



Knowledge Regarding Reproductive Health and its Relationship to Sexual Behavior in Adolescents

^KKasyafiya Jayanti¹, Pujiati², Ambariani³, Rini Damayanti³, Eilen⁵
^{1,2,3,4,5}STIKes Dian Husada Mojokerto
Email Corepondence author (^K): kasyafiya@gmail.com

ABSTRACT

Teenagers tend to face various challenges, both social and health problems. One problem is sexual activity when they lack adequate knowledge and skills for self-protection. This puts teens at higher risk for health problems. This study aims to examine the relationship between knowledge about reproductive health and sexual behavior in adolescents. This type of research is quantitative with a cross sectional design. The results of the bivariate analysis of the relationship between adolescent knowledge about reproductive health and sexual behavior were 80% had good knowledge and positive behavior. Teenagers who have less knowledge but still behave positively are 36.4%. Teenagers who have sufficient knowledge and behave positively are 100% and none have negative behavior at all. Teenagers who have poor knowledge and behave negatively are 63.6% and as many as 20.0% of teenagers have good knowledge but still behave negatively. The results of statistical analysis of the chi square test showed a p value of 0.005 ($p < 0.05$) which shows that there is a relationship between adolescent knowledge about reproductive health in class IX students. Adolescent sexual behavior is influenced by several factors, one of which is knowledge. One of the factors of negative sexual behavior is a lack of correct information about sexuality. Good knowledge will influence reproductive health behavior and increasing knowledge is very important to prevent negative reproductive health behavior. Cooperation is needed from parents, schools and related health services in improving quality reproductive health services for adolescents.

Keywords: Adolescents; Knowledge; Reproductive health

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INTRODUCTION

Adolescence is a period of rapid growth where physical and psychological changes occur. Adolescence is the stage of life where a person reaches sexual maturity, and however, teenagers appear to lack basic information about the body, sexuality, and reproductive organs. Some people think that information about reproductive health is still taboo and only discussed by adults.¹ However, nowadays, because of the rapid development of information technology, including social media, many teenagers are following a culture that is even different from the nation's values and morals. Adolescents have a lot of ignorance about their sexuality so that many teenagers do not understand and know about sexuality and reproductive health. There are still many teenagers who cannot access reproductive health services during adolescence, so teenagers tend to engage in unsafe or risky sexual activities among individual groups. Therefore, premarital sex, sexually transmitted diseases, unwanted pregnancies, illegal drug abuse, and unsafe abortions are serious problems for teenagers. Adolescent girls in this case tend to be more susceptible to sexually transmitted diseases.²

Teenagers tend to face various challenges, both social and health problems. One problem is sexual activity when they lack adequate knowledge and skills for self-protection. This places teenagers at higher risk of health problems including unwanted pregnancies, unsafe abortions and sexually transmitted infections including HIV/AIDS. The high prevalence of early marriage and childbearing in some cases can cause problems with high rates of maternal morbidity and mortality as well as neonatal and infant deaths in adolescents. Another social problem resulting from negative sexual behavior is increasing teenagers' vulnerability to violence, harassment, sexual exploitation, poverty, divorce. Adolescents' ability to practice safe reproductive health behavior is greatly influenced by adolescent knowledge.^{1,2}

Adolescent reproductive health is a condition of the physical, psychological and social well-being of adolescents. Many problems arise due to lack of attention to reproductive health, this is due to limited access to information or lack of knowledge about reproductive health. Problems that are often found are unwanted pregnancies, abortion, early marriage, sexually transmitted infections and HIV/AIDS, forms of sexual violence and unhealthy habits such as smoking, alcohol, substance abuse which are greatly influenced by advances in global information. These habits have an impact on the rapid age of sexual activeness and lead teenagers to high-risk sexual behavior.³

The population of Indonesia in 2021 will be 270.2 million people. This high population must be balanced with an increase in the quality of the population. One effort to improve the quality of human life can be done through improving reproductive health, especially for teenagers as the next generation of Indonesia in the future. Data from SKRRI shows that the percentage of teenage boys who have drunk

alcohol is around 34 percent and 2 percent for teenage girls. Behavioral studies conducted in Jakarta and Merauke reported that teenagers have a fairly high tendency to engage in activities related to sexual behavior such as kissing, sexually stimulating each other, masturbating or even having sex before marriage. The trend of premarital sexual behavior among teenagers is becoming more common, reflected in 30% of abortion cases in Indonesia carried out by teenagers or around 700 thousand cases per year.^{4,5}

