

The relationship between knowledge and social support with sexual behavior in adolescents

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Abstract

Adolescents often undergo a tumultuous phase of sexual maturation, leading to increased dating activity due to a lack of adequate knowledge and support. This study aimed to investigate the relationship between knowledge, social support, and sexual behavior among adolescents. The research adopted a cross-sectional design with 100 respondents from Manukan Kulon. Simple random sampling was used to select the respondents. Knowledge and social support served as independent variables, assessed through questionnaires, while sexual behavior was the dependent variable, evaluated with a separate questionnaire. Ordinal data analysis, specifically the Spearman Rho test ($p < 0.05$), was employed. Results indicated that 57% of adolescents in Manukan Kulon had low knowledge, 46% lacked social support, and 60% engaged in unsafe sexual behavior. The Spearman Rho test revealed significant relationships between knowledge and sexual behavior ($\rho = 0.000$) and between social support and sexual behavior ($\rho = 0.000$). In conclusion, improved knowledge can lead to safer sexual behavior among adolescents, while strong social support, particularly from parents and teachers, plays a vital role in providing information and promoting safe sexual behavior.

Introduction

Adolescents are individuals experiencing a transitional phase of sexual and biological maturation, which can lead to excessive dating behavior, including unhealthy reproductive behaviors like premarital sex.¹ Premarital sexual behavior is sexual behavior carried out without going through an official marriage process according to the law or according to their respective religions and beliefs. One of the factors of sexual behavior is social support and lack of knowledge.^{2,3} Little knowledge of sex in adolescents makes adolescent behavior worrying, such as things that should not be done but in this day and age teenagers consider holding hands, hugging kissing with the opposite sex is common.⁴ This perception often stems from the absence of correct and comprehensive sexual education¹. In addition to insufficient knowledge, social support plays a significant role in adolescent sexual behavior. Parents, as a primary influence within the family environment, exert considerable impact by providing social support.^{5,6} Families, particularly parents, have a pivotal role in shaping adolescent sexual behavior by imparting knowledge and understanding of the consequences of premarital and free sex.^{7,8} However, adolescents tend not to disclose their premarital sexual activities to their parents or family.³ They often place more trust in their peers, believing that friends can maintain confidentiality and offer solutions to their problems.⁹

According to data from the Adolescent Reproductive Health Survey (SKRR) in 2017, 45% of women and 44% of men started dating between the ages of 15 and 17. Regarding sexual behavior,

most women and men reported activities such as holding hands (64% of women and 75% of men), hugging (17% of women and 33% of men), kissing on the lips (30% of women and 50% of men), and touching/groping (5% of women and 22% of men) while dating. The survey also indicated that 8% of men and 2% of women reported engaging in premarital sexual intercourse. Reasons cited for engaging in premarital sex included love (47%), curiosity (30%), chance (16%), coercion (3%), and influence from friends (9%).¹⁰

In a preliminary study involving 10 adolescents from Manukan Kulon, findings revealed that 70% had limited sexual knowledge, while 30% possessed a higher level of knowledge. Regarding social support, 60% received support from peers, 20% from family, and 20% from special individuals like partners. In terms of sexual behavior, 70% had girlfriends, four held hands with the opposite sex, and three hugged individuals of the opposite sex. Furthermore, 30% did not have girlfriends, but two of them engaged in holding and hugging with the opposite sex, while one abstained from any such interactions. Notably, three teenage girls experienced unwanted pregnancies, highlighting the consequences of risky sexual behavior. Observations in Manukan Kulon indicated that adolescents lacked information about premarital sexual behavior and its consequences. Limited parental support, such as allowing late-night dating, pushed adolescents to rely on peers and special individuals for emotional support during highs and lows. This combination of insufficient knowledge and inadequate social support may contribute to high-risk sexual behavior among adolescents in Manukan Kulon.

