DOMINANT FACTORS AFFECTING ADOLESCENT KNOWLEDGE ABOUT RISK SEXUAL HEALTH

Heriza Syam*, Winancy, Siti Masitoh, Nina Primasari, Debiyantina
Health Polytechnic of Jakarta III
herizazyam@yahoo.co.id

ABSTRACT

Knowledge about reproductive health can be obtained from several sources of information. Starting from parents, friends, teachers, to mass media including social media, and others. In today's era, many teenagers use social media to explore, seek information. Knowledge is needed to prevent youth from risky sexual behavior, as well as increase their access to prevention tools. This study used a cross-sectional analytic approach. The reachable population in this study was all 100 adolescents aged 16-24 years in SMA Kota Bekasi. The sampling technique is proportional random sampling. The results of the study showed that adolescents' knowledge of risky sexual behavior averaged a score of 11. This indicated that out of the 14 questions given by adolescents, 11 of them were able to answer correctly. Adolescent girls have a higher knowledge score than male adolescents (p = 0.0023). There are differences in adolescent knowledge scores based on sources of information (p = 0.002). Information sources from parents and health workers have a higher average knowledge score than those from friends/social media.

Keywords: knowledge; risky sexual behavior; resources

INTRODUCTION

Adolescents according to the World Health Organization (WHO) are residents in the age range of 10-19 years. According to the Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, adolescents are individuals aged 10-18 years (Pusdatin, 2017). According to WHO, it is estimated that the number of teenagers in the world is 1.2 billion or 18% of the world's population. The proportion of Indonesian youth in 2020 in the population pyramid is quite large, namely 25.87%. In 2020, the percentage of the proportion of teenagers in Bekasi City is 36%. The number of adolescents aged 10–19 in the city of Bekasi in

2020 reached 409,792 people with 198,406 young women and 211,386 sons (Central Bureau of Statistics for DKI JAKARTA Province, 2022).

The proportion of teenagers in Bekasi City is quite high, which reaches 36%, in general it can affect the health of the residents of Bekasi City (USAID, bkkbn, 2019). This is due to the occurrence of several major changes in adolescents related to health, so that it will affect decision making, interacting with the surrounding environment, and also the way of thinking. Formation of behavior patterns such as sexual activity substantially determines whether these patterns can protect their health and the health of others or harm their health now and in the future (Liang et al., 2019).

Teenagers are often involved in risky sexual activities that make them vulnerable to sexual and reproductive health problems (El Kazdouh et al., 2019; Pradanie, Armini and Untari, 2020). Risky sexual behavior in adolescents can take the form of courtship, kissing, hugging, flirting (petting) and sexual intercourse (Hanifah, Nurwati and Santoso, 2022).

This risky sexual behavior will have a negative impact on the health of adolescents, namely the impact on the physical, psychological, physiological and social. One of the consequences of risky sexual behavior is an unwanted pregnancy. Unwanted pregnancies in adolescents can lead to high abortions which can lead to an increase in maternal mortality in Indonesia (Fauziah and Subiyatin, 2022). Other negative impacts can cause sexually transmitted diseases (STDs) and HIV/AIDS. Psychologically, teenage pregnancy causes stress and depression. The social life of pregnant adolescents will also experience changes due to the emergence of shame, low self-esteem, and negative words received from people around them so that these adolescents will withdraw from the environment (Meriyani et al., 2016).

Based on the results of the Indonesian adolescent reproductive health survey in 2017, around 33.3% of teenage girls dated and 34.5% of teenage boys started dating before they were 15 years old. The percentage of premarital sexual intercourse in males is greater, namely 4.5%, while in female adolescents it is 0.7%. Most of the premarital sexual intercourse was caused by curiosity/curiosity (57.5%), it just happened (38% of women) and was forced by a partner (12.6% of women). This reflects adolescents' lack of understanding about the risks of sexual relations and the

ability to refuse relationships they don't want (Liang et al., 2019). Another factor that influences this is the level of education and knowledge of adolescents about reproductive health.