In Indramayu Regency, youth workshops have been held organized by the Indonesian Midwives Association of Indramayu Regency. This activity is carried out in an effort to save the younger generation from the dangers of drug abuse, early marriage/premarital sex and adolescent reproductive health. Research conducted by Riyanto (2017) which was carried out at the As-Sakienah Islamic boarding school in Tugu Village, Sliyeg District, Indramayu Regency also proved that teenagers' knowledge about reproductive health is still very low. Only 17.1% of women and 10.4% of men know correctly about the fertile period and the risks of pregnancy. This is due to the absence of reproductive health education in most schools in Indramayu Regency. Due to the absence of reproductive health education from schools, this results in a lack of correct information about adolescent reproductive health. Limited knowledge about reproductive health has a negative impact on adolescent behavior. As a result, teenagers often seek information about sexual matters from inappropriate sources.^{4,5} Cooperation is needed from many parties, the role of parents, teachers and the environment must be mutually sustainable in increasing knowledge about sexual and reproductive health. It is hoped that teenagers can get the right information so that teenagers' sexual and reproductive health behavior will also be positive. This study aims to examine the relationship between knowledge about reproductive health and sexual behavior in adolescents.

METHOD

This type of research is quantitative with a cross sectional design. The sample was taken using a total sampling technique, namely 35 teenagers from class IX at junior high schools in Indramayu Regency, West Java, Indonesia. The independent variable in the research is teenagers' knowledge about reproductive health and the dependent variable is teenagers' sexual behavior. Data was taken directly using a questionnaire instrument. The instrument was created by the researcher himself based on a literature review and other instruments used in similar but validated research. The knowledge variable regarding reproductive health is assessed by whether or not the respondent's answer is correct to questions regarding reproductive health such as body changes from children to adolescents, the human reproductive system, HIV/AIDS, sexually transmitted infections and drugs. The measurement is using a

Guttman scale whose values are: correct is given a value of one and incorrect is given a value of zero. Adolescents' knowledge is categorized into good knowledge, sufficient knowledge and poor knowledge. Good knowledge is correct for $\geq 75\%$ of all statements in the questionnaire, sufficient knowledge is correct for 56 - 74% of all statements in the questionnaire and poor knowledge is correct for $< 55\%$ of all statements in the questionnaire.

The dependent variable is adolescent sexual behavior which is assessed by whether or not the respondent has ever carried out any form of action that could endanger their health and future, in this case they have ever kissed on the lips, ever touched sensitive body parts, ever had premarital sexual relations, ever smoked, have ever drunk alcohol and have used drug abuse after experiencing their first menstruation and experiencing wet dreams in men. The measurement uses a Likert scale whose values are always, often, rarely, and never. The results of measuring positive behavior variables (if the value is >50) and negative behavior (if the value is less than 50).

The research was carried out for 3 months, from November to January 2023. Validity testing is carried out by reviewing each question to determine how appropriate it is to the purpose of the survey and the clarity of the question statement. The results of the validity test of the questionnaire regarding behavior contained 25 questions, the results were 18 valid questions and 7 invalid questions. The results of the reliability test were found to be reliable (Cronbach's alpha = 0.6). The results of the validity test of the questionnaire regarding knowledge contained 20 questions, the results were 13 valid questions and 7 invalid questions. The test results show the Cronbach's alpha value = 0.7, meaning the questionnaire is reliable. Bivariate analysis using the chi square test was carried out to determine the relationship between knowledge and sexual behavior in adolescents.

RESULTS

Table 1. Frequency distribution of respondent characteristics

	Frequency	%
Gender		
Man	19	54.3
Woman	16	45.7
Amount	35	100
Age		
14	7	20.6
15	22	62.9
16	5	14.3
17	1	2.9
Amount	35	100

Based on gender, it was found that 54.3% were male and 45.7% were female. Based on the age of the respondents, it was found that 62% of respondents were 15 years old, 29.6% were 14 years old,

14.3% were 16 years old and only 2.9% were 17 years old.

