudi Waluyo, yenniayenni@gmail.com

⁶Bachelor of Midwifery Program, Universitas Ngudi Waluyo, luviqanaiz@gmail.com

Email Correspondence: fatmaerdaerda@gmail.com

Article Info	Abstract
Article History Submitted, 2026-04-12 Accepted, 2026-05-19 Published, 2026-06-30	Adolescents are a vulnerable population to sexual risk behavior due to physical, psychological, and social changes that are often not accompanied by adequate reproductive health knowledge. This study aimed to identify and analyze the determinants of sexual risk behavior among adolescents through a literature review. Articles were retrieved from Google Scholar with publication years ranging from 2020 to 2026 using the PICO approach. Of the 20 articles identified, 8 full-text quantitative studies that met the inclusion criteria were systematically analyzed. The findings revealed that the determinants of sexual risk behavior among adolescents consist of internal and external factors. Internal factors include reproductive health knowledge, age, and gender, while external factors comprise family environment, peer influence, school environment, exposure to digital media, socio-cultural norms, socioeconomic conditions, and access to reproductive health services. Overall, sexual risk behavior among adolescents results from complex interactions between these factors. Therefore, preventive strategies should focus on improving reproductive health education, and controlling inappropriate digital media exposure to support more comprehensive, targeted, and sustainable interventions.
Keywords: Determinants, risk behavior, adolescents, reproductive health	

Introduction

Adolescents are an age group in a transitional phase from childhood to adulthood, characterized by physical, psychological, and social changes. According to the World Health Organization, adolescents are individuals aged 10–19 years. During this period, the reproductive system develops, accompanied by increased sexual drive. However, this development is often not matched by adequate knowledge of reproductive health, thereby potentially leading to the emergence of risk sexual behaviors.

Risk sexual behavior among adolescents remains a significant public health issue in Indonesia. Recent data from the National Population and Family Planning Board (BKKBN) indicate an increasing trend of sexual behavior among adolescents. In 2024, it was reported that more than 50% of adolescent girls and more than 70% of adolescent boys aged 15–19 years had engaged in sexual intercourse. Furthermore, approximately 60% of adolescents aged 16–17 years were reported to have had sexual intercourse. In addition, survey results also show that around 30% of adolescents in Indonesia are sexually active. This phenomenon indicates that risk sexual behavior among adolescents is increasing and has become a serious concern.

Risk sexual behavior in adolescents is a public health problem that remains a major concern in various countries, including Indonesia. This behavior includes sexual activities carried out without consideration of health risks, such as premarital sexual intercourse, having multiple partners, and not using protection. These conditions may increase the risk of unintended pregnancy, unsafe abortion, and sexually transmitted infections (STIs), including HIV/AIDS.

Various studies have shown that risk sexual behavior in adolescents is influenced by multiple interrelated factors. These factors do not stand alone but result from the interaction between internal and external influences on adolescents. A study by Nurul Fitriani Rahayu (2020) found that gender, age, and exposure to pornography are associated with risk sexual behavior among adolescents. This indicates that individual characteristics and exposure to sexual content are important factors in shaping adolescent sexual behavior.

Corresponding author:

Fatmawati

fatmaerdaerda@gmail.com

The 3th International Conference on Health, Faculty of Health, Vol 3 No 1 2026

Universitas Ngudi Waluyo

Furthermore, Yasinta Dewi Kristianti (2021) stated that knowledge of reproductive health is associated with risk sexual behavior, where low levels of knowledge may increase adolescents' likelihood of engaging in unsafe sexual practices. Research by Raidah Intizar Yusuf (2021) showed that social media use and reproductive health knowledge have an interactive effect on adolescent risk sexual behavior, suggesting that social media may act as a risk factor if not accompanied by adequate knowledge. In addition, Desri Suryani (2021) revealed that internal factors such as attitudes, knowledge, and individual characteristics are related to risk sexual behavior. An international study by Astawus Alemayehu, (2023) also found that knowledge, attitudes, and practices are closely related and significantly influence adolescent sexual behavior.

