

Original Research

Adolescent Sexual Behavior In The Era Of The Industrial Revolution 4.0

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ABSTRACT

Background: *The index of adolescent knowledge about reproductive health has increased. Ease of accessing information is an important point in increasing adolescent knowledge about reproductive health, but the use of social media without parental supervision can also lead to risky sexual behavior. In this study, the author aims to determine adolescent knowledge about reproductive health, access to social media as a source of information, and sexual behavior in adolescents in Klaten.*

Methods: *The design in this study is a cross-sectional qualitative research. The population is adolescents aged 16-18 years in the Klaten Regency area. The sample in this study were 96 samples years by using non-probability method sampling count by lemeshow formula selected based on the inclusion and exclusion criteria through youth organizations. The instrument used was questionnaire consist of 4 indicators (usage of social media, source of health reproduction information, knowledge of health reproduction, sex behavior. After validity and reliability test, the questionnaire obtained 30 questions. Data was collected online by using google forms. Analysis data procedure was using chi square and logistic regression analysis techniques.*

Results: *The most respondents aged 18 years (48.60%), female gender (88.78%), accessed social media for 7-12 hours as much as 57.01%, all respondents accessed search engines and whatsapp, the majority of respondents received information about reproductive health from the internet is 90.65%, 59.81% of respondents' parents have a role in discussing reproductive health, 83.18% of respondents have good knowledge about reproductive health, 85.98 % respondents have risky sexual behavior.*

Conclusion: *The role of parents and the duration of adolescents accessing social media has a significant relationship in adolescent sexual behavior.*

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INTRODUCTION

According to the results of the 2018 Susenas, the number of teenagers in Indonesia reached 63.82 million. There are 87.44 percent of youth who have cellphones

and 93.02 percent of youths who use cellphones during the last three months. In addition, there are also around 34.01 percent of youth who use computers and 73.27 percent of youths who use the internet during the last three months (BKKBN, 2019).

In this era of the Industrial Revolution 4.0, information technology is very influential in human life. Humans began to rely on information technology in all fields, from the economy, education, health, government and others. Because information technology greatly facilitates humans in producing, processing data and disseminating information. So that information technology in this era is very fast development.

However, every development will inevitably be accompanied by a negative impact, namely the openness of the media to be accessed by everyone, with content that cannot be accounted for at all. The amount of irresponsible information can plunge teenagers who are not yet mature psychologically and mentally so that they often swallow all the information that enters them. According to the (BKKBN, 2019) the Adolescent Reproductive Health (KRR) knowledge achievement index experienced a good trend from 2012-2018, in 2012 it reached 50.5; in 2013 had dropped to 46.9; in 2014 it rose again to 48.4; in 2015 to 49.0; 2016 continued to rise to 51.1, and in 2017 it reached an index of 52.4. In 2018 it was 57.1.

However, in reality, the increasing trend of adolescent reproductive health knowledge index was not followed by a decrease in the trend of teenage pregnancy. In 2017, the pregnancy rate for adolescents aged 15-19 years reached 48 out of 1,000 pregnancies. And the latest data shows, there are 1.7 million teenagers under the age of 24 who give birth every year. Meanwhile, in 2018 it reached 39.17 percent or 2 out of 5 girls aged 10-17 years had been married before the age of 15. Around 37.91 percent married at the age of 16 years, and 22.92 percent married at the age of 17 years.

Around 35 percent of Indonesian children experience their first pregnancy under the age of 15 both in urban and rural areas. It should be noted that girls under the age of 15 who experience early pregnancy and childbirth are not yet fully mature for childbirth.

Comprehensive sexuality education is a curriculum-based teaching and learning process about the cognitive, emotional, physical and social aspects of sexuality. It aims to equip children and youth with the knowledge, skills, attitudes and values that will empower them to realize their health, well-being and dignity; develop mutually respectful social and sexual relationships; consider how their choices affect their own well-being and that of others; and understand and ensure the protection of their rights throughout their lives (WHO, 2018).

Based on Masae's research, the study found that knowledge, attitudes, and access to social media have a relationship with adolescent sexual behavior at SMA Negeri 1 Kalabahi in 2017. The provision of information needs to be increased regarding adolescent sexual behavior, especially for adolescent girls. Schools are expected to take an active role through reproductive health education and improve control on the use of social media access by students at school so that students only use social media access for educational purposes at school (Masae et al., 2019).

From the data above, we can see that the majority of teenagers use gadgets and can access a lot of information from social media. The era of the industrial revolution 4.0 is characterized by the internet of things. With a lot of information about reproductive health that can be accessed through social media, both from reliable sources.

