Factors Related to Sexual Behavior among Adolescents in West Java

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Abstract

Background: One of the problems in adolescents is sexual behavior, which generally begins with the courtship process and behavior in dating.

Purpose: The study aimed to determine the factors associated with sexual behavior in adolescents.

Methods: This study used secondary data and analyzed using a crosssectional design on a sample of 429 adolescents. Quantitative data used the chi-square test.

Results: One of the factors related to dating behavior is age, which is proven that dating behaviors such as holding hands (p=0.037), hugging (p=0.002), kissing lips (p=0.041), while touching/stimulating and having sexual relations are not related to age factor (p=0.929). Factors such as gender, education level, area of residence and information exposure were not related to dating behavior

Conclusions: There is a relationship between age factors and dating behavior in adolescents. Cross-sectoral collaboration, the use of digital media for socialization and education, and strengthening family and religious functions are strategies used to develop youth health programs.

Keywords: adolescents, dating, family, risk factors, sexual behavior

Introduction

Adolescence is a period of transition from childhood to adulthood, which includes all aspects of development experienced in preparation for entering adulthood, which can be physical, psychological, cognitive, spiritual and social and economic changes. In adolescence, a person tends to have a fairly large sense of curiosity, and likes adventure and challenges but usually makes decisions without careful consideration (Ministry of Health of the Republic of Indonesia, 2018).

Adolescents are more likely to engage in dangerous behavior. According to the National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes), and The International Classification of Functioning, Disability, and Health (ICF), (2018) the working age group right now is mostly made up of people from generation Y (millennials) and generation Z (youth). About 17% of Indonesia's population is between the ages of 15 and 24, and that number is expected to keep growing. Meanwhile, the World Health Organization (WHO), defines adolescents as those between 10 and 19 years of age. Adolescents need a variety of sources of information to grow and thrive in good health, including age-appropriate comprehensive sexual education, an opportunity to learn life skills, and a safe, supportive, egalitarian, and appropriate environment. In addition, they need an opportunity to actively engage in the planning and implementation of interventions aimed at preserving and improving their health. To address the unique needs and rights of adolescents, it is essential to expand this possibility.

At this time, adolescents begin to feel sexual urges and show interest in the opposite sex. Then teenagers will start trying everything related to it (Ministry

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of Health of the Republic of Indonesia, 2018). The results of the Survey by National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes), and The International Classification of Functioning, Disability, and Health (ICF) (2018) explained that the percentage of women and men aged 15-24 years who were unmarried and had had premarital sexual intercourse in women was 0.9% aged 15-19 years, 2.6% aged 20-24 years, while for men it was 3.6% aged 15-19 years and 14.0% aged 20-24 years (The National Population and Family Planning Board, 2018). Risky sexual behavior can have an impact on adolescent health. A study in Finland showed Chlamydia to be a diagnosed infection in 80% of the population aged 15 to 29 years (National Institute for Health and Welfare - Finland, 2016). In addition, other impacts such as cognitive, emotional, social and physical aspects also affect adolescents (Pakarinen et al., 2020). This risky sexual behavior will certainly have a physiological and psychological impact on teenagers who are the next generation of this nation.

Various studies have revealed the factors that cause the occurrence of dating behavior that comes from within and from outside of adolescents, including a lack of knowledge and high exposure to sources of sexual information (Mahmudah et al., 2016). This is reinforced by the research of Kyilleh, Tabong, and Konlaan (2018) that knowledge about reproductive health choices is low among respondents with the majority of them relying on their peers for information about sexual and reproductive health.

Other factors according to Arega et al. (2019) are sexual desire, not attending religious education, watching pornographic films and living in rural areas. Other factors that trigger sexual behavior during dating are sexual disorders, self-evaluation, and attitudes toward sexual health (Ahmadian et al., 2014). This finding was in line with the results of research by Putra et al. (2017) and Siyoto et al. (2018) that adolescents who had access to pornographic content tended to engage in sexual activity when they were dating. Another study by Ulfah (2018) in Cilacap also explained that factors that influence sexual behavior in adolescents include perceptions and knowledge regarding the value of virginity.