Knowledge about reproductive health can be obtained from various information. Starting from parents, friends, teachers, to mass media including social media, and others. In today's era, many teenagers use social media to explore, seek information. This can shape knowledge, attitudes and develop motivation and self-control and increase youth empowerment (Parmawati et al., 2020). The information and facts needed to prevent adolescents from having risky sexual behavior need to be strengthened from schools. Schools are an effective strategic tool as a prevention effort that allows youth to have safer behavior patterns, not only knowing who is at risk but growing a sense and motivation to take prevention, reduce risk, develop knowledge and attitudes and increase their access to prevention facilities (Geremew et al., 2020; Fekadu Wakasa et al., 2021). Therefore the authors are interested in analyzing the factors that influence knowledge about risky sexual behavior in adolescents from public high schools and private high schools in Bekasi City.

METHODS

The type of research used is quantitative research with a cross-sectional analytic approach which aims to analyze the factors that influence adolescents' knowledge about risky sexual behavior. This research was conducted at Bekasi Public High School and Bekasi Private High School, in April - September 2019. The population within this study included all adolescents aged 16-24 years at SMA Kota Bekasi. The sample in the quantitative study was 100 people, the sampling technique was a proportional random sampling technique. The data collection tool in this study was a closed questionnaire, which consisted of six questions about the characteristics of the respondents, two questions about sources of information and 14 questions about knowledge about risky sexual behavior. The questionnaire in this study was tested for validity using the Pearson Moment product with a significance level of 10% for each question item. The result is the value of r count > r table (0.514), so that all questions are declared valid and can be used as data collection instruments. The reliability test by carrying out the Cronbach Alpha test on the knowledge

questionnaire was 0.935 > 0.6, so it can be concluded that the instrument to be used is reliable.

This research has received ethical clearance from the Health Research Ethics Commission at the Health Polytechnic of the Ministry of Health Jakarta III. In addition, all respondents who were research subjects were given information about research plans and objectives through formal and written meetings. Each respondent was given full rights to agree whether he was willing or refused to be a respondent and to write a statement prepared by the researcher.

Data analysis used univariate and bivariate analysis. To determine the bivariate test, a data normality test was carried out using the Kolmogorov Smirnov test, the results obtained were p = 0.000, so the test performed was a non-parametric statistical test, namely Mann Whitney and Krusskall Willis with a significance level (α) of 5% which was processed using a computerized system using the SPSS program.

RESULTS AND DISCUSSION

The results of data processing are presented as follows:

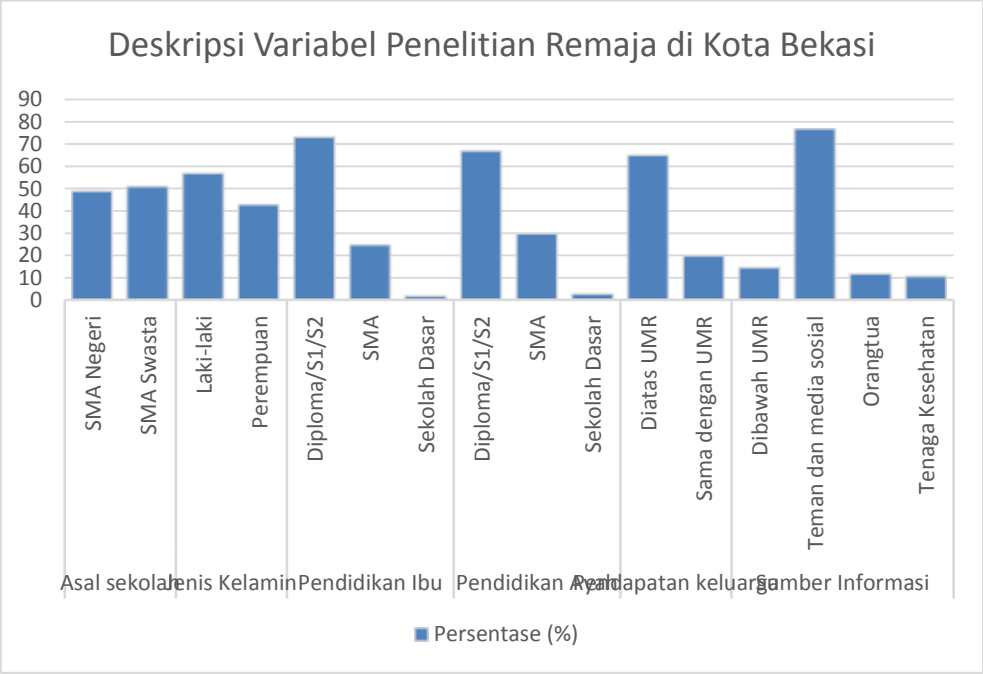


Figure 1. Description of the youth research variables in Bekasi City

In general, the characteristics of the respondents in this study were mostly male, the education of mothers and fathers was at the tertiary level, and an established economy. The diagram above also shows that many sources of information about risky sexual behavior come from friends and social media, namely 77%.

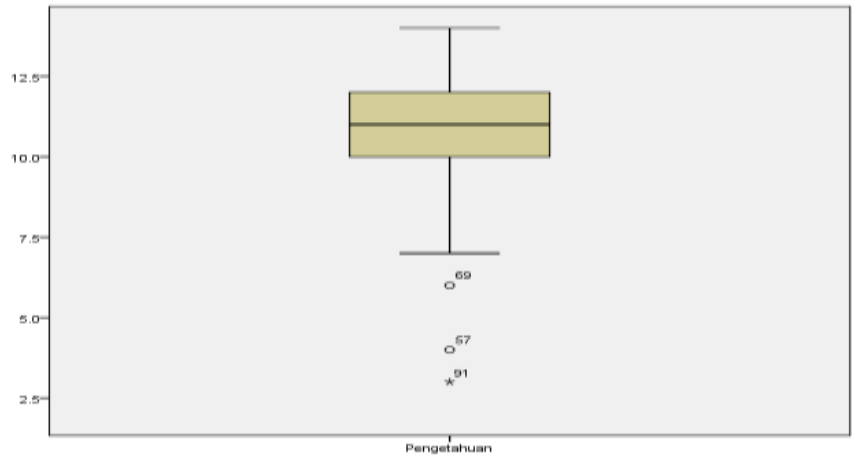


Figure 2. Variable Knowledge of Youth in Bekasi City

The box plot above shows that the median knowledge score of adolescents in the city of Bekasi is at number 11, with a minimum score of 3 and a maximum score of 14. The distribution of knowledge score data varies widely, in fact there are two outliners data and one extreme data with a score of 3.

