

Original Research**Adolescents' Reproductive Health Knowledge and Risky Sexual Behavior: A Correlational Study****Mitha Aprilia^{1*}, Siti Handayani², Sri Mulyanti³**¹ D-IV Nursing Student, Poltekkes Kemenkes Surakarta, Indonesia^{2,3} Department of Nursing, Poltekkes Kemenkes Surakarta, Indonesia**ABSTRACT**

Background: Many teenagers engage in underage dating involving sexual activity, as well as unhealthy behaviors such as smoking, alcohol consumption, and drug use. Early prevention through counseling and education on reproductive health and risky sexual behavior is essential. To identify the relationship between reproductive health knowledge and risky sexual behavior among adolescents.

Methods: Analytical observational method with a crosssectional approach. The sampling technique used, namely purposive sampling of 69 respondents. This research instrument uses a questionnaire sheet. Statistical tests using the Spearman Rank test.

Results: The Spearman Rank correlation coefficient was 0.307, indicating a positive relationship between reproductive health knowledge and risky sexual behavior.

Conclusion: There is a positive correlation between reproductive health knowledge and risky sexual behavior in adolescents. Educational programs are recommended to improve awareness and reduce risky behavior.

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adolescents, reproductive health, sexual behaviour;

CONTACT

Mitha Aprilia

mithaaprilia@gmail.comD-IV Nursing Student, Poltekkes
Kemenkes Surakarta. Jl. Letjen
Sutoyo Street, Mojosongo,
Surakarta, Indonesia.

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INTRODUCTION

Risky sexual behavior threatens health by exposing individuals to sexually transmitted diseases (STDs) such as hepatitis C, hepatitis B, and HIV. Adolescents are often perceived as having both the opportunity and inclination to engage in risky sexual behaviors. In Indonesia, unhealthy activities such as smoking, alcohol consumption, and drug abuse are common among teenagers, which can affect their social lives and lead to behaviors harmful to both themselves and their surrounding environment (Du et al., 2021)".

A portion of adolescents, both girls and boys, have engaged in dating at an age younger than 15. This phenomenon demonstrates that early romantic relationships are quite common among teenagers. Meanwhile, some adolescents participate in risky sexual behaviors. These behaviors include kissing, touching their partner's body, and engaging in sexual intercourse. These findings illustrate that adolescents are vulnerable to sexual exploration that can have negative impacts.

A lack of supervision and sexual education is one of the factors influencing such behaviors. Therefore, it is crucial for parents and schools to provide guidance and accurate information regarding reproductive health and healthy relationships (Du et al., 2021; Kefale et al., 2024). According to the Ministry of Health of the Republic of Indonesia (Kemenkes RI), there were 50,282 new HIV cases in Indonesia in 2019, with 32,443 male and 17,839 female cases.

The cumulative total reached 121,101 cases, with 7,036 new cases reported that year. The AIDS-related death toll in 2019 was 614 (Kementerian Kesehatan, 2021). These figures underscore the urgent need to address risky sexual behaviors, particularly among adolescents, as part of a broader public health strategy (Kementerian Kesehatan, 2021).

Peer relationships and parental influence are critical factors shaping adolescents' knowledge of sexual behavior. Research indicates that both peer relationships and parental guidance play essential roles in adolescents' development. When adolescents feel comfortable with their peers, they often become less open in communicating with their parents. Poor communication between children and parents can lead to feelings of distrust and isolation, prompting adolescents to seek out knowledge independently, often disregarding societal values and norms (Millanzi, Kibusi, et al., 2022; Nopyanti et al., 2023; Nugroho et al., 2023)".

In Sawahan Village, Boyolali, the majority of teenagers are still in school, so it is possible that it will cause concern to parents about how teenagers behave. The role of parents is one of the determining factors of how adolescent behaviour will be formed in the community. Risky sexual behaviour such as dating is still considered a necessity for adolescents in Sawahan Village, Boyolali because several interviews revealed that dating can provide more enthusiasm and motivation in learning.