Adolescent knowledge about sex remains deficient, often influenced by incorrect sources of information, such as pornographic videos, pornographic websites on the internet, and other sources, which can lead to misconceptions and incorrect perceptions about sex.^{11,12} These misconceptions can lead to inappropriate attitudes and subsequent sexual behaviors.¹³ Additionally, adolescents may believe that engaging in sex is a way to express love, leading them to engage in sexual activity before marriage.¹⁴ Lack of knowledge can result in sexual activity, and the worst consequences can include sexually transmitted diseases (STDs) like HIV/AIDS.¹⁵

Inadequate social support, including support from parents, peers, and special individuals, is another contributing factor to adolescent sexual behavior. Adolescents naturally seek independence from their parents and form bonds with peers, and peer associations significantly influence their sexual behavior, as they spend more time with friends.^{16,17} Adolescents often rely more on friends than their parents and develop strong emotional connections within their peer groups. This strong solidarity among peers can influence adolescents' sexual behavior.¹⁸ The consequences of insufficient and incorrect social support can lead to sexual behaviors that result in unwanted pregnancies, abortions, STDs like HIV/AIDS, and psychological impacts such as anxiety, depression, shame, and fear.¹⁵ The support provided by families, peers, and special individuals is a crucial factor influencing premarital sexual behavior in adolescents. Insufficient social support can lead to limited knowledge, which is essential for preventing sexual behavior.¹⁵ Early sex education, provided by parents or teachers, is necessary to help adolescents make informed decisions about their behavior and avoid accepting incorrect information. Parents should maintain open communication with their children to explain what is acceptable and what is not. The primary objective of this research was to examine the relationship between knowledge, social support, and adolescent sexual behavior.

Materials and Methods

Research design

This study employed a quantitative research approach with an observational analytical design using a cross-sectional approach. The research was conducted in a specific area of West Surabaya, namely Manukan Kulon.

Study respondents

The population for this study comprised adolescents residing in Manukan Kulon, with a total of 133 potential respondents. The sample size selected for this study consisted of 100 respondents. The sampling method involved collecting data from teenagers at a single location during a specific time frame, and those who were present during that time were included as research respondents. The inclusion criteria for this study included adolescents who were living in the area, willing to participate by completing the distributed questionnaires, aged between 15 and 21 years, and not married. Exclusion criteria encompassed adolescents who did not attend the research site as respondents and adolescents with disabilities.

Variable, instrument and data collection

The independent variables in this study were knowledge and social support, while the dependent variable was sexual behavior. The questionnaire used to gather demographic data from respondents included initial name, gender, age, age at first menstruation (only for women), age at first wet dream (for men only), individuals respected by the respondent, presence of close friends, number of close friends, presence of friends, the number of friends, sources of friendship, sources of information related to sexuality, existence of a romantic relationship, and parental restrictions on relationships. The knowledge measurement instrument employed in this study used a knowledge questionnaire comprising 15 Guttman scale questions adapted from prior research,⁹ with two optional answers. Knowledge was categorized as low if the score was < 75% (true < 11) and high if the score was ≥ 75% (correct ≥ 11).

The social support questionnaire in this study consisted of 12 Likert scale questions adapted from Lakey and Cohen,¹⁸ with four optional answers: Very suitable (4), suitable (3), not suitable (2), very inappropriate (1). Social support was categorized as low (12-23), medium (24-35), and high (36-48). The sexual behavior questionnaire in this study consisted of 15 Likert scale questions adapted from Muflich's research,¹⁹ with two optional answers: Never=0 and Ever=1. Sexual behavior was categorized as safe (if all answers were "Never"), less safe (if the respondent answered "Ever" for one of the indicators: Touching, Kissing, and Masturbation), and unsafe (if the respondent answered "Ever" for one of the indicators: Deep kissing, Oral sex, Petting, and Sexual intercourse).

Validity and reliability tests were conducted on 30 respondents, and the results indicated that all the questions were valid. The Cronbach Alpha results for the knowledge questionnaire were 0.760, and for the sexual behavior questionnaire, they were 0.764, demonstrating the reliability of both questionnaires.