This has a positive impact related to increasing adolescent knowledge about reproductive health, but freely accessing this information will actually lead to further curiosity where if it is not bridged and accompanied properly by parents as the closest part of adolescents, it will lead to deviations in sexual behavior. Therefore, researchers want to see what the impact of using social media as a source of information is with the role of parents on adolescent sexual behavior in Klaten.

MATERIALS AND METHOD

The design in this study is a cross-sectional qualitative research. the population is adolescents aged 16-18 years in the Klaten Regency area. The sample used in this study were adolescents aged 16-18 years. The sampling technique in this study using the non-probability method with the Lemeshow formula, the results of the calculation of the number of samples were 96 respondents or rounded up to at least 100 samples.

Respondents get informed consent through an attachment to the google form questionnaire where if the respondent is not willing to fill in then the respondent can end answering the google form, but if the respondent is willing to fill it will be directed to the questions on the questionnaire

Data was collected online by using google forms during July to August 2020. Data analysis was carried out after all data had been collected through several stages marked by editing to check the completeness of the respondent's identity whether the answers on the observation sheet were complete, clear and consistent with what was being studied. Then provide coding or certain numbers on the observation sheet to make it easier for researchers to enter data into the computer (entry) and data processing is done using computerized techniques.

Univariate analysis is used to describe the characteristics of respondents, namely age and sex data presented in the form of frequency distribution tables and proportions. Bivariate analysis in this study used chi square. Multivariate analysis was carried out through logistic regression to see the relationship between the independent variables and the dependent variable and which independent variable had the greatest influence on the dependent variable. This research has passed the ethical feasibility test with the registration number: 581/E.A/KEPK/2020.

RESULTS

The most respondents aged 18 years (48.60%), female gender (88.78%), accessed social media for 7-12 hours as much as 57.01%, all respondents accessed search engines and whatsapp, the majority of respondents received Information about reproductive health from the internet is 90.65%, 59.81% of respondents' parents have a role in discussing reproductive health, 83.18% of respondents have good knowledge about reproductive health, 85.98 respondents have risky sexual behavior.

Table 1. Characteristics of respondents of adolescent sexual behavior in Klaten Area

Characteristics of respondents	n	Percentage (%)
Age		
16	25	23.36
17	30	28.04
18	52	48,60
Gender		
Woman	95	88,78

Characteristics of respondents	n	Percentage (%)
Man	12	11.22
Long Access to Social Media		
0-6 hours	18	16.82
7-12 hours	61	57.01
13-18 hours	24	22.43
19-24 hours	4	03.74
Type of social media used		
Search engines	107	100.00
Whatsapp	107	100.00
Instagram	83	77.57
Facebook	23	21.50
Twitter	41	38.32
Etc	17	15.88
Resources		
School/teacher	86	80.37
Parent	50	46.73
Friends of the same age	49	45.79
Internet	97	90.65
Television	29	27.10
Books	67	62.62
Health workers	59	55.14
Etc	6	05.61
The role of parents		
Once	64	59.81
Never	43	40,18
Knowledge level		
Well	89	83.18
Enough	18	16.82
Not enough	00	00.00
Sexual Behavior		
Risky sexual behavior	92	85.98
Sexual behavior is not risky	15	14.02

Table 2. Distribution of respondents based on sexual behavior

Sexual behavior	Yes		No		Total
	n	%	n	%	
Dating/have been in a relationship	98	91.58	9	8.42	107
Neighborhood/friends who are dating	99	92.52	8	07.48	107
View/search for stories/images/videos that contain sexual content	76	71.03	31	28.97	107
Have you ever kissed the opposite sex?	86	80.37	21	19.63	107
Have you ever hugged someone of the opposite sex?	55	51.40	52	48,60	107
Have you ever felt / touched the breast?	14	13.08	93	86.92	107
Have you ever felt/touched the genital area?	13	12.15	94	87.85	107
Have you ever masturbated?	20	18.69	87	81.31	107
Have you ever had premarital sex?	3	02.80	104	97,20	107

The table above shows that 91.58% of respondents are currently dating, 71.03% of respondents said they had seen/searched for pictures and videos that contain sexual content, 31 respondents said they had seen through their social media advertisements, 18 respondents said they had seen sexual content through films, 13 respondents said they saw books, 7 respondents said they saw through chain messages on whatsapp, twitter, and telegram.

7 respondents stated that they saw sexual content intentionally looking on websites that provide sexual content. 80.37% of respondents said they had kissed with the opposite sex, 51.40% had hugged the opposite sex, 13.08% had felt/felt in the breast area, 12.15 had felt/touched on the genitals, 18.69% had masturbating / masturbating, as well as 2.

