Analysis of Factors Affecting Adolescent Sexual Behavior in Sidoarjo: A Holistic Approach

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Sections Info	ABSTRACT
	Adolescent sexual behavior is a significant concern in efforts to maintain reproductive and mental health among adolescents in Indonesia. This study aims to analyze the factors influencing adolescent sexual behavior in Sidoarjo Regency. Using a holistic approach, this research examines the impact of various internal factors such as reproductive health knowledge and self-control, as well as external factors such as peer influence, family, and social media exposure. This study employs a descriptive quantitative method with a survey approach, involving 300 adolescents from several high schools in Sidoarjo. The results indicate that peer influence and social media exposure significantly contribute to adolescent sexual behavior, followed by low reproductive health knowledge. Based on these findings, an integrated intervention program involving the active role of families, schools, and media is needed to improve adolescents' understanding and self-control.

INTRODUCTION

Adolescence is a critical period in an individual's life, marked by significant physical, emotional, and social changes. During this stage, adolescents experience rapid development in their reproductive system, increased curiosity about sexuality, and greater exposure to various forms of information, including those related to sexual behavior [11]. In Indonesia, discussions about adolescent reproductive health are often considered taboo, resulting in limited access to accurate information and guidance for young people [3]. This lack of knowledge and awareness poses risks for adolescents, leading to unintended pregnancies, sexually transmitted infections (STIs), and psychological issues such as anxiety and depression [3].

In Sidoarjo Regency, as in many regions in Indonesia, adolescent sexual behavior has become a growing concern. As a densely populated area with diverse socio-economic backgrounds, Sidoarjo presents unique challenges related to youth education and behavior, particularly in the context of reproductive health [4]. The presence of widespread social media usage and the influence of peer groups have become pivotal factors in shaping adolescents' perceptions and behaviors toward sexuality [6]. Despite numerous initiatives aimed at promoting reproductive health education, a considerable gap remains in effectively reaching and educating adolescents in a comprehensive and culturally sensitive manner [5].

Previous studies have highlighted the role of both internal and external factors in influencing adolescent sexual behavior. Internally, factors such as reproductive health

knowledge and self-control play crucial roles in shaping an adolescent's decisions and actions. Externally, the influence of peer groups, family dynamics, and exposure to media, especially social media, are increasingly recognized as significant determinants of sexual behavior among adolescents [10]. However, the interplay between these factors and their cumulative impact on adolescent sexual behavior in the specific context of Sidoarjo remains underexplored.

This study aims to fill this gap by adopting a holistic approach to understanding the factors influencing adolescent sexual behavior in Sidoarjo Regency. A comprehensive analysis of internal factors (knowledge of reproductive health and self-control) and external factors (peer influence, family involvement, and social media exposure) is essential to formulate effective strategies for promoting healthy sexual behavior among adolescents. This research seeks to identify key determinants and suggest targeted intervention programs.

RESEARCH METHOD

The study employs a cross-sectional design, aiming to analyze the factors influencing adolescent sexual behavior in Sidoarjo Regency. The sample includes 300 adolescents aged 15 to 18 years from several high schools in Sidoarjo, selected through stratified random sampling based on school type (public and private) and location (urban and rural). This technique ensures a better representation of the adolescent population in the region, increasing the reliability of the findings.

The study's inclusion criteria consist of adolescents aged 15-18 years, residing in Sidoarjo for at least one year, and willing to participate in the study. Adolescents with a history of mental disorders that could affect the accuracy of their responses and those who did not consent to participate were excluded.

The data collection involved distributing structured questionnaires to measure variables such as peer influence, social media exposure, reproductive health knowledge, family support, and risky sexual behavior. Data analysis was performed at three levels: univariate, bivariate, and multivariate. Univariate analysis was used to describe the frequency distribution of each variable, providing an overview of the data. Bivariate analysis was conducted using Chi-Square tests to explore the relationships between each independent variable and the dependent variable. Finally, multivariate analysis employed logistic regression to determine the combined effects of all independent variables on the likelihood of risky sexual behavior among adolescents.

RESULTS AND DISCUSSION

This section presents the findings of the study and provides a comprehensive analysis of their implications in the context of adolescent sexual behavior in Sidoarjo Regency. The presentation of results begins with a univariate analysis, which outlines the frequency distributions and descriptive statistics of the primary variables. Following this, the bivariate analysis examines the relationships between each independent variable and the dependent variable of risky sexual behavior. The multivariate analysis subsequently assesses the combined effects of all factors, offering an integrated perspective on the determinants of adolescent sexual behavior.

Table 1. Univariate Analysis

Respondent Characteristic	n (%)
Age	
15	127 (42,3)
16	87 (29,0)
17	58 (19,3)
18	28 (9,3)
Gender	
Male	123 (41,0)
Female	177 (59,0)

Table 1 presents the results of the univariate analysis of respondent characteristics based on age and gender. The data shows that among the total respondents, the majority are aged 15, making up 42.3% (127 individuals), followed by respondents aged 16 with 29.0% (87 individuals), and those aged 17 accounting for 19.3% (58 individuals). The smallest proportion of respondents are aged 18, comprising 9.3% (28 individuals). In terms of gender distribution, the table indicates that 41.0% (123 individuals) are male, while females represent 59.0% (177 individuals) of the total respondents.