However, not a few teenagers in Sawahan Village, Boyolali stated that dating is unnecessary because it is a waste of time. The description of the phenomenon underlies the researcher's interest in conducting a study with the title "Relationship between Level of Knowledge about Reproductive Health with Risky Sexual Behaviour in Adolescents".

MATERIALS AND METHODS

The researchers used an analytical observational method with a cross-sectional design, which provides a snapshot of adolescents' reproductive health knowledge and risky sexual behavior at a specific point in time. This design was chosen to allow for an assessment of the relationship between these variables within a short period. The study employed purposive sampling to target a specific group of adolescents who met the inclusion criteria, ensuring that participants were aged 12-19 years, enrolled in junior or senior high school, and physically and mentally healthy. Adolescents who were absent during the research process or physically ill were excluded from the study.

The reproductive health knowledge questionnaire, consisting of 19 true/false questions, was developed based on existing literature and expert recommendations. The questionnaire assessed knowledge levels, classified as good (76-100%), sufficient (56-75%), or poor (<56%). Similarly, the sexual behavior questionnaire, with 13 closed-ended questions, evaluated risky behaviors, classified as good (>76%), fair (56-75%), or poor (<56%).

The Cronbach's Alpha coefficients for both questionnaires were 0.839 for reproductive health knowledge and 0.848 for risky sexual behavior, indicating good

internal consistency. Bivariate analysis using the Spearman Rank test was employed to assess the relationship between knowledge and sexual behavior (M. S. Dahlan, 2020; S. Dahlan, 2021). This study has passed ethical review and was approved by the Health Research Ethics Commission of the Poltekkes Kemenkes Surakarta No. LB.02.02/1.1/1790.1/2022 dated 8 April 2022.

RESULTS

Table 1. Characteristics of Adolescents by Gender, Age, Education, and Information Exposure (n = 69 Students)

Characteristics of Adolescents	n	%
Gender		
Male	31	44.9
Women	38	55.1
Total	69	100
Age		
10-12 years	1	1.4
13-15 years	50	72.5
16-21 years old	18	26.1
Total	69	100
Education		
SMP	44	63.8
SMA/SMK	25	36.2
Total	69	100
Information Exposure		
Ever	48	69.6
Family	3	6,3
Peers	19	39.6
Teacher	12	25.8
Mass media	5	10.4
Health workers	9	18.8
Never been	21	30.4
Total	69	100

Description: n = number; % = percentage

Table 1. describes the characteristics of adolescents based on gender, age, education, and information exposure. Characteristics of adolescents based on gender were more female at 50.4% with an age of 13-15 years at 72.5%. Characteristics of adolescents based on education level had a higher percentage at the junior high school level at 63.8%. The percentage of adolescents who had received exposure to reproductive health information was greater at 69.6% with peer sources at 39.6%.

Table 2. Relationship between Reproductive Health Knowledge and Risky Sexual Behaviour in Adolescents

Reproductive Health Knowledge	Risky Sexual Behaviour						Total		p value *	r**
	Good		Simply		Less		n	%		
	n	%	n	%	n	%				
Good	25	36.2	2	2.9	1	1.4	28	40.5	0.01	0.307

Reproductive Health Knowledge	Risky Sexual Behaviour						Total		<i>p</i> value *	<i>r</i> **
	Good		Simply		Less		n	%		
	n	%	n	%	n	%	n	%		
Simply	27	39.1	5	7.2	4	5.8	36	52.2		
Less	3	4.3	2	2.9	0	0.0	5	7.2		
Total	55	79.7	9	13	5	7.2	69	100		

Description: n = number; % = percentage ; * *Spearman Rank* Test; **Correlation Coefficient

Table 2. shows the relationship between reproductive health knowledge and risky sexual behaviour in adolescents. There is a significant relationship between reproductive health knowledge and risky sexual behaviour in adolescents (*p* value 0.01) with the strength of the relationship in the weak category (*r* = 0.307). The results of the analysis also show that the direction of the relationship is positive, meaning that the better the reproductive health knowledge, the better the risky sexual behaviour in adolescents.

