

THE RELATIONSHIP BETWEEN KNOWLEDGE OF HIV/AIDS WITH ATTITUDE OF ADOLESCENTS IN JERUK PURUT VILLAGE, RT 005/RW 004, PASIR AMPO VILLAGE, KRESEK DISTRICT, TANGERANG DISTRICT, BANTEN PROVINCE

Intan Nursyahbani Saadah¹, Karina Utari¹, Armain^{*1}, Muhammad Irfan Efendi¹, Fatimah Nanda Qasih Haerina¹, Erlina Wijayanti²

¹Department of Public Health Sciences, Faculty of Medicine, University of YARSI

²Lecturer in the Department of Public Health, Faculty of Medicine, YARSI

*email Corresponding author: aarmain86@gmail.com

ABSTRACT

The level of knowledge about HIV/AIDS among the population aged 14 years and over is still low. Approximately 42% of the population aged over 15 years have never heard of HIV/AIDS. Only 10% of women and 13% of men have comprehensive knowledge about HIV prevention. Knowledge is one of the predisposing factors that can influence changes in a person's attitude. The higher the level of knowledge and education of a person will affect the perception formed by that person. Adolescence is a period of transition from childhood to adulthood which is marked by physical, emotional, and psychological changes in which there is an urge to know and try new things. Knowledge about HIV/AIDS is very important to be given to adolescents because adolescents have a high sense of curiosity which results in them being easily swayed if they receive wrong information. The type of research used in this study was observational with a cross-sectional study design. The population is adolescents in Jeruk Purut Village, RT 005/RW 004, Pasir Ampo Village, Kresiek District, Tangerang Regency, Banten Province. Sampling was done by quota sampling and obtained respondents as many as 28 people were. Of the 28 respondents who took part in the study, there were 10 respondents (35.7%) had good knowledge and attitudes about HIV/AIDS, and there were 14 respondents (50.0%) had bad knowledge and attitudes about HIV/AIDS. Conclusion: There is a statistically significant relationship between the level of knowledge of adolescents about HIV/AIDS and attitudes towards HIV/AIDS with a P value = 0.001.

Keywords:

HIV/AIDS, Knowledge, Attitude, Adolescents

INTRODUCTION

Human Immunodeficiency Virus (HIV) is a type of virus that infects white blood cells causing a decrease in human immunity. Acquired Immune Deficiency Syndrome (AIDS) is a set of symptoms that arise due to a decrease in immunity caused by infection by HIV. HIV can be transmitted through the exchange of various body fluids from an infected person, such as blood, breast milk (breast milk), semen and vaginal fluids. HIV can also be transmitted from a mother to her child during pregnancy and childbirth. People cannot become infected through daily contact such as kissing, hugging, shaking hands, or sharing

personal objects, food, or water (Ministry of Health, 2020) (World Health Organization, 2022c).

HIV infection is epidemiologically widespread worldwide with the highest prevalence found in sub-Saharan Africa. Global statistics from the World Health Organization (WHO) and the Joint United Nations Programme on HIV and AIDS (UNAIDS) show that by the end of 2020 there were 37.7 million people living with HIV. The highest distribution distribution was found in Africa at 67.4%, followed by the Americas (9.8%), Southeast Asia (9.8%), Europe (6.9%), the Western Pacific (5%), and the Eastern Mediterranean (1.1%). From the global data, 1.7 million are children under the age of 15 and 36 million are over 15 years old including adults (19.3 million women and 16.7 million men). The data at the end of 2020 showed that 84% of people with HIV knew their status through screening and diagnostic tests, 73% of people with HIV had antiretroviruses (ARVs), and 66% of people with antiretroviral therapy (ARVs) had a suppressed viral load. The number of new cases of HIV infection globally in 2020 was 1.5 million, namely 150,000 children under the age of 15 and 1.3 million over 15 years old including adults (660,000 women and 640,000 men). The death rate due to HIV/AIDS infection globally in 2020 was 680,000. HIV infection was predominantly found in key populations, namely 23% in the male group of sex with men (LSL), 20% in sex worker clients or sex partners, 11% in sexual workers, 9% in injectable drug users, and 2% in the transvestite group (World Health Organization, 2022a, 2022b).