A study by Lita Aprelia Nurvitasari (2025) further confirmed that the level of reproductive health knowledge is associated with adolescent sexual behavior. Moreover, Irma Misbahul Jannah (2026) found that exposure to pornography on social media is significantly associated with risk sexual behavior among adolescents. This is consistent with the findings of Kadek Risma Devina Pramesti (2026), which showed that higher intensity of social media use is associated with an increased tendency toward sexual behavior among adolescents.

Based on the various findings above, it can be concluded that risk sexual behavior among adolescents is influenced by multiple complex determinants, including both internal and external factors. Therefore, further studies on the determinants of risk sexual behavior in adolescents are needed as a basis for prevention efforts and the development of more effective reproductive health programs.

Methods

This literature study employed a Systematic Literature Review (SLR) approach, which is a structured and transparent method of reviewing literature by systematically collecting, identifying, and evaluating existing research data. The aim of this literature review was to identify the factors influencing risk sexual behavior among adolescents. A systematic search was conducted using computer-based databases, specifically Google Scholar. The search was limited to publications released between 2020 and 2026. The keywords used in the search process were “risk sexual behavior” and “adolescents.” The inclusion criteria applied in this literature review were as follows: (1) articles focused on factors influencing risk sexual behavior among adolescents; (2) articles available in full-text form and published between 2020 and 2026; (3) articles written in either Indonesian or English; and (4) articles classified as research articles published in scientific journals. Meanwhile, the exclusion criteria were: (1) articles in the form of undergraduate theses, master’s theses, or dissertations; (2) articles that were not freely accessible (restricted access); and (3) articles not relevant to the determinants of risk sexual behavior among adolescents. From a total of 20 articles initially identified, a selection process was conducted, resulting in 8 articles that met the eligibility criteria and were subsequently analyzed systematically.

Results and Discussion

A literature review was conducted on 8 selected articles. The publications ranged from 2020 to 2026. The results of the journal analysis are presented in Table 1 as follows:

Table 1. Results of Journal Analysis			
No	Research	Method	Results
1.	The Relationship Between Gender, Age, and Exposure to Pornographic Media and Risk Sexual Behavior Among Junior High School Students in Semarang City. (Rahayu et al., 2020)	This study employed an analytical survey design with a cross-sectional approach. The sample consisted of 104 early adolescents (aged 12–15 years) selected using a multistage random sampling technique. Data were analyzed using univariate and bivariate methods, with the Chi-square test applied for statistical analysis.	There is a relationship between gender and exposure to pornographic media and the sexual behavior of junior high school students in Semarang City. The results of the Chi-square analysis indicate significant associations between gender (p-value = 0.045) and exposure to pornographic media (p-value < 0.001) and risk sexual behavior among junior high school students in Semarang City.
2.	The Relationship Between Knowledge of Adolescent Reproductive Health and Risk Sexual Behavior Among Adolescents	This study employed a cross-sectional design using a quantitative approach. The population consisted of 2,808 students from public senior high schools (SMAN) in the Kramat Jati District. The sample was selected using a cluster sampling technique, resulting in 1,372	There is a statistically significant relationship between risk sexual behavior and knowledge of reproductive health (p < 0.05). The findings indicate a significant association between adolescents knowledge of reproductive health and their engagement in risk sexual behavior. Lower levels of