Table 2. Frequency distribution of knowledge regarding reproductive health

Knowledge	Frequency	%
Good	15	42.9
Enough	9	25.7
Not enough	11	31.4

Based on table 3.0, research results showed that 42.9% of respondents had good knowledge about reproductive health, 25.7 had sufficient knowledge and 31.4% had insufficient knowledge.

Table 3. Frequency distribution based on adolescent behavior towards reproductive health

Behavior	Frequency	%
Positive	25	71.4
Negative	10	28.6
Total	35	100

The results of research regarding respondent behavior in reproductive health were that 71.4% of respondents had positive behavior in reproductive health. As many as 28.6% of respondents tend to behave negatively in reproductive health.

Table 4. Relationship between knowledge and adolescent behavior towards reproductive health

Teenage knowledge	Behavior				Amount		P value
	Positive		Negative		f	%	
	f	%	f	%			
Good	12	80.0	3	20.0	15	100	0.005
Enough	9	100	0	0.0	9	100	
Not enough	4	36.4	7	63.6	11	100	
	25	71.4	10	28.6	35	100	

The results of the bivariate analysis of the relationship between adolescent knowledge about reproductive health and sexual behavior were 80% had good knowledge and positive behavior. Teenagers who have less knowledge but still behave positively are 36.4%. Teenagers who have sufficient knowledge and behave positively are 100% and none have negative behavior at all. Teenagers who have poor knowledge and behave negatively are 63.6% and as many as 20.0% of teenagers have good knowledge but still behave negatively. From the results of the statistical analysis of the chi square test, a p value of 0.005 ($p < 0.05$) was obtained, which shows that there is a relationship between adolescent knowledge about reproductive health in class IX students.

DISCUSSION

This research was attended by 35 respondents who were teenagers aged between 14 and 17 years. According to WHO, a teenager is someone aged 12-24 years. Law No. 23 of 2002 concerning child protection states that the age limit for teenagers is 10-18. Adolescence is an important period in human development because during adolescence physical and psychological changes occur, as a transition period from childhood to adulthood.⁶ The older you are, the more mature a person's level of maturity and strength will be in thinking and working. So as one gets older, one's experience will increase and experience will influence the level of knowledge.⁷ The research results showed that of all the teenagers who were respondents in the research, more of them had good knowledge about reproductive health. However, the number of teenagers who have less knowledge is still in second place.

The research results showed that the majority of teenagers had positive sexual behavior and a small number had negative behavior. Health behavior is all a person's activities or actions, both observable and unobservable, which are related to maintaining and improving health. Sexual behavior can be assessed as positive and negative. Negative or risky sexual behavior includes premarital sex which can result in unwanted pregnancy, sexual behavior with multiple partners, unsafe abortion, and the risk of contracting sexually transmitted infections. Other risky behaviors that can affect reproductive health include premarital sexual relations.⁸ Pregnancy at a young age (under 19 years) carries a 50% risk of perinatal morbidity and mortality, low birth weight, increased risk of premature birth, and neonatal asphyxia. Early marriage and/or childbearing also often prevent girls from getting an education and increase the cycle of poverty. Knowledge of adolescents regarding sexual and reproductive health will help prepare adolescents to live a healthy and responsible reproductive life which includes physical, psychological and social preparation for marriage. and become parents at a mature age.⁹

Adolescents have special sexual and reproductive health needs, whether they are sexually active or not yet married. The results of the research analysis show that there is a relationship between knowledge about reproductive health and adolescent sexual behavior (p -value = 0.005). Teenagers' lack of knowledge about reproductive health can influence teenagers' attitudes about premarital sex, giving rise to the risk of unhealthy sexual behavior that will have long-lasting impacts in the future.¹⁰

Adolescent sexual behavior is influenced by several factors, one of which is knowledge. One of the factors of negative sexual behavior is a lack of correct information about sexuality. Easy access to information technology means that teenagers can access information that is not necessarily true. This can influence the thoughts and behavior of adolescents in terms of sexual and reproductive health.¹¹ Adolescent sexual activity varies greatly based on gender and environment.¹² There are differences in reproductive patterns of sex hormones between adolescent boys and adolescent girls. Adolescent girls

have reproductive patterns according to the monthly cycle, while males produce sexual hormones continuously so that adolescent boys tend to be more aggressive.¹²