There are 1.7 million people living with HIV in the ASEAN region and almost a third are women. Across Asia there has been a 26% drop in new infections since 2001. Data on HIV infection in Indonesia as of 2021 shows 540,000 people infected with HIV. From this data, 210,00 cases were women aged >15 years. And in 2021 there were 27,000 new cases. The percentage of people with HIV infection in Indonesia who have known their infection status (through screening and diagnostic tests) is 66%, the percentage of people with HIV infection who get ARV is 28%, while the percentage of people with ARV therapy who have a suppressed (ASEAN, 2020)viral load has not been reported by data from Indonesia. HIV infection in Indonesia is predominantly found in key populations with a prevalence of 17.9% in the homosexual group, 13.7% in the group of injectable drug users and 2.1% in commercial sex workers(World Health Organization, 2021).

Based on the report of the Indonesian statistical data center (Pusdatin) of the Indonesian Ministry of Health, the five provinces with the highest number of HIV cases are East Java with 8,935 cases, DKI Jakarta with 6,701 cases, West Java with 6,086 cases, Central Java with 5,630 cases, and Papua with 3,753 cases, where in 2017 the most HIV cases were also owned by the five provinces. Meanwhile, the provinces with the highest number of AIDS cases are Central Java with 1,613 cases, Papua with 1,061 cases, East Java with 958 cases, DKI Jakarta with 585 cases, and Riau Islands with 411 cases. AIDS cases in Central Java account for about 22% of the total cases in Indonesia. The trend of the highest HIV and AIDS cases from 2017 to 2019 is still the same, mostly on the island of Java. As for the region, the number of cases infected with HIV in 2019 was 1,643 cases and the number of AIDS cases was 158 cases. Compared to 1 decade ago (in 2010), global mortality due to HIV/AIDS has decreased by 47%. This is due to an increase in access to ARV drugs, preventive efforts, diagnostics, and treatments. The Case Fatality Rate (CFR) is the number of deaths in the form of percent, compared to the number of cases in a particular disease. CFR AIDS in Indonesia from 2005 to 2019 continued to decline. This can be caused because AIDS treatment efforts in Indonesia have succeeded in reducing the death rate due to AIDS (Ministry of Health, 2020).

In 2021 the Tangerang City Government through the Health Office has provided HIV AIDS screening services in all puskesmas and Rumah Sakit (RS) spread across Tangerang City. It was recorded that throughout 2021, the Tangerang City Health Office has screened HIV AIDS to 31,385 residents of Tangerang City. From January to October, the Health Office screened HIV as a routine program for 20,855 people. As a result, 224 of them tested positive for HIV AIDS and seven of them were pregnant women. In the hiv screening program ahead of World AIDS Day 2021 which was held from November 8 to the present, which was carried out by 38 puskesmas with an average of 100 participants per village, the Health Office succeeded in screening 10,530 people. As a result, 40 people were found to be reactive HIV tests (Tangerang Regency Health Office, 2021).

The level of knowledge about HIV/AIDS among the population aged 14 years and over is still low. The 2013 RIKESDAS survey showed that approximately 42% of the population over the age of 15 had never heard of HIV/AIDS. Only 10% of women and 13% of men have comprehensive knowledge about HIV countermeasures (Ministry of Health, 2013).

According to Lawrence Green in Notoatmodjo (2012) that one's knowledge is one of the predisposing factors that can influence the change of attitude. The higher the level of knowledge and education of a person will influence the perception formed of the person (Notoatmodjo, 2012) (Hermanto, 2010).

The increasing number of HIV / AIDS cases in adolescents is partly due to adolescent behavior that indicates risky behavior. This can be seen based on the 2012 Adolescent Reproductive Health Survey (SKRR) conducted by BKKBN. Some of the dating behaviors of unmarried teenagers are particularly worrying. As many as 34.7% of young women and 30.9% of young men aged 14-19 years have had premarital sex (Aryani and Anitasari, 2021).

By age group, the incidence of HIV is highest at 20-49 years old (87%). Meanwhile, AIDS is most prevalent in the age of 20-49 years (by 81%). If viewed from the incubation period which takes about 5-10 years, it is estimated that the first contact with HIV has occurred in adolescence, so that adolescence can be said to be the age prone to HIV (Aryani and Anitasari, 2021) (Husaini, 2017).

