

KNOWLEDGE OF YOUNG INDONESIAN WOMEN ABOUT HIV/AIDS

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ABSTRAK: PENGETAHUAN WANITA MUDA INDONESIA TENTANG HIV/AIDS

Latar Belakang: Minimnya pengetahuan tentang kesehatan reproduksi remaja terutama dalam kaitannya dengan perlindungan terhadap perilaku seksual berisiko, pencegahan kehamilan yang tidak diinginkan dan persepsi banyak remaja tentang HIV/AIDS sebagai penyakit yang tidak berbahaya dan banyak kesalahpahaman tentang penyakit ini merupakan masalah yang sangat penting. Dengan pemahaman dan pendidikan yang benar, infeksi HIV/AIDS yang mematikan sebenarnya bisa dicegah. Berdasarkan data UNAIDS tahun 2020, setiap minggu sekitar 5000 wanita usia 15-24 tahun terinfeksi HIV.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan usia, tempat tinggal, dan tingkat pendidikan dengan pemahaman tentang HIV/AIDS pada Wanita muda di Indonesia.

Metode: Penelitian ini merupakan penelitian kuantitatif dengan desain penelitian cross sectional. Peneliti menggunakan data yang berasal dari data Survei Demografi dan Kesehatan Indonesia (SDKI) tahun 2017 yang diterbitkan oleh Demographic Health Surveys (DHS) Program. Populasi dari penelitian ini adalah seluruh remaja wanita usia 15-24 tahun yang telah didata oleh SDKI tahun 2017 berjumlah 14.766 orang. Pemilihan sample dalam penelitian ini menggunakan metode purposive sampling dengan kriteria yaitu remaja putri yang terdapat pada data SDKI 2017 dengan rentang usia 15-24 tahun dan memiliki data yang lengkap yaitu sebanyak 12.723 responden. Variable pada penelitian ini antara lain usia, tempat tinggal, pendidikan responden, dan pengetahuan Wanita muda Indonesia tentang HIV/AIDS. Analisis data statistik pada penelitian ini menggunakan uji chi-square.

Hasil: Hasil penelitian ini menunjukkan bahwa ada hubungan antara usia responden dengan pengetahuan tentang HIV/AIDS ($p= 0,000$), tempat tinggal responden dengan pengetahuan tentang HIV/AIDS ($p= 0,000$), dan tingkat Pendidikan responden dengan pengetahuan tentang HIV/AIDS ($p= 0,000$). Sehingga dapat diketahui bahwa usia, tempat tinggal dan tingkat Pendidikan berhubungan dengan pengetahuan wanita muda Indonesia tentang HIV/AIDS

Kesimpulan: Upaya peningkatan pengetahuan remaja tentang HIV/AIDS dapat dilakukan dengan pendekatan pada media elektronik, media sosial, media cetak, dan lingkungan sosialnya, dengan memberikan informasi oleh tenaga pendidikan dan tenaga kesehatan, berupa pengetahuan tentang cara transmisi HIV/AIDS, cara pencegahan (penggunaan kondom), deteksi dini HIV ke pusat kesehatan dan mengubah persepsi yang buruk dimasyarakat terkait orang dengan HIV/AIDS (ODHA)

Saran: Pemerintah maupun swasta diharapkan dapat lebih gencar dalam melakukan promosi kesehatan guna terjangkaunya informasi yang dibutuhkan oleh masyarakat terkait HIV/AIDS.

Kata Kunci: HIV; AIDS; Usia; Tempat Tinggal; Pendidikan; Pengetahuan

ABSTRACT

Background: The lack of knowledge about adolescent reproductive health, especially in relation to protection against risky sexual behavior, prevention of unwanted pregnancies and the perception of many adolescents about HIV/AIDS as a disease that is not dangerous and many misunderstandings about this disease is a very important problem. With the right understanding and education, the deadly HIV/AIDS infection can actually be prevented. Based on UNAIDS data for 2020, around 5,000 women aged 15-24 years are infected with HIV every week.

Objective: This study aims to determine the relationship between age, place of residence, and level of education with an understanding of HIV/AIDS among young women in Indonesia.