Data analysis

Statistical analysis was performed using Spearman's rho ($\alpha < 0.05$). Mentioning data normality and characteristics is essential.

Results

The study's respondents, as described in Table 1, primarily consisted of 58% males and 42% females. The majority fell into the 15-year-old age category (31%). Most females experienced menarche at age 12 (15%). Among males, wet dreams commonly occurred at ages 12 and 13 (15%). Regarding respected individuals, 71% of respondents respected their parents. The majority had 1-5 close friends (66%), who primarily came from the home environment (38%) or school (34%). Information about sexuality was mainly obtained from multiple sources (33%). In terms of relationships with the opposite sex, 63% of respondents reported not having such relationships. Parental restrictions on relationships were mostly not imposed (62%).

Table 2 illustrates that a significant majority of adolescents,

specifically 60.0%, exhibit low knowledge and engage in unsafe sexual behavior. In contrast, a smaller percentage, 21.1%, display low knowledge but practice safe sexual behavior. Additionally, 40.0% of adolescents with high knowledge engage in unsafe sexual behavior, while 78.9% of those with high knowledge practice safe sexual behavior. Only 19.0% of adolescents with high knowledge engage in unsafe sexual behavior. The Spearman rho test results ($\rho = 0.000$) with a value of $r = -0.378$ indicate a significant negative relationship between adolescent knowledge and sexual behavior in RW 3 Manukan Kulon. This suggests that the hypothesis, which posits a low-nature relationship, is accepted, affirming the association between knowledge and sexual behavior among these adolescents.

Table 3 provides insights into the relationship between adolescent social support and their sexual behavior in RW 3 Manukan

Table 1. Demographic Data Characteristics of Youth in RW 3 Manukan Kulon 18-19 June 2022 (n=100).

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	58	58
Female	42	42
Age		
Middle adolescent (14-17 year old)	56	56
Last adolescent (18-21 year old)	44	
Age of puberty (menarche/wet dream)		
8 year old	1	1
10 year old	6	6
11 year old	14	14
12 year old	30	30
13 year old	24	24
14 year old	12	12
15 year old	7	7
16 year old	6	6
Respected person		
Parent	71	71
Teacher	3	3
Parent and teacher	19	19
Special other	6	6
Nothing	1	1
Number of close friend		
Nothing	5	5
1-5 people	66	66
6-10 people	25	25
11-15 people	4	4
Neighborhood origins of close friends		
Household	38	38
School	34	34
Household and School	23	23
Nothing	5	5
Information about sexual behavior comes from		
Social media	25	25
School	27	27
Parent	1	1
Friend	14	14
Choose more 1	33	33
Relationship status (have boy/girlfriend)		
Yes	37	37
No	63	63
Parent limitation of relationship		
Yes	38	38
No	62	62

Kulon. Notably, 48.3% of adolescents with low social support tend to engage in unsafe sexual behavior, while a smaller proportion (66.7%) with similarly low support also exhibit unsafe sexual behavior. However, a modest 15.8% of adolescents with low social support practice safe sexual behavior. On the other hand, 30.0% of adolescents with high social support engage in unsafe sexual behavior, while a significant majority (73.7%) with high support follow safe sexual practices. Moderate social support corresponds to diverse outcomes: 21.7% of adolescents with moderate support exhibit unsafe sexual behavior, while 9.5% with the same level of support engage in unsafe sexual practices. Additionally, 10.5% of adolescents with moderate social support opt for safe sexual behavior. The Spearman rho test results ($\rho = 0.000$) with a correlation coefficient (r) of -0.344 signify a significant negative relationship between adolescent social support and their sexual behavior in RW 3 Manukan Kulon. This supports the hypothesis of a low-nature relationship, underlining the meaningful connection between social support and adolescent sexual behavior in this context.