Adolescence is a transition period from childhood to adulthood characterized by physical, emotional and psychic changes. Adolescence lasts between the ages of 10- 19 years, there is a maturation of the reproductive organs that is often called puberty. Adolescence is an important period in a person's life and a period of transition from child to adulthood. In adolescence there is often an impulse to know and try new things in its efforts to find one's identity and reach personal maturity according to its developmental tasks (Baderiah, 2019) (Hidayah, 2018).

Adolescents are a group at risk for HIV/AIDS transmission. A good knowledge of the disease will help adolescents to make preventive efforts. Adolescence is the time when individuals are at the highest social mobility. This high social mobility will open up opportunities for him to be exposed to various social, cultural, cultural, and physical and psychological changes. As a result, these adolescents have a high susceptibility to the transmission of various types of diseases, especially HIV / AIDS. Recently there has been a tendency to increase HIV / AIDS cases, especially in the group of adolescents who are still very productive age (Aryani and Anitasari, 2021) (Berek, 2019).

HIV virus infection is increasing even in adolescence (<15 years). One of the contributing factors is the lack of knowledge about HIV / AIDS. Knowledge about HIV/AIDS is very important to be given to adolescents because adolescents have a high sense of

curiosity which results in them falling easily if they receive misinformation (Ariyanti, 2020) (Ministry of Health, 2015).

The way to prevent the HIV virus is to break the chain of transmission. Where the prevention of the HIV virus can be related to the ways of HIV transmission. HIV

/ AIDS infection is a disease with a long journey and until now no effective cure has been found, so prevention and transmission have become very important through health education and increasing knowledge about the pathophysiology of HIV and how it is transmitted (Febrianti and Wahidin, 2019).

Because knowledge is still low and attitudes that refer to negative directions are still high, this encourages researchers to conduct research to find out whether there is a relationship between HIV / AIDS knowledge and attitudes related to HIV / AIDS in adolescents in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province.

METHOD

This research was conducted on teenagers residing in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province. Data collection is carried out for 2 weeks, starting from November 9, 2022 to November 18, 2022.

The type of research used is observational research with a research design using a cross-sectional approach. The cross-sectional approach is research to study the dynamics of the correlation between risky factor variables and effects, by means of approach, observation or data collection at once at a time (point time approach). That is, each subject of the study is only observed once and measurements are made against the character status or variables of the subject at the time of examination. The samples to be taken in this study use the (Notoatmodjo S, 2012) quota sampling method. Quota sampling is a technique to determine samples from populations that have certain characteristics to the desired number (quota). In this study, the number of samples determined will be studied as many as 28 samples according to the number desired to be determined by the author. The inclusion criteria in this study were adolescents who lived (Sugiyono, 2016) in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province, aged 12 – 16 years (early adolescence) and 17–25 years (late adolescence), willing to participate in the study by filling out informed consent and filling out a questionnaire. The exclusion criteria in this study were adolescents who were not present at the time of data collection. In this study, the type of data used was primary data obtained from the results of filling out a questionnaire that had been prepared before being shared with respondents to be filled in including an informed consent sheet, respondent's identity (name, age, gender) and questions to be asked about knowledge and attitudes related to HIV / AIDS. Data measurement was carried out by entering data obtained from the results of filling out questionnaires by respondents to a computer and analyzed using the Statistical Package for Social Science (SPSS) program version 25. The analysis that will be presented is univariate and bivariate data analysis with variables assessed in the form of independent variables, namely knowledge about HIV / AIDS and dependent variables, namely attitudes related to HIV / AIDS.

RESULT AND DISCUSSION

The respondents in this study were teenagers who lived in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province. The number of samples taken was 28 samples that met the established inclusion criteria. The characteristics of the respondents are needed to know the background of the respondents and complete the research data. An overview of the characteristics of respondents by age and gender can be seen in table 1.