Table 3. Bivariate analysis table

Variable	Sexual Behavior				P
	No Risk		at risk		
	n	%	n	%	
Knowledge level					
Not enough	0	0	0	0	0.309
Enough	7	06.54	11	10.28	
Well	24	22.43	65	60.75	
The role of parents					
Yes	24	22.43	40	37.38	0.018
No	7	06.54	36	33.66	
Social Media Access Time					
0-6 Hours	8	07.47	10	09.35	0.131
7-12 Hours	19	17.76	42	39.25	
13-18 Hours	4	03.74	20	18.69	
19-24 Hours	0		4	3.74	

Adolescents with a good level of knowledge have sexual behavior that is not at risk as much as 22.43% but the results of the chi square calculation show that p count (0.309 > 0.05) is greater than the p table so that the level of knowledge does not have a significant relationship with sexual behavior. The role of parents has a p count (0.018 < 0.05) smaller than the p table so that the role of parents has a significant relationship to sexual behavior.

Meanwhile, on the length of access to social media, the p count (0.131 > 0.05) is still larger than the p table so that the results show that the length of access to social media does not have a significant relationship with adolescent sexual behavior.

Tabel 4. Multivariate analysis table

Independent Variable	Regression Coefficient (b)	95% CI		P
		Lower limit	Upper limit	
Knowledge level	-0.562	0.185	1,760	0.328
The role of parents	1.183	1.216	8,765	0.019
Social Media Access Time	-0.855	0.213	0.848	0.015

Joint effect of independent variables on the dependent variable using logistic regression. The results of the analysis show that simultaneously the role of parents and duration of access to social media has $p < 0.05$ so that it has a statistically significant relationship with social behavior.

DISCUSSION

The results of the chi-square test showed that there was no significant relationship between the level of adolescent knowledge about reproductive health and adolescent sexual behavior. The results of good knowledge are not necessarily followed by good sexual behavior, these results are also in line with Parihat's research which explains that there is no significant relationship between knowledge about reproductive health and premarital sexual behavior in high school students in South Tangerang City (Parihat, 2015).

In line with Auliyah's research, there is no relationship between knowledge and risky premarital sexual behavior in Unwanted Pregnancy in S1 Public Health Study Program students, Muhammadiyah University, East Kalimantan with p value $(0.879) > (0.05)$. Nowadays it is very easy to obtain information related to reproductive health from various mass media such as websites that contain videos or photos about pornography, television, books, magazines, and others (Auliyah & Winarti, 2020).

It was found that respondents who are highly knowledgeable but many have risky sexual behavior, where things that can cause this to happen are because the information obtained is not necessarily all correct and the information obtained is sometimes only half-assed so that it encourages teenagers to think about doing it because they want to try it. Large and can result in a person having high knowledge but still engaging in risky sexual behavior.

According to (Nurhayati et al., 2017) teenagers who have high knowledge make them always look for various information from various sources related to premarital sexual behavior which can be dangerous due to often imagining what it would be like to have sexual intercourse. The higher a person's level of knowledge, the more risky his premarital sexual behavior is.

This study indicates that there is a significant relationship between the experience of discussing with parents about adolescent reproductive health and adolescent sexual behavior.

Based on Masni's research (2015) which shows that there is an influence of the role of parents on risky sexual behavior ($p < 0.05$ and $= 0.403$) it shows that there is an influence of the role of parents on risky sexual behavior in students with a moderately close relationship between the role of parents on behavior social risk (Masni & Hamid, 2018). In line with Mariani's research, 2018, the role of parents has a relationship with adolescent sexual behavior (p value 0,004) in addition to being influenced by peers (p value 0,000 (Mariani & Murtadho, 2018).

This shows that the role of parents in assisting adolescents in finding an identity and seeking information about reproductive health has significant results in the formation of children's sexual behavior. The existence of the role of parents where parents are the closest environment for children to provide a sense of security and comfort to children so that children's sexual behavior can be more directed, in addition, the closeness and role of parents who are open to reproductive health problems will be able to solve children's curiosity in issues of reproductive health and sexual behavior so

that the information obtained by children can be more filtered and the children's curiosity can be fulfilled by parents.

The results of the analysis between the length of time accessing social media and risky sexual behavior there is no significant relationship. This is not in line with the results of Naja's research which states that there is a significant relationship between exposure to social media and premarital sexual behavior in high school adolescents in Semarang City. The existence of this relationship is because the emergence of sexual content on social media invites the curiosity of teenagers and provokes their desire to have sexual activity. Social media stimulates teenagers to imitate sexual behavior in social media (Naja, 2017).