Based on research by Kyilleh, Tabong, and Konlaan (2018) having sexual partners and having premarital sex is common and seen as normal in Ghana. Adolescents engage in unprotected sexual practices as a way of testing their fertility, assurance of love, bait for marriage and livelihood. Abortions are performed by adolescents with local methods used identified as inserting herbs into the vagina, drinking concoctions and boiling papaya leaves. Reproductive health services are available in the community but receive low utilization due to perceived negative attitudes of health workers, confidentiality, and social norms.

Based on the literature review, the researchers

concluded that there are five major factors, namely the age factor of adolescents who engage in sexual intercourse, especially in the 15-18 year range, the gender factor of adolescents, the knowledge factor about reproductive health, exposure to sexuality and reproductive health of adolescents, and the residence factor. To obtain the right treatment method, this study will analyze the factors related to dating behavior in adolescents, both non-risky and risky behavior carried out by adolescents based on data analysis of the 2019 Population Family Planning and Family Development program in Program Performance and Accountability Survey. By analyzing the factors related to dating behavior in adolescents, we can see which factors are more dominant and from these factors we can make policy strategies, design interventions or develop related programs that can prevent and reduce the adverse effects of premarital sexual behavior on adolescents

Materials and Methods

Design

The design in this study is a cross sectional method. In a cross-sectional study, the researcher looks at both the result and the risks of the people who are taking part in the study at the same time (Setia, 2016). This study uses a quantitative approach to analyze secondary data.

Sample and setting

The survey respondents are unmarried men and women aged 15-24 years in West Java Province. The total number of adolescent respondents in this study comprised 634 adolescents, but after removing 131 missing data, the remaining population studied was 429 people.

Variables

The independent variable was background characteristics and dependent variable was dating behavior. The background characteristic variables include age, education, residence, and exposure to reproductive health information while the dating behavioral variable includes holding hands, hugging, kissing lips, stimulate/touch, and having sexual intercourse.

Instruments

The data source in this study is based on the results of the 2019 Youth Population Program Performance and Accountability Survey.

Data collection

The data collection instrument in the 2019 Program Performance and Accountability Survey used a questionnaire based on smartphone application utilization technology.

Ethical clearance

This research was approved by the Research Ethics

Table 1. Characteristics Demographic of the Respondents (n=429)

Variable		Frequency (f)	Percentage (%)	
Age	15-16 years old	205	47.8	
	17-18 years old	224	52.2	
Education	No formal school	18	4.2	
	Elementary school	402	93.7	
	Junior high school	9	2.1	
Residence	Urban	303	70.6	
	Rural	126	29.3	
Exposure to reproductive health information	Exposed	411	95.8	
	Never	18	4.2	

Table 2. The Bivariate Analysis of Teenagers Most Often Date and Dating Behavior

Teenagers mo	st often date	Dating Behavior							
Variable	Explanation	Holding hands (%)	Hugging (%)	Kissing lips (%)	Stimulate / touch (%)	Having sexual inter- course (%)			
Age	17-18 years old	37.8	11.4	3.0	0.5	0.2			
Gender	Male	34.0	9.3	2.8	2.2	0.2			
Education	Elementary school	63.9	15	3.0	0.9	0.2			
Residence	Urban	48.0	12.4	2.6	0.5	0.5			
Exposure to reproductive health information	Exposed	65.5	16.3	3.7	0.9	0.5			

Committee of Universitas Padjadjaran with Number 454/LB.02/H4/2019. Signed written consent or verbalization of The National Population and Family Planning Board indicated willingness to allow researchers to use this data with responsibility. Any results of this study will be presented in aggregate form and for academic purposes only. In addition, there is no risk to the adolescents and The National Population and Family Planning Board in the conduct of this study.

Data analysis

Data processing is done through the help of software by utilizing an appropriate computer program, namely SPSS software. The data processing process begins with editing, coding, processing, and cleaning. The collected data were analyzed using univariate analysis, specifically focusing on percentages. In addition, the analysis included the application of the chi-square test. Univariate analysis in the form of percentages was used to analyze the age, education, residence, and exposure to reproductive health information. Meanwhile, bivariate analysis was used to analyze the relationship between the teenagers most often dating behavior (holding hands, hugging, kissing lips, stimulate/touch, having sexual intercourse).