Table 1. Characteristics of Respondents

Variable	Frequency	Percentage
Gender		
Man	11	39,3%
Woman	17	60,7%
Total	28	100%
Age		
15 Years	5	17,9%
16 Years	5	17,9%
17 Year	4	14,3%
18 Year	6	21,4%
19 Years	8	28,6%
Total	28	100%

Based on the data shown in table 1, it can be seen that the respondents in this study were almost entirely female, namely 17 respondents (60.7%), while men were only 11 respondents (39.3%). As for the age range, the majority of respondents were 19 years old, namely 8 respondents (28.6%) followed by 18 years old as many as 6 respondents (21.4%).

In this study, HIV / AIDS knowledge was included in the free (independent) variable. The assessment of HIV / AIDS knowledge is carried out by filling out a questionnaire and the results are divided into 2 categories, namely good knowledge if the score is > 5 and bad knowledge if the score is 5. An overview of HIV/AIDS knowledge can be seen from table 2.

Table 2. Proportion of HIV/AIDS Knowledge

HIV/AIDS Knowledge	Frequency	Percentage
Bad	15	53,6%
Good	13	46,4%
Total	28	100,00%

Based on table 2, it is known that out of a total of 28 respondents, there are 13 respondents (53.6%) who have good knowledge and 15 adolescents (46.4%) who have bad knowledge about HIV / AIDS.

In this study, attitudes related to HIV / AIDS included dependent variables. The assessment of attitudes towards HIV / AIDS was carried out by filling out a questionnaire and the results were divided into 2 categories, namely good attitudes if the score > 14 and bad attitudes if the score was 14. HIV/AIDS-related attitudes can be seen from table 3.

Table 3. Proportion of HIV/AIDS-Related Attitudes

HIV/AIDS-related attitudes	Frequency	Percentage
Bad	17	60,7%
Good	11	39,3%
Total	28	100,00%

Based on table 3, it is known that out of a total of 28 respondents, there are 11 respondents (39.3%) who have good attitudes related to HIV / AIDS and 17 respondents (60.7%) who have bad attitudes related to HIV / AIDS.

Bivariate analysis was carried out to determine the relationship between HIV / AIDS knowledge and attitudes related to HIV / AIDS. It says significant there is a relationship if the p-value is < 0.05 and it says insignificant if the p-value is 0.05. The relationship of HIV/AIDS knowledge to HIV/AIDS-related attitudes can be seen in table 4.

Table 4. The Relationship of HIV/AIDS Knowledge to HIV/AIDS-Related Attitudes

Variable		HIV/AIDS-related attitudes		Total	
		Bad	Good		
HIV/AIDS Knowledge	Bad	Frequency	14	1	15
		Percentage	50,0%	3,6%	53,6%
	Good	Frequency	3	10	62
		Percentage	10,7%	35,7%	46,4%
TOTAL		Frequency	17	11	28
		Percentage	60,7%	39,3%	100,0%

Based on table 4, it can be seen that of all respondents who have good HIV / AIDS knowledge tend to have a good attitude related to HIV / AIDS, namely as many as 10 respondents (35.7%). As for respondents who have poor HIV / AIDS knowledge tend to have bad attitudes related to HIV / AIDS as many as 14 respondents (50.0%).

Table 5. Chi-square results

Hypothesis	<i>Odds Ratio</i>	<i>P value</i>	Information
Relationship between HIV/AIDS Knowledge and HIV/AIDS-related Families in Adolescents	46,66	0.001	There's a Connection

The results of statistical analysis conducted with the Chi-square test showed a P value = 0.001. Thus, it can be said that there is a statistically meaningful relationship between the level of knowledge of adolescents about HIV / AIDS and the attitudes of HIV / AIDS terait. The results of such analysis can be seen in table 5.

Adolescence is a transition period from the age of a child to an adult. In general, adolescence is considered to begin when the child sexually matures and ends when the child reaches a legally mature age. The existence of behavioral attitudes and values throughout adolescence shows a difference in early adolescence, which is approximately from the age of 13-16 years or 17 years of age when adolescents enter high school. Early adolescence starting from the age of 12-15 years, middle adolescence from the age of 15-18 years and late adolescence from the age of 18-21 years (Turrangan, 2020).