Discussion

Factors related to adolescent sexual behavior include knowledge and social support. Knowledge can shape a person’s attitudes and behavior. It also enables adolescents to have awareness and act in accordance with their knowledge. Behavior based on knowledge tends to be more enduring than behavior without a knowledge foundation. The results of this study are consistent with Kumalasari’s research¹⁹ which suggests that students with limited knowledge are more likely to engage in premarital sexual behavior. Conversely, adolescents with higher knowledge levels are less likely to engage in premarital sexual behavior.^{12,20,21}

This study’s findings align with a survey conducted by Kumalasari¹⁹ in various countries, demonstrating that access to accurate information can reduce reproductive issues in adolescents.^{22,23} Thus, it can be inferred that a higher level of knowledge among adolescents correlates with more responsible behavior.

Cognitive knowledge is a vital domain for shaping an individual’s actions (*i.e.*, behavior).^{24,25}

Interestingly, there were 19% of respondents with high knowledge who engaged in unsafe sexual behavior. Researchers speculate that these adolescents may have understood the definition and consequences of sexual behavior, leading them to take more risks. Access to abundant information on reproductive health through various media sources, such as websites, videos, television, books, and magazines, might influence this behavior.^{26,25,27} The results highlight that well-informed respondents can still engage in risky sexual behavior, possibly because the information they receive is not always accurate or complete, encouraging experimentation despite their knowledge.^{27,28}

Low social support among adolescents was associated with less safe sexual behavior. Behavior can be influenced by the support provided by individuals in one’s social circle, which encompasses emotional support, information, rewards, and tools that enhance responsible behavior.²⁹ Various factors, including predisposition, support, and driving factors, can shape an individual’s actions. Peer social support is a driving factor that should significantly influence behavior, as strong peer support can deter premarital sexual behavior. However, family support is another factor that may directly affect behavior.^{9,22,30}

Interestingly, some respondents received high social support but still engaged in unsafe sexual behavior (23.8%). It’s possible that respondents perceived the support they received as granting them the freedom to do as they pleased, as the surrounding support allowed them to act without fear, including engaging in negative behaviors. This finding aligns with previous research³¹ which established a connection between parental support and adolescent risky sexual behavior. This support sometimes takes the form of permissive-indulgent parenting, where parents prioritize their children’s happiness, granting them more freedom and complying with their wishes. Consequently, this approach can lead to more aggressive, independent, and socially unaware adolescents who may engage in risky sexual behavior.^{7,28,30,32} One limitation of this study is that the measurement of social support does not provide detailed data on the sources of support received by adolescents.

Table 2. The Relationship between Knowledge and Sexual Behavior in Adolescents in RW 3 Manukan Kulon on 18-19 June 2022 (n=100).

Knowledge	Sexual behavior						Total	
	Unsafe		Less of safe		Safe		N	%
	F	%	F	%	F	%		
Low	17	81.0	36	60.0	4	21.1	57	57
High	4	19.0	24	40.0	15	78.9	43	43
Total	21	100	60	100	19	100	100	100

Result of Spearman’s Rho analysis ($\alpha = 0.05$) > ($\rho = 0.000$) ($r = -0.378$).

Table 3. The Relationship between Social Support and Sexual Behavior in Adolescents in RW 3 Manukan Kulon on 18-19 June 2022 (n=100)

Knowledge	Sexual behavior						Total	
	Unsafe		Less of safe		Safe		N	%
	F	%	F	%	F	%		
Low	14	66.7	29	48.3	3	15.8	46	46
Middle	2	9.5	13	21.7	2	10.5	17	17
High	5	23.8	18	30.0	14	73.7	37	37
Total	21	100	60	100	21	100	100	100

Result of Spearman’s Rho analysis ($\rho = 0.000$) < ($\alpha = 0.05$) ($r = -0.344$)

Conclusions

The knowledge and social support possessed by adolescents are related to their sexual behavior. Providing appropriate information that aligns with the needs of adolescents is one of the key factors in helping them avoid risky sexual behavior. Efforts to prevent premarital sexual behavior should focus on increasing knowledge and social support, particularly from those who are closest to adolescents, including parents, teachers, and peers. This approach aims to create an environment conducive to the healthy development of adolescents as they navigate their developmental tasks.

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