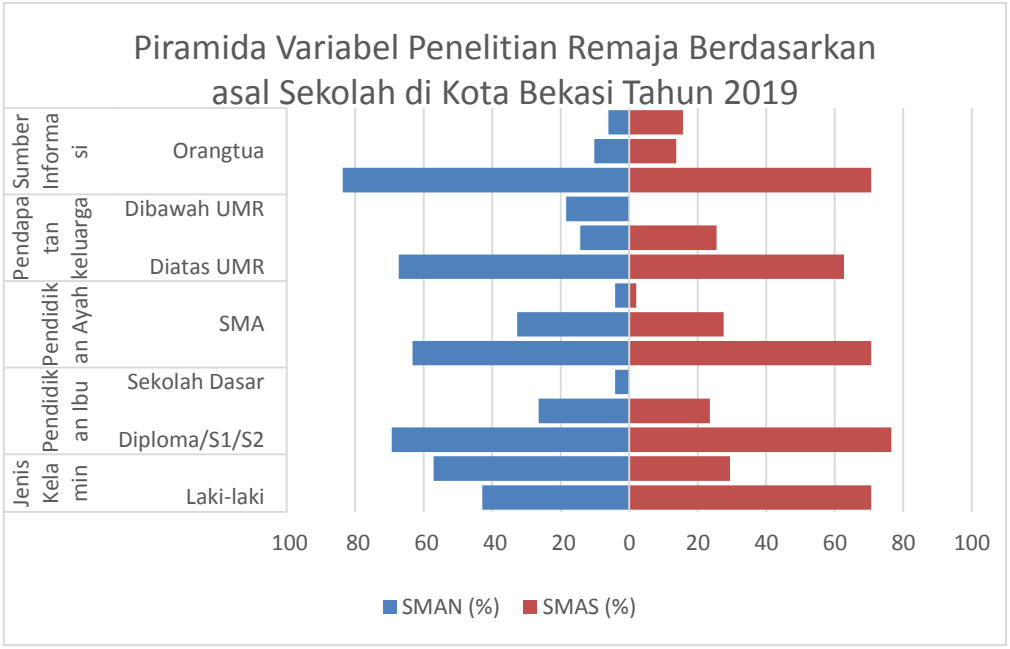
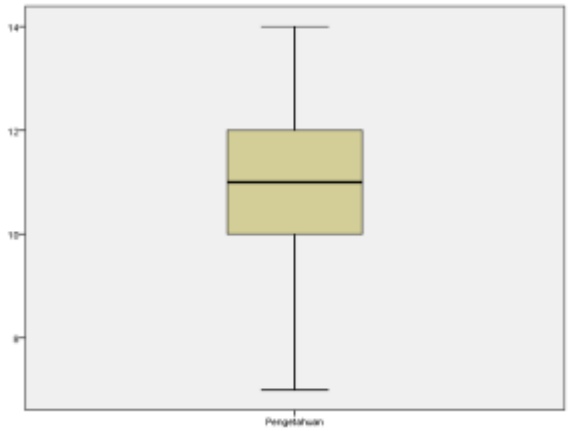


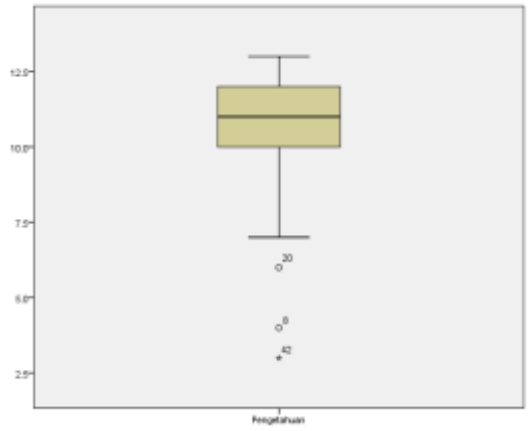
Figure 3. Categorical Description of Adolescent Research Variables Based on School of Origin in Bekasi City (n=100)

The characteristics of adolescents in the city of Bekasi in this study were almost the same between adolescents from SMAN and those from SMAS, the difference only lay in gender, in SMAN most of the respondents were female teenagers, whereas in SMAS most were male adolescents.

The characteristics of sources of information about risky sexual behavior are also the same between adolescents from SMAN and SMAS, that is, most of the information about risky sexual behavior comes from friends/social media.



Knowledge score of youth from SMAN (N=49)



Youth Knowledge Score from SMAS (N=51)

Figure 4. Adolescent Knowledge Variables Based on School Origin in Bekasi City

The graph above shows that the median value of knowledge scores is the same between adolescents from SMAN and adolescents from SMAS, namely 11. The distribution of knowledge scores in SMAN adolescents is more evenly distributed with a score range of 7-14, while in SMAS adolescents the distribution of scores is less even with a range of 3-13 , this can be seen that there are many whose scores are below 10, there are even two teenagers whose scores are outliers (scores 4 and 6) and one teenager who has an extreme score with a score of 3.

The results of data processing using the Mann Whitney and Kruskall Wallis tests are presented in the following table.