In the early adolescence phase, changes occur very rapidly and reach their peak. Emotional imbalances and instability in many ways exist at this age. In this period of development, the achievement of independence and identity is very prominent, curiosity is high, thinking is increasingly logical, abstract and idealistic and more and more time is spent outside the family. Meanwhile, in the final adolescence phase, the teenager wants to be the center of attention, wants to highlight himself, is idealistic, has high ideals, is passionate, has great energy, tries to establish self-identity, and wants to achieve good emotions. The age of respondents in this study was between the ages of 12-16 (early adolescents) and 17-25 (late adolescents) with the highest percentage being late adolescents, namely 19 years old as many as 8 respondents (28.6%) (Diananda, 2018) then followed by 18 years old as many as 6 respondents (21.4%) who when adjusted to theory are the age who have idealistic thinking, have tried to establish self-identity and are expected to have good emotions.

Knowledge of HIV/AIDS in Indonesia is still low. Based on research conducted by Sudikno et al (2010) the level of knowledge with good categories in urban adolescents is 54% and dipedesaan is 46.6%. This research is in line with the research of Sudikno et al, where the knowledge of adolescents (Berek, 2019) in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province is still low because the area is still rural.

The gender of respondents in this study consisted of 11 respondents (39.3%) and 17 respondents (60.7%). Based on this, it is known that there are more female respondents than male respondents. This happened because teenagers in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province were willing to participate in research on the dominant female sex.

Knowledge is a cognitive domain that is very influential in shaping a person's actions. The acceptance of new behaviors will be more permanent when they are based

on knowledge, while those behaviors will not last long without being based on knowledge. The right knowledge can provide good benefits. Likewise, with knowledge about HIV/AIDS. People's knowledge of HIV / AIDS will affect attitudes and behaviors, people with insufficient knowledge about HIV / AIDS will behave and behave away from people infected with the disease, some even think the disease is harmless and not deadly. On the other hand, if the knowledge is sufficient, the attitude given to the sufferer is different. In this case, the community will be more accepting of the presence of sufferers. Whereas if the knowledge and understanding of HIV / AIDS is correct then its transmission can be prevented (Moudy, 2020) (Nurwati, 2018).

Based on the results of this study, it is known that out of a total of 28 respondents, there are 13 respondents (53.6%) who have good knowledge and 15 respondents (46.4%) who have bad knowledge about HIV / AIDS. This result is in line with research conducted by Aisyah and Fitria (2019) where knowledge about HIV

/ AIDS in adolescents at SMA Negeri 1 Montasik, Aceh Besar Regency is still lacking with a percentage of 35.6%. According to research conducted by Irawan (2012) also shows that HIV / AIDS knowledge in adolescents at Pangudi Luhur High School is still low with a percentage of 76.27% compared to those with good knowledge, namely 23.73% (Aisyah, 2019) (Irawan, 2012).

Attitude is a person's closed response to a stimulus to a certain object, which already involves the factors of opinion and emotion in question (happy-unhappy, agree- disagree, good-not good and so on). The sweetness of the attitude can not be seen immediately, but can only be interpreted in advance from a closed behavior (Aisyah, 2019).

Based on the results of this study, it is known that out of a total of 28 respondents, there are 11 respondents (39.3%) who have good attitudes related to HIV / AIDS and 17 respondents (60.7%) who have bad attitudes related to HIV / AIDS. This is in line with research conducted by Aisyah and Fitria (2019) where the majority of respondents have a negative (bad) attitude with a percentage of 40.7%. This research is also in line with research conducted by Aslia where the results show that adolescents at SMAN 2 Bau-Bau City have a negative attitude related to HIV / AIDS with a percentage of 54.3% (Aslia, 2017).

Based on this study, it was found that there was a statistically meaningful relationship where after statistical analysis with the Fisher-test, it showed a P value = 0.000. It is known from all respondents who have good HIV / AIDS knowledge tend to have a good attitude related to HIV / AIDS, namely as many as 10 respondents (35.7%). As for respondents who have poor HIV / AIDS knowledge tend to have bad attitudes related to HIV / AIDS as many as 14 respondents (50.0%). This shows that the bad attitude related to HIV / AIDS shown by teenagers in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province is influenced by knowledge factors, so the better the knowledge of adolescents in Kampung Jeruk Purut, the less likely it is for teenagers in Kampung Jeruk Purut to show bad attitudes related to HIV / AIDS. These results are in line with research conducted by Andika et al (2018) where there is a meaningful relationship between knowledge and attitudes related to HIV / AIDS with a P value = 0.001. Research conducted by Iswahyuni et al (2019) where there is a meaningful relationship between the knowledge and attitudes of adolescents about HIV / AIDS in Boyolali district with a (Andika, 2018) P value = 0.000. In addition, research conducted by Noorhidayah et al (2016) also showed meaningful results where there is a relationship between knowledge, attitudes, and

sources of information with HIV / AIDS prevention efforts in the Banjar Masin street children youth community with P (Iswahyuni, 2019) value = 0.000 results (Noorhidayah, 2016).