Adolescents tend to face health and social challenges. Starting sexual activity when lacking adequate knowledge and skills to protect themselves puts teenagers at higher risk of unwanted pregnancy, unsafe abortion, sexually transmitted infections including HIV/AIDS. Various problems can arise due to teenagers' lack of knowledge regarding reproductive health. One problem that has a long-lasting impact is teenage pregnancy which is associated with anemia, sexually transmitted infections, infant morbidity and mortality, stunting, and even mental disorders due to not being ready to become parents. Pregnant teenagers will also experience negative social disturbances and may leave school, which will reduce their ability to work and can have an impact on the economy in the long term.^{12,13}

Research conducted by Kumalasari in 2022 shows that there is a relationship between teenagers' knowledge of reproductive health and premarital sexual behavior. Teenagers who have good knowledge about reproductive health will have a positive attitude in preventing teenage pregnancy, including premarital sexual attitudes. Another research conducted by Atik (2021) shows that there is a relationship between knowledge about reproductive health. The results of the research show that there is a relationship between knowledge about reproductive health and reproductive health behavior in adolescents aged 15-19 years. Good knowledge will influence reproductive health behavior and increasing knowledge is very important to prevent negative reproductive health behavior.¹⁴

Similar research was conducted by Solisa (2023) where there was a relationship between adolescent knowledge about reproductive health and adolescent sexual behavior. The results of the research can be concluded that knowledge of reproductive health is needed so that students do not make mistakes in their behavior, especially adolescent sexual behavior. This is different from research conducted by Maelissa (2020) where there was no relationship between the level of reproductive health knowledge and adolescent sexual behavior. This means that a good level of reproductive health knowledge does not guarantee that teenagers' sexual behavior will also be good. This is possibly due to other factors that can influence adolescent sexual behavior, including the social environment, information technology, spirituality and others.^{15,16}

The lack of knowledge among teenagers can be caused by the fact that many teenagers are still hesitant and embarrassed about visiting sexual and reproductive health services so that they do not get the right information about reproductive health, sexual information or about narcotics and dangerous drugs. Adolescents must be able to reach health services so that adolescents can obtain information about reproductive health. The government must also strengthen the sexual and reproductive health service system. Reproductive health information is still considered a taboo subject, so students rarely

get the right information. Teenagers tend to get information from the internet that is not necessarily true. Reproductive health issues must be considered by many sectors, especially education. Students should receive information about reproductive health from school.^{1,2,6}

The government must provide services for the many adolescents who need sexual and reproductive health services, such as appropriate information, contraception and treatment for sexually transmitted diseases. These health services must be built in a way that makes teenagers feel comfortable in accessing reproductive health services. Health services must be sensitive to the needs and developmental attributes of adolescents in order to attract their attention. WHO promotes Youth Friendly Health Services to overcome these problems and make it easier for teenagers to get the services they need.^{1,2,15}

Health education practitioners need to educate the younger generation about safe sex and the consequences of unsafe premarital sex. Safer sex is anything that can be done to reduce the risk of STIs/HIV and pregnancy without reducing pleasure. This term reflects the idea that choices can be made and behaviors taken to reduce or minimize risk. Parents need to have adequate communication with their teenage children regarding topics related to sexuality and reproductive health, because parents are the least common source of information, while teachers are the most common source of information regarding these topics. One of the main factors in socializing reproductive health issues is communication regarding sexual and reproductive health issues with both teachers and parents. There is research evidence that confirms that many adolescents engage in sexual activities that increase their risk of several reproductive morbidities of unsafe abortion, unintended pregnancy, abuse, sexual exploitation and sexually transmitted infections due to lack of knowledge and information.^{1,9,15,16}

CONCLUSION

Based on the research results, it can be concluded that there is a relationship between knowledge about reproductive health and adolescent sexual behavior. The results of this study are in accordance with the theory that teenagers' lack of knowledge about reproductive health can influence sexual behavior such as premarital sex. Negative or unhealthy sexual behavior will have a long-lasting impact in the future. Information and knowledge regarding reproductive health must be accessible to teenagers. Parents of teenagers and teachers at school must play a proactive role in providing information about sexuality and reproduction. The education sector must also be involved in increasing knowledge of reproductive health among adolescents. Health facilities must work together with relevant stakeholders to improve quality reproductive health services for adolescents so that adolescents are no longer embarrassed to obtain information about sexual and reproductive health.

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