Table 1. Differences in Adolescent Knowledge according to type, school origin, parental education level, parental income and sources of information in Bekasi City

Variable	N	mean rank	Pvalue
Gender			
Woman	57	56,13	0.023
Man	43	43.03	
From high school			
SMAS	49	48.03	0.396
PUBLIC HIGH SCHOOL	51	52,87	
Father's Education			
Diploma/S1/S2	67	51,12	
SENIOR HIGH SCHOOL	30	51.00	0.348
Elementary school	3	21.00	
Mother's Education			
Diploma/S1/S2	67	51,18	
SENIOR HIGH SCHOOL	30	52,25	0.130
Elementary school	3	17,83	
Family income			
<UMK	15	39,40	
=UMK	20	48.30	0.199
>UMK	65	53,74	
Resources			
Friends and social media	77	45.02	
Parent	12	69.04	0.002
Health workers	11	68,64	

Note: Mann Whitney test and Kruskal Wallis test

Statistical results showed a significant difference in knowledge scores between men and women (p = 0.0023). This can be seen from the average knowledge of women is higher than that of men. There is no significant difference in statistical results for other variables. The table above shows that there is no difference in adolescents' knowledge about risky sexual behavior based on school origin (p=0.396). There was no difference in the knowledge of adolescents between parents (mother and father) with a bachelor's degree and high school and elementary school graduates (p=0.199). Family income also had no effect on differences in adolescent knowledge scores about risky sexual behavior (p=0.915). In the table above, it can be seen that there are differences in the knowledge scores of adolescents based on the source of information obtained by adolescents (p=0.002). To find out in detail the differences in knowledge based on information sources between friends/social media

and parents, friends/social media and health workers and between parents and health workers a post hoc analysis was carried out.

Table 2. Post hoc analysis of knowledge comparison between groups of information sources

Resources	N	MeanRanking	Pvalue
Friends/ Social Media vs	77	42.15	0.007
Parent	12	63,29	
Friends/ Social Media vs	77	41.87	0.009
Health workers	11	62,91	
Parents vs	12	12.25	0.848
Health workers	11	11.73	

Statistically, there was a difference in knowledge scores between groups that received information from friends/social media and those who received information from parents (p=0.007). Clinically, there was a difference in knowledge scores between groups who received information from friends/social media and parents because the difference in knowledge scores was more than 15. The mean knowledge score in the group who received information from parents was higher than that from friends / social media.

Statistically, there was a difference in knowledge scores between groups who received information from friends/social media and those who received information from health workers (p=0.009). Clinically, there was a difference in knowledge scores between the groups that received information from friends/social media and health workers because the difference in knowledge scores was more than 15. The mean score of knowledge in the group that received information from health workers was higher than that from friends/social media.

Statistically, there was no difference in knowledge scores between groups who received information from parents and those who received information from health workers (p=0.848). Clinically, there was no difference in knowledge scores between the groups that received information from parents and health workers because the difference in knowledge scores was less than 15. The mean score of

knowledge in the group that received information from parents was almost the same as the average score of knowledge that came from health workers.

The results of this study show that adolescents' knowledge of risky sexual behavior is quite good with an average score of 11. This indicates that out of the 14 questions given by adolescents, 11 questions have been answered correctly. Although the knowledge score of adolescents from SMAS is quite a lot below the score of 11, it does not statistically affect the difference in knowledge scores between adolescents from SMAS and SMAS. This is because the number of male respondents in SMAS is greater than SMAN, so that the difference in knowledge scores is only in gender.

The results of this study are supported by Suparmi and Isfandari (2016) that female adolescents have a better understanding of the impact of risky sexual behavior. This knowledge can influence young girls not to engage in risky sexual behavior. Young women have better knowledge about risky sexual behavior, because men and women differ in the selection of information sources. Adolescent girls prefer sources of information from family and teachers as the main source of information, while adolescent boys prefer the internet, then teachers and friends. Adolescent boys are generally less open or rarely ask their families about reproductive health. Mother or sister is the main source of information chosen by young women because young women feel close to their mothers and sisters. They say that they can openly disclose their reproductive health problems to their mother or sister. But things that are considered taboo or sensitive to ask parents, they look for other sources of information (Kurniasih and Komariah, 2017).