Knowledge can be interpreted as information that a person constantly needs to understand experience. Knowledge is also capable of influencing adolescents in maintaining attitudes or forming new attitudes. Extensive knowledge can bring good benefits to a person. Similarly, to knowledge about HIV/AIDS, extensive knowledge of HIV/AIDS can help a person to take appropriate action, especially in the prevention of contracting HIV/AIDS (Ananda, 2022).

Adolescence is an age that is very vulnerable to being infected with the HIV / AIDS virus where there is a transition period from childhood to adulthood which includes physical changes, curiosity. High (trying new things), sociological and emotional changes (Ananda, 2022).

Knowledge plays an important role in making efforts to prevent HIV / AIDS, because broad knowledge will form a good attitude. Where an attitude is a reaction to an object in a certain environment as a delusion after a person has knowledge. Therefore, knowledge and attitude become the basis of moral formation in a person, meaning that there is a harmony that occurs between knowledge and attitude (Ananda, 2022).

Good knowledge about HIV / AIDS is very necessary because, the better the level of knowledge students about HIV / AIDS, the better the attitude in preventing HIV / AIDS. This is because attitudes are not only influenced by education, there are other influencing factors such as unsupportive environmental factors, lack of access to information because it is considered still taboo for adolescents, while students who have less knowledge but have a good attitude to prevention can be because the student is affected by the attitudes of others that he often sees, like parents and friends. Parents who set a good example towards the child will influence the child about a good attitude as well (Chika, 2022).

The limitation of this study is the possibility of respondents' behavior that is less focused or less serious in answering all the questions given because the implementation is carried out when the respondent is doing other activities. thus, reducing the validity of the data collected. Then this limitation is also due to the lack of detailed explanation from the survey so that it is likely that respondents do not understand the meaning of the questionnaire questions. In addition, researchers also experienced limitations in the lack of sample numbers where this study was only conducted on 28 respondents who lived in Kampung Jeruk Purut, RT 005 / RW 004, Pasir Ampo Village, Kresek District, Tangerang Regency, Banten Province.

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that there is a statistically meaningful relationship between the level of knowledge of adolescents about HIV / AIDS and the attitude of HIV / AIDS with the result P value = 0.001. Furthermore, researchers are expected to conduct further research by examining other variables that may affect the level of knowledge, attitudes and behaviors related to HIV / AIDS. In the future, it is also hoped that there will be additional knowledge or counseling related to HIV / AIDS so that it can increase knowledge and concern for HIV / AIDS. For health agencies, it is hoped that they can provide information about HIV / AIDS and encouragement to carry out HIV / AIDS prevention.