Results

Respondents in the program performance and accountability survey data in this study were 429 teenagers with an age range of 15-18 years. There were 205 (47.8%) adolescents aged 15-16 years, and 224 (52.21%) aged 17-18 years.

Teenagers who most often engaged in dating behavior were in the age range of 17-18 years with details of holding hands at 37.8%, hugging 11.4%, kissing lips by 3.0%, stimulating/touching by 0.5%, and having sexual intercourse by 0.2%. Based on gender, there were 211 males (49.18%) and 218 females (50.81%). From the data, the number of female adolescents is more than male adolescents, but for dating behavior it is seen that male adolescents are more involved in dating with details of holding hands by 34.0%, hugging by 9.3%, kissing lips by 2.8 %, touching/stimulating by 2.2%, and having sexual intercourse by 0.2%. Based on education level, there were 18 teenagers (4.2%) who had not received any formal education, 402 (93.7%) were in elementary school, and nine (2.1%) were in junior high school. There were no adolescents aged 15-18 years in this study who were already in high school or who had graduated from high school. Teenage dating behavior was also mostly carried out by teenagers who only received elementary school education, with details of holding hands by 63.9%, hugging by 15%, kissing lips by 3.0%, touching and stimulating by 0.9% and having

Table 3. The Pearson Chi-Square Analysis of Independent Variable and the Dependent Variable

Dating Behavior		Holding Hugging hands		Kissing lips		Stimulate / touch		Having sexual inter- course					
		·	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Don't know
Vari-	Age	15–16 y.o	129	76	22	183	4	201	2	203	1	201	3
able		17–18 y.o	162	62	49	175	13	211	2	222	1	219	4
	Total		291	138	71	358	17	412	4	425	2	420	7
	Pearson Chi-Square		0.037		0.0	0.002 0.041		0.929			0.964		
	Gender	Male	146	65	40	171	12	199	3	208	1	205	5
		Female	145	73	31	187	5	213	1	217	1	215	2
	Total		291	138	71	358	17	412	4	425	2	420	7
	Pearson Chi-Square		0.552 0.187		0.072		0.299		0.494				
	Educa- tion	No formal school	12	6	6	12	3	15	0	18	0	18	0
		Ele- mentary school	274	128	64	338	13	389	4	398	2	393	7
		Junior high school	5	4	1	8	1	8	0	9	0	9	0
	Total		291	138	71	358	17	412	4	425	2	420	7
	Pearson Chi-Square		0.7	722	0.1	137	0.0	009	3.0	373		0.961	
	Resi-	Urban	209	94	53	250	11	292	4	299	2	295	6
	dence	Rural	82	44	18	108	6	120	0	126	0	125	1
	Total		261	138	71	358	17	412	4	425	2	420	7
	Pearson C	hi-Square	0.7	722	0.1	137	0.0	009	0.8	373		0.961	
	Exposure	Once	281	130	70	341	16	395	4	407	2	402	7
	to repro- ductive health informa- tion	Never	10	8	1	17	1	17	0	18	0	18	0
	Total		291	138	71	358	17	412	4	425	2	420	7
	Pearson C	hi-Square	0.2	255	0	.2	0.7	723	0.6	674		0.818	

sexual intercourse by 0.2%. According to the area of residence, adolescents who live in urban areas were 303 (70.6%), and those who live in rural areas were 126 (29.3%), with the number of dating characteristics mostly carried out by adolescents who lived in urban areas. Adolescents who lived in urban areas had performed dating behaviors such as holding hands by 48%, hugging 12.4%, kissing lips by 2.6%, touching or stimulating 0.5% and having sexual intercourse by 0.5%. According to the exposure to information related to reproductive health, as many as 411 (95.8%) adolescents had been exposed to information, and 18 (4.2%) had never been exposed to information related to reproductive health. Adolescents who were exposed to information engaged in more dating behavior with details of holding hands by 65.5%, hugging by 16.3%, kissing lips by 3.7%, touching and stimulating

by 0.9% and having sexual intercourse by 0.5%.