	(Kristianti & Widjayanti, 2021)	respondents. Data were collected simultaneously using a structured questionnaire.	knowledge are associated with a higher likelihood of engaging in risk sexual behavior.
3.	The Interaction Effect of Social Media Use and Reproductive Health Knowledge on Risk Sexual Behavior Among Adolescents (Raidah Intizar Yusuf & Hamdi, 2021)	This study employed a quantitative approach using an online survey method. The data were analyzed using a mediation model based on the PROCESS macro developed by Andrew F. Hayes.	The results indicate that social media use predicts risk sexual behavior, as does knowledge of reproductive health. However, no interaction effect was found between reproductive health knowledge and social media use on risk sexual behavior, suggesting that social media use does not account for variations in the level of reproductive health knowledge.
4.	The Relationship Between Internal Factors and Risk Sexual Behavior Among Adolescents: An Analysis of the 2019 SKAP Survey in Bengkulu Province. (Suryani D et al., 2021)	This study employed a quantitative design using a cross-sectional approach involving 301 families with adolescents aged 10–24 years in Bengkulu Province. Data analysis was conducted using univariate descriptive analysis and bivariate analysis with the Chi-square test.	Risk sexual behavior among adolescents begins with holding hands (83.4%), hugging (34.2%), kissing on the lips (15.6%), and touching/stimulating (3.3%). Most respondents were aged 15–19 years with a senior high school level of education, and the majority lived in rural areas. Age as a risk factor was significantly associated with holding hands ($p = 0.018$), hugging ($p < 0.001$), and kissing on the lips ($p < 0.001$).
5.	Levels and Factors Influencing Knowledge, Attitudes, and Practices of Risk Sexual Behavior Among Adolescents in Harar, Ethiopia (Mesele et al., 2023)	This study employed a school-based cross-sectional design. From the total adolescent population, 387 respondents were selected as the sample. A simple random sampling technique was used to select the study participants. Data were collected using a self-administered questionnaire and analyzed using SPSS software version 26.	Among the participants, 47.3% had good knowledge of risk sexual behavior. A total of 41.9% demonstrated a positive attitude toward risk sexual behavior. Additionally, 36.1% of students had initiated sexual activity before the age of 18. Of the 9.3% of respondents who had engaged in sexual intercourse, nearly 50% reported having more than one sexual partner. Students residing in urban areas were three times more likely (adjusted odds ratio: 3.3; 95% confidence interval: 1.6–6.6) to have good knowledge of risk sexual behavior compared to those living in rural areas.
6.	The Relationship Between Knowledge of Reproductive Health and Sexual Behavior Among Adolescents at SMA Negeri 2 Sukoharjo (Nurvitasari, 2025)	This study employed a quantitative method with a cross-sectional design. The sample consisted of 91 respondents drawn from students in grades X, XI, and XII at SMA Negeri 2 Sukoharjo. The instruments used were questionnaires on reproductive health knowledge and adolescent sexual behavior. Data were analyzed using the Spearman rank correlation test.	The results showed that most adolescents had a moderate level of knowledge, accounting for 49 respondents (53.8%). The majority of adolescent sexual behavior was categorized as good, totaling 77 respondents (84.6%). The Spearman rank test indicated a significant relationship between the level of reproductive health knowledge and adolescent sexual behavior, with a p-value of 0.000 and a correlation coefficient (rho) of 0.364. There is a significant association between reproductive health knowledge and adolescent sexual behavior at SMA Negeri 2 Sukoharjo. Higher levels of knowledge are associated with a lower tendency for adolescents to engage in risk sexual behavior.
7.	The Relationship Between Exposure to Pornographic Content on Social Media and Risk Sexual Behavior	This study employed a correlational analytical design with a cross-sectional approach. The study population consisted of all 12th-grade students, totaling 213 students. The sample size	The results of the Chi-square analysis showed a p-value of 0.00 ($p < 0.05$), indicating a statistically significant relationship between exposure to pornography on social media and adolescent sexual

Among Adolescents (Jannah et al., 2026)	was determined using the Slovin formula with a 5% margin of error, resulting in 139 respondents. A total sampling technique was used, meaning the entire sample consisted of 139 students. The research instrument was a questionnaire comprising six questions on exposure to pornography on social media and nine questions on risk sexual behavior. Data analysis was conducted using the Chi-square test with a significance level of $\alpha = 0.05$.	behavior. These findings suggest that exposure to pornography on social media is associated with an increased tendency toward risk sexual behavior among adolescents.
8. The Relationship Between Social Media Use and Sexual Behavior Among Adolescents at SMA X Denpasar (Pramesti et al., 2026)	This study employed a descriptive correlational design with a cross-sectional approach. The sample consisted of 190 respondents selected through a stratified random sampling technique. The instruments used were questionnaires on social media use and sexual behavior. Bivariate analysis was conducted using Spearman's rho test with a significance level of $\alpha = 0.05$.	Social media use among adolescents falls into various categories of intensity. The results of the Spearman's rho test showed a p-value of < 0.001 ($p < 0.05$), indicating a statistically significant relationship between social media use and sexual behavior among adolescents. The higher the intensity of social media use, the greater the tendency toward sexual behavior among adolescents. These findings suggest that social media is associated with adolescent sexual behavior through exposure to content, online interactions, social learning processes, as well as a lack of self-control and increased impulsivity.