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REFERENCES

- Aisyah, Siti.A. Fitria. (2019) 'the relationship between adolescent knowledge and attitudes about hiv/aids with hiv/aids prevention in sma negeri 1 montasik kabupaten aceh besar', Journal of Community Midwives, 2(1). Available at: <http://ejournal.helvetia.ac.id/index.php/jbk/article/view/4081/154> (Accessed: November 18, 2022).
- Ananda, Irfan. (2022) 'The Relationship of Knowledge and Attitudes Towards HIV/AIDS Prevention in Adolescents', International Journal of Academic Health and Medical Research (IJAHMR), 6(5). Available at: <http://repository.unp.ac.id/38989/1/Irfan%20Ananda-Islami-Hubungan-Peng-etahuan-Dan-Sikap-Terhadap-Pencegahan-HIV-AIDS-pada-Remaja.pdf> (Accessed: November 18, 2022).
- Andika, K. and S.H. (2018) 'Correlation Between Knowledge Of HIV/AIDS and Prevention Attitude Against HIV/AIDS in Adolescents of Jembrana College of Health Sciences, Bali', Indonesian Journal of Health Research, 1(1), pp. 1–5. Available at: <https://doi.org/https://doi.org/10.32805/ijhr.2018.1.1.3>. Ariyanti, K.S. (2020) 'Overview of Adolescent Knowledge about HIV/AIDS in SMA Negeri 1 Baturiti', Jurnal Medika Usada, 3(2), pp. 54–59. Available at: <https://doi.org/https://doi.org/10.54107/medikausada.v3i2.70>.
- Aryani, A. and Anitasari, A. (2021) 'an overview of adolescent knowledge about hiv/aids disease', Journal of Nursing Sciences, 14(2), pp. 44–50. Available at: <https://doi.org/10.47942/jiki.v14i2.794> (Accessed: November 10, 2022).
- ASEAN (2020) 'HIV in the ASEAN Region Second Regional Report on HIV & AIDS 2011 – 2015', in ASEAN (ed.). Jakarta: The ASEAN Secretariat. Available at: <https://asean.org/wp-content/uploads/2021/01/08ASEAN-Regional-Report-on-HIV-AIDS-1dec.pdf> (Accessed: November 10, 2022).
- Aslia (2017) the relationship of knowledge and attitudes about HIV/AIDS with HIV/AIDS prevention measures in adolescents in SMAN 2 Bau-Bau City in 2017. Kementerian Kesehatan Republik Indonesia Polytechnic Kesehatan Kendari. Available at: <http://repository.poltekkes-kdi.ac.id/5/1/ASLIA-min.pdf> (Accessed: November 18, 2022).
- Baderiah (2019) 'An Overview of Adolescent Knowledge and Attitudes About HIV/AIDS in High School 24 Bone 2018', Scientific Journal of Health Diagnosis, 14(1), pp. 118–121. Available at: <http://jurnal.stikesnh.ac.id/index.php/jikd/article/view/137> (Accessed: November 10, 2022).
- Berek, P.A.L. (2019) 'The Relationship of Sex and Age with Adolescents' Level of Knowledge About HIV/AIDS IN SMAN 3 Atambua East Nusa Tenggara 2018', Journal of Friends of Nursing, 1(1), pp. 1–13. Available at: <https://doi.org/https://doi.org/10.32938/jsk.v1i01.85>.
- Chika, Made. (2022) The Relationship of Knowledge with HIV / AIDS Prevention Attitudes in Adolescents at SMA Negeri 1 Kediri Tabanan. Ministry of Health R.I Polytechnic Health