DISCUSSION

This study proves that there is a relationship between reproductive health knowledge and risky sexual behaviour in adolescents. In adolescents, there is a process of physical change that is most easily marked and physically visible, namely secondary changes. This physical development is able to attract the attention of the opposite sex which affects risky sexual behaviour and reproductive health. In addition, adolescents will also experience psychological changes that can have a negative impact if not controlled properly so that it can affect risky sexual behaviour (Millanzi, Kibusi, et al., 2022; Millanzi, Osaki, et al., 2022).

This study demonstrates a significant relationship between reproductive health knowledge and risky sexual behavior in adolescents. Adolescents undergo physical changes, such as secondary sexual characteristics, which can attract attention from the opposite sex and potentially influence risky behaviors. Psychologically, adolescents experience emotional and cognitive changes that, if not managed well, may lead to increased vulnerability to risky sexual behavior.

The study's findings are supported by Ha et al., (2024) which highlight the influence of peers in shaping adolescents' knowledge and behaviors related to reproductive health. Peer interactions, while facilitating the exchange of information, can also perpetuate risky behaviors when the shared knowledge is not aligned with healthy practices (Finlay et al., 2020; Nopyanti et al., 2023). Research by Mbachu et al., (2020) explains that the role of parents affects the growth and development of adolescents in the era of globalisation.

This is related to the results of the study which still show the low role of parents in adolescents' knowledge about reproductive health. Family is the first environment for children to interact, so it is important for parents to determine how to choose parenting patterns that can shape the personality of adolescents. The results showed that democratic parenting can provide moderate knowledge results on sexual behaviour (Mbachu et al., 2020; Nugroho et al., 2023).

Knowledge of reproductive health is a crucial aspect in supporting the physical, psychological, and social development of adolescents. However, the implementation of counseling related to reproductive health at the community level remains limited. The

low coverage of counseling poses a challenge in achieving the educational targets set by the government, particularly for the early adolescent age group.

Providing comprehensive information about reproductive health is essential to foster responsible behavior among adolescents that aligns with health norms. One determinant that influences adolescents' knowledge of reproductive health is the role of mass media. Mass media has significant potential as an effective and efficient means of disseminating information to reach adolescents. Therefore, optimizing the role of the media in reproductive health education should be a priority in promoting adolescent health (Finlay et al., 2020; Guan, 2021; Ha et al., 2024; Nopyanti et al., 2023).

Millanzi et al. (2023) explains that a person's behaviour can be influenced by internal factors and external factors. Internal factors include perception, motivation, interest, intelligence, knowledge, emotions and everything that can be used to manage external influences. Other factors are external factors including objects and cultural values that can shape adolescent attitudes. Research by Lin et al., (2020) on the behaviour and norms of adolescents has been contradictory due to the rapid flow of globalisation. The majority of adolescents use social media to find information related to sexual behaviour, due to the lack of education and the role of parents.

The results of this study show a positive correlation direction and mean that the correlation between knowledge and risky sexual behaviour is "Straight Comparable". This means that the higher the knowledge of adolescents, the higher the value of behaviour. This is in line with research by Ha et al., (2024) showed a relationship related to knowledge with risky sexual behaviour in adolescents. Research by Finlay et al. (2020) states that knowledge is an important domain in a person's actions and shapes risky sexual behaviour.

This study has proven that there is a significant relationship between reproductive health knowledge and risky sexual behaviour in adolescents. Lastly, the study acknowledges a limitation in the data collection method, as the less conducive environment during the questionnaire administration could have affected results. Future research could benefit from online questionnaires to enhance data collection effectiveness and efficiency.

CONCLUSION

This research indicates that there is a significant relationship between reproductive health knowledge and risky sexual behavior among adolescents. Adolescents with low levels of knowledge tend to be more vulnerable to engaging in risky sexual behaviors. Therefore, enhancing knowledge about reproductive health is crucial in efforts to prevent such negative behaviors. The role of healthcare professionals, particularly nurses, is strategically important in providing appropriate education to adolescents. The education provided can help shape attitudes and sexual behaviors among adolescents to be more responsible. Thus, continuous interventions from healthcare professionals are expected to improve the overall quality of life for adolescents.

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