Based on the analysis of the eight reviewed journals, it can be concluded that risk sexual behavior among adolescents is influenced by a combination of internal and external factors. Internal factors include gender, knowledge of reproductive health, age, and attitudes toward sexual behavior, while external factors include social media use, exposure to pornographic media, place of residence, and access to information. In general, the better adolescents' knowledge and self-control, the lower their tendency to engage in risk sexual behavior

Internal Factors

Gender

Gender is one of the factors associated with risk sexual behavior among adolescents. Based on the chi-square test analysis, a p-value of 0.045 ($p < 0.05$) was obtained, indicating a significant relationship between gender and risk sexual behavior. Recent studies show differences in sexual behavior tendencies between males and females, influenced by biological and psychosocial factors (Rahmadani & Harahap, 2023). This suggests that gender plays a role in shaping adolescents' sexual behavior patterns.

Age

Age is a developmental factor that influences adolescent sexual behavior. Research findings show a relationship between age and behaviors such as holding hands ($p = 0.018$), hugging ($p < 0.001$), and kissing ($p < 0.001$). Recent studies suggest that adolescents aged 15–19 years have a higher tendency to engage in sexual exploration due to hormonal and psychosocial changes (Aima & Erwandi, 2023).

Attitudes Toward Sexual Behavior

Adolescents' attitudes toward sexual behavior influence their actions. Approximately 41.9% of adolescents were found to have permissive attitudes toward risk sexual behavior. Studies indicate that permissive attitudes toward sexuality are significantly associated with premarital sexual behavior among adolescents (Nuraini & Sari, 2023). Attitudes that are not supported by adequate self-control can increase the risk of engaging in risk sexual behavior.

External Factors

Exposure to Pornographic Media

Exposure to pornographic media shows a highly significant relationship with risk sexual behavior among adolescents ($p < 0.001$). Recent studies indicate that exposure to pornography is significantly associated with an increase in premarital sexual behavior among adolescents

(Nuraini & Sari, 2023). This is attributed to imitation processes and social learning from consumed content.

Social Media Used

Social media use has a significant relationship with adolescent sexual behavior ($p < 0.001$). Studies show that high intensity of social media use is associated with increased risk sexual behavior through exposure to content and online interactions (Rahmadani & Harahap, 2023). However, no interaction effect was found between social media use and reproductive health knowledge on sexual behavior.

Place of Residence

The living environment influences adolescents knowledge and behavior. Adolescents living in urban areas are more likely to have better knowledge compared to those in rural areas. Recent studies indicate that access to education and information is better in urban areas than in rural areas, thereby influencing adolescent behavior (Widiyanti, 2024).

Access to Information

Access to reproductive health information is an important factor in shaping adolescent behavior. Recent studies show that limited access to accurate information can increase the risk of risk sexual behavior among adolescents (Alimuddin et al., 2025). Inadequate information may encourage adolescents to seek alternative sources that are not necessarily reliable, such as social media or pornography.

Conclusion

Based on the literature review, the majority of studies indicate a significant association between behavioral determinants, including reproductive health knowledge, age, and gender, as well as exposure to social media and pornography, and risk sexual behavior among adolescents. These factors act as determinants that may either increase or decrease adolescents' likelihood of engaging in risk sexual behavior. Therefore, preventive efforts should focus on strengthening cognitive and psychosocial aspects through improving reproductive health knowledge, and controlling exposure to media. Such approaches are expected to produce more comprehensive, targeted, and sustainable interventions.

Acknowledgments

All praise and gratitude are due to God Almighty for His blessings and grace, which enabled the author to complete this literature review entitled "Determinants of Sexual Risk Behavior among Adolescents." The author would like to express sincere gratitude to all lecturers at Ngudi Waluyo University, the academic supervisor, and fellow students of the cohort who have provided guidance, direction, and support throughout the process of preparing this scientific work. The author acknowledges that this work is still far from perfect; therefore, constructive criticism and suggestions are highly appreciated for future improvement. It is hoped that this work will be beneficial to readers, particularly in the field of adolescent reproductive health.

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