Risky sexual behavior that occurs among adolescents indicates a serious problem in adolescent reproductive health. Many factors influence sexual behavior in adolescents. In this study, the variables of the role of parents in discussing with their children and the duration of accessing social media simultaneously have a significant influence on children's sexual behavior.

Harmonious parenting promotes optimum emotional life over the development of the adolescent personality and instead, quarrelsome parents block communication within the family, and youth run away from the family. Incomplete families, such as divorce, death, and families with underlying economic circumstances, can affect the development of the young soul (Yatiningsih, 2018).

Communication between parents and teenagers is said to be good when both mates have a good relationship in the sense of being able to understand, understand, trust, and love each other, whereas poor communication indicates a lack of attention, understanding, trust, and affection between the two. Mutually beneficial communication, in this case between parents and teenagers, is feedback, there is openness, there is openness, it is spontaneous and there is feedback from both parents and teenagers (Trismiyana, 2017).

A parent teaches a child in their teen years to make them understand what sexuality is, to avoid perverted sexual behavior. According to Freud in psychosexual theory, it is said that adolescence enters the genitalia stage that begins at puberty, when sexual impulses are clearly visible in adolescents, especially toward the enjoyment of sexual relations. Guidance and direction are given to a teenager, a parent must have good knowledge and build a good relationship with his child. So that parents are able to carry out their role as educators in providing sex education in their teens (Winarti & Alamsyah, 2020).

Knowledge is influenced by the level of education, age, experience, work, income, culture, and association. Inappropriate knowledge, unrealistic expectations, low self-esteem, fear of not working out or pessimism, show that youths have immature personalities and volatile emotions, thus becoming susceptible to negative, such as having premarital sex. Good knowledge of sexuality can lead to a young person's healthy and responsible sexual behavior (Rina Marlina Hutahun, 2020).

In addition, together with the role of parents, the duration of access to social media also has a significant role in the formation of adolescent sexual behavior, this is in accordance with Puspita's research (Puspita, 2019). In line with the results of Naja's research, there is a significant relationship between exposure to social media and premarital sexual behavior in high school teenagers in Semarang City. The existence of this relationship is because the emergence of sexual content on social media invites the

curiosity of teenagers and provokes their desire to have sexual activity. Social media stimulates teenagers to imitate sexual behavior on social media (Naja, 2017).

The role of parents in sexuality education is between being an evaluator of sexuality education, an escort, an educator and a monitor in sexuality education. Yet, as most parents often view sexual education as taboo, parents assume that children learn about sex only when they are older and older. Based on that assumption, parents will tend to resist or avoid it when children want to discuss sex.

Parents often think sexuality education will come to children with age when they grow up. As if parents were to hand over sexuality education to the school as a source of learning for their children, though sexuality education itself had not been incorporated exclusively in the school curriculum (Hidayat & Nurhayati, 2020).

Seeing the unlimited freedom of information that can be accessed by adolescents on social media, as well as the psychological development of adolescents who are still very strong in their curiosity and the process of seeking self-identity, parents need to play a role in assisting the development of adolescents and providing appropriate reproductive health information (Wahyuni, 2018).

Efforts were made to prevent further exposure of social media to a young person's sexual behavior by revealing or communicating about the negative and positive effects of social media exposure. In addition to asking parents to be better able to monitor their children at the frequency of daily social media use, and also to provide information about the effect that sexual behavior on adolescents will have on their future so that through the information presented it would be better able to train the youth mentally and avoid improper sexual behavior (Rosita Passe, Nurul Fitri Sugiarti Syam, 2021).

According to Supriyono's research that the role of parents in supervising their children using gadgets and social media is very important to anticipate deviations in children's behavior, especially sexual behavior (Supriyono, 2020). Communication with parents need to be improved in terms of actively involve parents in the process of supervising children (Winarti & Alamsyah, 2020).

CONCLUSION

The majority of respondents access social media 7-12 hours a day, all respondents access search engines and WhatsApp. 90.65% of respondents get information about adolescent reproductive health through the internet. There are no respondents who have less knowledge about reproductive health, 83.18% of respondents have a good level of knowledge. 85.98% of respondents have risky sexual behavior.

Based on the bivariate test, the role of parents has a significant relationship to adolescent sexual behavior, while based on the objective of the variable, the role of parents and the duration of adolescents accessing social media has a significant relationship in adolescent sexual behavior.

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