There were 429 teenagers with an age range of 15-18 years who were studied using this program performance and accountability survey data. Most of the respondents were male (49.18%), and the average formal education was at elementary school with 402 people (93.7%). All of these adolescent respondents had been in a relationship, with as many as 291 (67.8%) teenagers holding hands, 71 (16.6%) teenagers hugging, 17 (4.0%) kissing lips, four (9%) teenagers touching or stimulating, while as many as two (0.5%) adolescents had sexual intercourse during dating. Five teenagers in this study also admitted that they had been in a relationship, some had only been in one relationship and some had four. They said that, during dating, they were holding hands, hugging, kissing cheeks, forehead and lips. Some said they had also touched,

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but these five teenagers did not have sexual relations like husband and wife when dating. Dating behavior carried out by teenagers is very risky because it can lead to more serious things, and, if no special intervention is carried out, it will be possible for more teenagers to have sexual relations like husband and wife with their partners and cause many health problems in adolescents. The significance value found in the relationship between age and dating behavior is that the higher the age, the more types of sexual activity are carried out.

The explanation of the independent variable and the dependent variable in this study can be seen in Table 3.

Discussion

In this study, age is a variable that affects sexual behavior in adolescents during dating or before marriage. This research is in line with research studies by Ahmadian et al. (2014) and Akibu et al. (2017) which state that age is a factor that influences adolescents to engage in sexual behavior, and the average age of adolescents who engage in sexual behavior is 18.7 years, and half do it because they want to fulfill sexual desires. However, this is not in line with research by Haruna and Ibrahim (2014) which found that the age variable had no effect on sexual behavior during dating, or before marriage. Two sources in this study also revealed that age is a factor associated with dating behavior in adolescents. Sources argue that, by analogy, human babies are not able to do anything, let alone date or do more activities. Behaviors such as searching for identity, physical and mental psychological changes are literally only carried out by humans in the age range of 12-24, which is known as adolescence.

One of the factors that cause dating behavior and premarital sexual behavior in adolescents is the age factor. As is known, adolescence is a period of transition to adulthood, with an age range of 12-24 years. At this age, adolescents must face physical and psychological changes. Their sexual drive is high at this time, they are also unstable in decision-making and have a high curiosity that encourages them to try something, for example approaching the opposite sex and dating.

When two people start dating, they often start sexual behavior, which includes things like kissing, necking, petting, and having sex. Dating as a teen is an important part of socialization because it helps with learning how to be close to someone and gives you chances to build meaningful relationships with people of the opposite sex. It can also be a place to try new things sexually and learn more about yourself (Ohee, 2018). Because of this, dating is no longer a taboo subject. However, people who are dating should take precautions to avoid risky sexual behavior before marriage, which can damage sexual organs and make them more likely to get STDs like HIV/AIDS, gonorrhea, genital herpes, and syphilis. It can also have negative psychological effects, like

guilt, regret, low self-esteem, and the bad feelings that come with an unwanted pregnancy (Ulum, 2015). The adolescents need to care about religious beliefs, learning enough about sexual health, getting enough training from their parents, taking care of the environment, and many other things in order to live a good life.

The study also found that gender factors, education, residence, and exposure to information related to adolescent reproductive health had nothing to do with sexual behavior during dating or before marriage. This was inconsistent with a study conducted Lou et al. (2012) that found media exposure, family, peers, and school were associated with adolescent sexual behavior and health. Today's adolescents find it difficult to avoid dating behaviors as mentioned in the data because they are used to living with gadgets and smartphones so that they can get information from anywhere easily. This information is sometimes taken as it is without being filtered, and this information affects their sexual behavior more than it affects their academic performance (Kumar et al., 2013).

In this study, it is also found that gender factors have no relationship to sexual behavior during dating or before marriage. Teen respondents in this study were 543 people with a total of 273 males (50.3%) and 270 females (49.7%). The results show that, on average, all adolescents, both male and female, have had sexual behavior during dating or before marriage. This happens because, on average, both males and females have the same sex drive and have the same desire to date. Other research that is in line with this research was conducted by Haruna and Ibrahim (2014) and states that gender does not affect sexual behavior during dating or before marriage, for both adolescents and young adults. Seven sources in this study also did not mention and argued that gender factors were associated with behavior during dating. This study is not in line with research conducted by Zuo et al. (2012) which found that gender is an important factor that influences sexual behavior in adolescents.