This research is also supported by Nursiah (2020), there is a relationship between information sources and young women's knowledge about the risks of early marriage (p=0.007). Young women who received information from their parents mostly had good knowledge (52.63%) about the impact of early marriage. Communication between family members is very important, especially between parents and children, which is a medium for bridging an open relationship between parents and children, so that children can express their reproductive health problems to their parents (Nurasiah, Rizkiyani and Heriana, 2020).

The rise of social media has caused major changes in the order of human life, one of those affected by the presence of social media is teenagers. It can be seen from the results of this study that the majority of adolescents take information about risky sexual behavior from social media, namely 83%. The same thing was stated by Hakim and Kadarullah (2016) that most sources of information about reproductive health are taken from online media. Yusuf (2021) who researched the interaction effects of social media use and knowledge on risky sexual behavior by testing the hypothesis using Andy F.Hayes' PROCESS, said that there was no interaction between social media use and knowledge of reproductive health (p=0.077) (Yusuf and Hamdi, 2021).

According to research (Laksmiwati, 2011) the lack of information obtained from online media affects their insight and knowledge about reproductive health. Wrong knowledge about reproductive health influences adolescents to behave deviantly.

This is in line with Furwasyih's explanation (2011) that information taken from social media is negative information, exposure to information about reproductive and sexual health is a place for teenagers to 'learn' about sexual activity, namely things that smell pornographic and pornographic, such as videos. porn, porn movies, adult stories containing sexual stories, and other eroticism. Of course the knowledge and understanding received is misguided.

CONCLUSION

There are differences in knowledge scores (p=0.023) about risky sexual behavior based on gender, women have better knowledge than men. The source of information is one of the factors that influence adolescents' knowledge about risky sexual behavior (p=0.002). This research also shows that knowledge about risky sexual behavior comes from parents and health workers rather than from friends or social media.

Therefore, support from parents is needed in providing information and responding to conditions of adolescents at home. Warm communication is needed between parents and teenagers, so that teenagers want to tell stories and complain to their parents so that they can direct them to the right behavior. The need for support

from Educational Institutions to provide education proportionally, because adolescents need the right information about reproductive health, considering that the higher the knowledge, the lower the risky sexual behavior. Health workers work together with the local government to conduct education about reproductive health with media and tools that are of interest to youth

ACKNOWLEDGEMENTS

Thank you to all respondents from public high schools and private high schools in the city of Bekasi, teachers and all parties who cannot be mentioned one by one who have helped carry out this research activity. Thank you also to the Jakarta III Health Polytechnic for supporting this research activity.

REFERENCES

Central Statistics Agency for DKI JAKARTA Province (2022) Total Population of DKI Jakarta Province by Age Group and Gender 2019-2021, BPS PROVINCE OF DKI JAKARTA. Available at: https://jakarta.bps.go.id/indicator/12/111/1/nomor-penduduk-provinsi-dki-jakarta-menurut-group-agem-dan-tipe-kelamin.html.

Fauziah, PS and Subiyatin, A. (2022) 'Unwanted Pregnancy in Teenagers', 3(2), pp. 53–67. Available at: https://doi.org/10.24853/myjm.3.2.53-67.

Fekadu Wakasa, B. et al. (2021) 'Risky sexual behavior and associated factors among sexually experienced secondary school students in Guduru, Ethiopia', *Preventive Medicine Reports*, 23, p. 101398. Available at: https://doi.org/10.1016/j.pmedr.2021.101398.

Furwasyih, D. (2011) Correlation between the frequency of exposure to erotic information on television and the internet and adolescent sexual behavior in dating at SMK Satya Widya. Surabaya: Airlangga University.