- Ministry of Health Denpasar. Available at: <http://repository.poltekkes-denpasar.ac.id/9694/> (Accessed: November 18, 2022).
- Diananda, A. (2018) 'Adolescent Psychology and Its Problems', *Journal of Islamic Education and Thought*, 1(1). Available at: <https://e-journal.stit-islamic-village.ac.id/istighna/article/view/20> (Accessed: November 18, 2022).
- Tangerang Regency Health Office (2021) 2021: Health Office of HIV Screening to 31 Thousand Residents of Tangerang City. Available at: <https://www.tangerangkota.go.id/berita/detail/29005/2021-dinkes-skrining-hiv-ke-31-ribu-warga-kota-tangerang#> (Accessed: November 10, 2022).
- Febrianti, R. and Wahidin, M. (2019) 'An Overview of The Level of Knowledge and Attitudes of Adolescents About HIV/AIDS IN SMK NEGERI 3 JAMBI IN 2018', *UNES Journal of Social and Economics Research*, 4(1). Available at: <http://Ojs.ekasakti.org>.
- Hermanto, Dadang. (2010) *The Effect of Perception of Midwifery Service Quality on Satisfaction of Obstetric Inpatients at Dr. H. Soemarno Sostroato Mojo Bulungan Hospital, East Kalimantan*. Dipenogoro University.
- Hidayah, U., S.P., S.A.I. (2018) 'Overview of Adolescent Knowledge about HIV/AIDS After Participating in a Great Program at SMP Negeri Kota Bandung', *Journal of Health Systems*, 3(3), pp. 111–115. Available at: <https://doi.org/https://doi.org/10.24198/jsk.v3i3.16984>.
- Husaini, H., P.R., & S.M. (2017) 'The Effect of HIV/AIDS Counseling on Knowledge and Attitudes About HIV/AIDS of Banjarbaru Midwifery Academy Students in 2016', 45(1).
- Irawan, R. (2012) *The Relationship About Knowledge And AIDS/HIV Student's Respondens At SMA Pangudi Luhur Class X Yogyakarta*. Indonesian Islamic University. Available at: <https://dspace.uui.ac.id/bitstream/handle/123456789/36395/06711005%20Riko%20Irawan.pdf?sequence=1> (Accessed: November 18, 2022).
- Iswahyuni, S., & Herbasuki. (2019) 'Knowledge and Attitudes About HIV-Aids in Adolescents in Boyolali County', *Avicenna Journal of Health Research*, 2(1), pp. 58–66. Available at: <https://www.jurnal.stikesmus.ac.id/index.php/avicenna/article/view/260> (Accessed: November 18, 2022).
- Ministry of Health (2013) *Basic Health Research 2013*. Jakarta: Ministry of Health of the Republic of Indonesia. Available at: <https://www.litbang.kemkes.go.id/laporan-riiset-kesehatan-dasar-risikesdas/> (Accessed: November 10, 2022).
- Ministry of Health (2015) *Infodatin Adolescent Reproductive Health Situation*. Available at: <https://www.kemkes.go.id/folder/view/01/structure-publikasi-pusdatin-info-datin.html> (Accessed: November 10, 2022).
- Ministry of Health (2020) *Infodatin HIV and AIDS 2020*. Jakarta: Directorate General of Disease Prevention and Control of the Ministry of Health of the Republic of Indonesia.
- Moudy, Jesica., and S. Rizma. (2020) 'Knowledge related to Coronavirus Disease (COVID-19) Prevention Efforts in Indonesia', *Higeia Journal of Public Health Research and Development*, 4(3), pp. 333–346. Available at: <https://journal.unnes.ac.id/sju/index.php/higeia/article/view/37844/16595> (Accessed: November 18, 2022).
- Noorhidayah, Asrinawaty. (2016) 'The Relationship of Knowledge, Attitudes, and Sources of Information with HIV/AIDS Prevention Efforts in the Community of Adolescent Street Children in Banjarmasin in 2016', *Health Dynamics: Journal of Midwifery and Nursing*,

- 7(1), pp. 272–282. Available at: <https://ojs.dinamikakesehatan.unism.ac.id/index.php/dksm/article/view/83> (Accessed: November 18, 2022).
- Notoatmodjo S (2012) *Methodology of Health research*. Jakarta: Rineka Cipta.
- Notoatmodjo, Soekidjo. (2012) *Public Health Sciences*. Jakarta: Rineka Cipta.
- Nurwati, Nunung., and R. Binahayati. (2018) 'Adolescent Knowledge of HIV/AIDS', Universitas Padjadjaran, 5(3). Available at: <http://jurnal.unpad.ac.id/prosiding/article/download/20607/pdf> (Accessed: November 18, 2022).
- Sugiyono (2016) *Educational Research Methods Quantitative, Qualitative and R&D Approaches*. Bandung: PT. Alfabeta.
- Turrangan, R.R.J. and M.H. (2020) 'The Relationship of Family Support and Information Technology with Knowledge of Adolescent Premarital Sex Gmim Eben Haezer Tatelu North Minahasa Regency', *Journal of KESMAS*, 9(4), pp. 16–20. Available at: <https://ejournal.unsrat.ac.id/index.php/kesmas/article/view/29264> (Accessed: November 18, 2022).
- World Health Organization (2021) HIV Country Profile. Available at: <https://cfs.hivci.org/> (Accessed: November 10, 2022).
- World Health Organization (2022a) Data on The Size of The HIV Epidemic. Available at: <https://www.who.int/data/gho/data/themes/topics/topic-details/GHO/data-on-the-size-of-the-hiv-aids-epidemic?lang=en> (Accessed: November 10, 2022).
- World Health Organization (2022b) Global HIV Programme. Available at: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/overview> (Accessed: November 10, 2022).
- World Health Organization (2022c) HIV. Available at: <https://www.who.int/news-room/fact-sheets/detail/hiv-aids> (Accessed: November 10, 2022).