Another study conducted by Lopez et al. (2015) also said that male adolescents are more likely to use pornography and engage in sexual practices during dating and even engage in risky behavior, and this is in line with research from several Asian countries (Belay et al., 2020; Hong & Kang, 2017). On the other hand, Fibrila et al. (2021) found that there was a strong link (r = 0.276) between high school students in a Metro City who saw pornography on social media and their sexual behavior. Most teens think that watching pornography with friends on social media who also watch sexual material changes their views on early sexual activities (Tesfahun, 2021).

Another factor in this study is the education factor, and the result is that there is no influence of the education level factor with sexual behavior during dating or before marriage in adolescents p =0,568 (α = > 0,05). A total of 486 (89.5%) adolescents in this study only received elementary

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school education and of 329 (60.1%) of them had sexual behavior during dating or before marriage. In theory, it can be said that by having education only in elementary and junior high schools, even not getting formal education, it means that their knowledge is low and can have bad consequences for their behavior.

Adolescents are a demographic that requires particular attention in the realm of sexual and reproductive health. This is due to their frequent engagement in risky sexual behavior and their limited access to information and reproductive health services. Consequently, these adolescents are not adequately informed about the information they should receive. Adolescents with limited understanding of sex and sexuality are more likely to engage in risky and unmonitored sexual behavior, which can have detrimental effects on their well-being (Rashid & Mwale, 2016).

But in fact, in this study there was no relationship between education level and sexual behavior during dating or before marriage in adolescents. Another study by Rosdarni et al. (2015) in the city of Kendari found adolescents who have low knowledge about sexual health are 4.28 times at risk of engaging in sexual behavior during dating and before marriage. This is in line with the research conducted by Hariningsih et al. (2022) which said that there was relationship between the level of knowledge with reproductive health and sexual behavior in adolescents. Neither of the two sources said that the education factor was an important factor related to dating behavior in adolescents.

The factor of residence is also one of the behavioral factors studied, but it was found that there was no relationship between the factor of the area of residence and sexual behavior during dating or before marriage in adolescents. This means that adolescents who live in rural or urban areas have the same risk of being exposed to sexual behavior during dating or before marriage. This is not in line with a study conducted by Ray et al. (2012) for 220 adolescents in India, which said that rural and urban men differed significantly in their sexual attitudes and practices. Place of residence and media were found to be significant predictors of sexual activity among adolescents. Urban male adolescents are significantly less likely to engage in penetrative sexual activity than rural male adolescents. This is also in line with research conducted by Salih et al. (2015) which found that there was a relationship between the area of residence and sexual behavior during dating or before marriage by adolescents. According to the findings, young people in rural areas are sexually active at an early age with insufficient protection.

In this study, it was found that there was no relationship between exposure to information related to adolescent reproductive health and sexual behavior during dating or before marriage in adolescents p =0.134 (α = <0.05). This study is not in line with research conducted by Okigbo and

Speizer (2015) which states that there is a significant relationship or influence between knowledge related to reproductive health and sexual behavior during dating or before marriage. Quantitatively, there is no relationship between exposure to information related to reproductive health and it has nothing to do with dating behavior in adolescents.

The research concluded that there were no significant differences in the sexual behavior of adolescents who had completed their education, those who had not, or those with differing levels of educational attainment. Even adolescents who have not concluded formal instruction experience a shared sense of transformation within themselves, regardless of their educational heritage.

Conclusions

Based on the results of the research and responding to the objectives of the study, the authors can conclude that the factors associated with dating behavior in adolescents are age factors. Adolescent respondents at all ages from 15-18 years have had sexual behavior during dating or before marriage. And the higher the age of the teenager, the more likely the teenager can perform sexual behavior during dating or before marriage.

The factors that are not related to sexual behavior in adolescents, according to both quantitative and qualitative research, are gender, educational level, and the region where they live. This means that adolescents with educational levels of elementary, junior, and senior high school, even those who are not in school, have the same risk of having sex during dating and before marriage.

In this study, one of the strategies for developing adolescent health programs is designed with the aim of improving the quality of adolescent health, as well as increasing adolescent awareness of preventing sexual behavior before marriage which often begins with dating behaviors in adolescents in Indonesia, especially West Java.

Declaration of Interest

All authors declare that they have no conflicts of interest

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Data Availability

The participants of this study did not give written consent for their data to be shared publicly, so due to the sensitive nature of the research supporting data is not available.

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