Geremew, AB et al. (2020) 'Youth Risky Sexual Behavior: Prevalence and Socio-Demographic Factors in North-West Ethiopia: A Community-Based Cross-Sectional Study', International Quarterly of Community Health Education [Preprint]. Available at: https://doi.org/10.1177/0272684X20976519.

Hakim, A. and Kadarullah, O. (2016) 'The effect of mass media information on reproductive health knowledge in high school students', *Psycho Idea*, 14(1), pp. 31–40.

Hanifah, SD, Nurwati, RN and Santoso, MB (2022) 'Adolescent Sexuality and Free Sex', Journal of Research and Community Service (JPPM), 3(1), p. 57. Available at: https://doi.org/10.24198/jppm.v3i1.40046.

El Kazdouh, H. et al. (2019) 'Perceptions and intervention preferences of Moroccan adolescents, parents, and teachers regarding risks and protective factors for risky sexual

behaviors leading to sexually transmitted infections in adolescents: Qualitative findings', *Reproductive Health*, 16(1), pp. 1–17. Available at: https://doi.org/10.1186/s12978-019-0801-y.

Kurniasih, N. & Komariah, N. (2017) Map of adolescent reproductive health information seeking in the city of Bandung based on gender, educational background, social and economic status.

Laksmiwati, I. (2011) 'Social transformation and adolescent reproductive behavior', Journal of Gender Studies SRIKANDI, 3(1)

Liang, M. et al. (2019) 'The State of Adolescent Sexual and Reproductive Health', *Journal of Adolescent Health*, 65(6), pp. S3–S15. Available at: https://doi.org/10.1016/j.jadohealth.2019.09.015.

Meriyani, DA et al. (2016) 'Risk Factors for Adolescent Pregnancy in Bali: Case Control Study Risk Factors for Adolescent Pregnancy in Bali: Case Control Study Introduction Method The study design was case control, which', *Public Health and Preventive Medicine Archive*, 4, pp. 201–206.

Nurasiah, A., Rizkiyani, A. and Heriana, C. (2020) 'Relationship Between Information Sources and Knowledge of Young Women About the Risks of Early Marriage on Reproductive Health at Cibingbin 1 High School in 2020', Journal of Health Sciences Bhakti Husada: *Health Sciences Journal* , 11(2), pp. 217–223. doi: 10.34305/jikbh.v11i2.173.

Parmawati, I. et al. (2020) 'Efforts to Reduce Premarital Sexual Activity Through Reproductive Health Education Based on Gender Equality', *Indonesian Journal of Community Engagement*, 6(1), p. 38. Available at: https://doi.org/10.22146/jpkm.38144.

Pradanie, R., Armini, NKA and Untari, AD (2020) 'Factors associated with premarital sexual behavior of adolescents who lived in a former prostitution area', *International Journal of Adolescent Medicine and Health*, pp. 1–10. Available at: https://doi.org/10.1515/ijamh-2019-0203.

Pusdatin (2017) 'Infodatin Adolescent Reproduction-Ed.Pdf', Adolescent Reproductive Health Situation, p. 1.

Suparmi and Isfandari, S. (2016) 'The role of peers in premarital sexual behavior among male and female adolescents in Indonesia', *Indonesian Bulletin of Health Research*, 44(1), pp.139-146

USAID, BKKBN. (2019) 'Indonesia Demographic and Health Survey 2017: Adolescent Reproductive Health Key Indicators Report', ISSN 2502-3632 (Online) ISSN 2356-0304 (Paper) *International & National Online Journal* Vol. 7 No.1.

Yusuf, RI and Hamdi, A. (2021) 'The Interaction Effect of Social Media Use and Reproductive Health Knowledge on Adolescent Risky Sexual Behavior The Interaction Effect of Social Media Use and Reproductive Health Knowledge on Adolescent Sexual Risky Sexual Behavior', *Jurnal_Pekommas*, 2(3) pp. 35–46. doi: 10.30818/jpkm.2021.2060304.