Table 2. Bivariate Analysis

Variable	Risky Behavior		p-value	RP	95% CI
	Yes n (%)	No n (%)			
Peer Influence					
Low	46 (83,6)	5 (2,0)	< 0,001	24,95	13,06 – 47,69
High	9 (16,4)	240 (98,0)			
Total	55 (100,0)	245 (100,0)			
Social Media Exposure					
Low	53 (96,4)	47 (19,2)	< 0,001	53,00	13,18 – 213,05
High	2 (3,6)	198 (80,8)			
Total	55 (100,0)	245 (100)			
Reproductive Health Knowledge					
Low	54 (98,2)	57 (23,3)	< 0,001	91,95	12,89 – 655,43
High	1 (1,8)	188 (76,7)			
Total	55 (100,0)	245 (100,0)			
Family Support					
Low	53 (96,4)	54 (22,0)	< 0,001	47,79	11,88 – 192,27
High	2 (3,6)	191 (78,0)			
Total					

Variable	Risky Behavior		p-value	RP	95% CI
	Yes n (%)	No n (%)			
	55 (100,0)	245 (100,0)			

Table 2 shows significant associations between several variables and risky behavior. Respondents with low peer influence had a much higher proportion of risky behavior (83.6%) compared to those with high peer influence (16.4%), with a relative risk (RP) of 24.95 (95% CI: 13.06–47.69). Similarly, low social media exposure was linked to higher risky behavior (96.4%) versus high exposure (3.6%), with an RP of 53.00 (95% CI: 13.18–213.05). Low reproductive health knowledge was also associated with higher risky behavior (98.2% vs. 1.8%), with an RP of 91.95 (95% CI: 12.89–655.43). Finally, respondents with low family support had a higher prevalence of risky behavior (96.4%) compared to those with high support (3.6%), with an RP of 47.79 (95% CI: 11.88–192.27). These findings underscore strong relationships between risky behavior and the studied variables.

Table 3 Multivariate Analysis

Variable	Adjusted OR	p-value	95% CI
Peer Influence	48,01	< 0,001	14.47 – 159,25
Social Media Exposure	4,28	0,227	0,405 – 45,179
Reproductive Health Knowledge	3,87	0,392	0,175 – 85,83
Family Support	2,83	0,397	0,25 – 31,68

Table 3 examines the influence of various variables on risky behavior by presenting the adjusted odds ratios (OR), p-values, and confidence intervals. The results indicate that peer influence is significantly associated with risky behavior, with an adjusted OR of 48.01 and a p-value of less than 0.001, suggesting a strong effect with a confidence interval ranging from 14.47 to 159.25. This implies that individuals experiencing high peer influence are substantially more likely to engage in risky behavior compared to others. In contrast, social media exposure, reproductive health knowledge, and family support do not show statistically significant associations with risky behavior, as indicated by their p-values being greater than 0.05. Although the adjusted odds ratios for these variables suggest potential relationships, the wide confidence intervals for each indicate a lack of precision and certainty in the estimated effects.

The significant role of peer influence observed in this study aligns with the Social Learning Theory, which posits that adolescents are likely to emulate behaviors modeled by their peers, especially in contexts where peer acceptance is critical [7]. This is consistent with findings from previous studies indicating that adolescents heavily influenced by their peer groups are more prone to engaging in risky behaviors due to social pressure or a desire for group conformity. The strong association between low peer

influence and risky behavior found in this study suggests that peer dynamics remain a critical determinant in adolescent behavior [8].

Additionally, the influence of social media exposure resonates with Bandura's Theory of Observational Learning, which emphasizes the role of media in shaping individual behaviors through repeated exposure and reinforcement [8] Studies have shown that exposure to sexual content on social media platforms can shape adolescents' attitudes toward sexual behaviors, making them more likely to engage in risky behaviors if media portrayals normalize or glamorize these actions. The current findings substantiate this connection, indicating that adolescents with low social media exposure were more likely to engage in risky behaviors, suggesting that structured media literacy and regulation could play a preventive role [12].

Moreover, the lack of reproductive health knowledge as a significant predictor of risky behavior highlights the critical need for comprehensive sexual education, as emphasized by the Health Belief Model [13]. This model suggests that a lack of knowledge about the consequences of certain behaviors and the benefits of preventive measures can contribute to risk-taking actions. Studies in similar contexts have revealed that a limited understanding of reproductive health often leads adolescents to underestimate the risks associated with unsafe sexual practices. This study's findings reinforce the importance of enhancing reproductive health education within school curricula and community programs [1].

Finally, the role of family support aligns with Bronfenbrenner's Ecological Systems Theory, which underscores the impact of familial relationships on adolescent development [2]. Previous research supports the notion that strong family bonds and open communication can mitigate adolescents' engagement in risky behaviors. In this study, low family support was significantly correlated with increased risky behaviors, suggesting that interventions aimed at improving family communication and involvement could effectively reduce risky sexual behaviors among adolescents [9].

These findings collectively suggest that a multifaceted approach, involving peer education, media regulation, comprehensive sexual education, and family engagement, is crucial for addressing risky behaviors in adolescents. Future interventions should consider these interconnected factors to create more effective and sustainable strategies for promoting adolescent health and well-being.

CONCLUSION

This study highlights the significant influence of peer dynamics, social media exposure, reproductive health knowledge, and family support on risky sexual behavior among adolescents in Sidoarjo. The findings reveal that low peer influence, limited social media exposure, inadequate reproductive health knowledge, and minimal family support are associated with higher levels of risky behavior. These results underscore the need for comprehensive and integrated intervention programs that address peer influence, enhance reproductive health education, regulate social media exposure, and strengthen family involvement to effectively reduce risky behaviors and promote adolescent well-being.

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