Method: This research is quantitative research with cross-sectional research design. Researchers used data derived from the 2017 Indonesian Demographic and Health Survey (IDHS) data published by the Demographic Health Surveys (DHS) Program. The population of this study was all female adolescents aged 15-24 years whose data had been recorded by the 2017 IDHS, totaling 14,766 people. The selection of the sample in this study used a purposive sampling method with the criteria of young women who were found in the 2017 IDHS data with an age range of 15-24 years and had complete data, namely 12,723 respondents. Variables in this study included age,

place of residence, respondent's education, and knowledge of young Indonesian women about HIV/AIDS. Statistical data analysis in this study used the chi-square test.

Results: The results of this study indicate that there is a relationship between the respondent's age and knowledge of HIV/AIDS ($p= 0.000$), where the respondent lives and knowledge of HIV/AIDS ($p= 0.000$), and the education level of the respondent with knowledge of HIV/AIDS ($p= 0.000$). So it can be seen that age, place of residence, and education level are related to the knowledge of young Indonesian women about HIV/AIDS

Conclusion: Efforts to increase youth knowledge about HIV/AIDS can be carried out by approaching electronic media, social media, print media, and their social environment, by providing information by education staff and health workers, in the form of knowledge about how HIV/AIDS is transmitted, how to prevent it (use of condoms), early detection of HIV to health centers and changing bad perceptions in society regarding people with HIV/AIDS.

Suggestion: The government and the private sector are expected to be more aggressive in carrying out health promotion in order to reach the information needed by the public regarding HIV/AIDS.

Keywords: HIV; AIDS; Age; Residence; Education; Knowledge

INTRODUCTION

Human Immunodeficiency Virus (HIV) is a virus that attacks white blood cells and causes damage to a person's immune system. This virus also causes a person to get Acquired Immuno Deficiency Syndrome (AIDS). HIV/AIDS is still the biggest public health problem in the world. (Aisyah & Fitria, 2019)

UNAIDS (Joint United Nations Program on HIV and AIDS) at the end of 2017 there were more than 36.9 million people infected with HIV worldwide, 1.8 million new HIV cases and 940,000 people worldwide died from AIDS (Aryani et al. , 2021). In 2020, 37.7 million people were infected with HIV, 1.5 million new HIV cases and 680,000 people died from AIDS. Distribution of new cases of HIV infection by gender and population in 2019 in Asia and the Pacific, namely 44% of cases in homosexual men, 21% of clients from commercial sex workers or their own sexual partners, 17% from drug users, 9% by sex workers and 7% are transgender people. According to this data, 11% of women between the ages of 15 and 24 become new HIV sufferers (UNAIDS, 2020). The number of HIV sufferers in Indonesia is increasing every year.

Based on age group, the highest HIV infection occurred in the age group 20-49 years (87%). At the same time, AIDS is most common between the ages of 20 and 49 years (81%). Judging from the incubation period of around 5-10 years, it is estimated that the first exposure to HIV occurs during adolescence, so adolescence can be considered an age vulnerable to HIV infection (Husaini et al., 2017). According to UNAIDS (2020), around 5,000 women between the ages of 15 and 24 are infected with HIV every week.

Adolescence has been described as a critical stage of social, psychological, economic, and

biological transition. At this point, adult supervision is declining and adolescents have limited knowledge, financial dependence, lack of self-confidence, and limited life skills. Risky behaviors such as inappropriate sex may increase. These behaviors may contribute to the risk of HIV infection, making young people more susceptible to HIV exposure and infection. (Pei et al., 2018)

The low knowledge of adolescents about reproductive health is mainly related to protection against unwanted pregnancies, risky sexual behavior, there are still many adolescents who perceive HIV/AIDS as a disease that is not dangerous, and there are still many misunderstandings about this disease. Proper education and understanding can prevent transmission and death from HIV/AIDS (Jumhati & Rahayu, 2016).

Based on several studies, it is proven that the higher a person's education, the lower the risk due to unsafe sexual intercourse which results in an increased risk of HIV/AIDS transmission (Hidayangsih et al., 2011). Factors that can influence risky behavior in adolescents include age, gender, education level, mother's age and media exposure about reproductive health (Wahdini et al., 2021). A high level of education is able to master a higher level of knowledge, namely having an understanding of how prevention of HIV/AIDS infection, so that changes in behavior can occur which can be at risk of contracting the disease (Mwamwenda, 2014). Adolescents aged 15-24 years still lack knowledge about HIV/AIDS where only 20 data are obtained.

Based on this background, the researcher was interested in conducting a study entitled "Knowledge of Young Indonesian Women about HIV/AIDS". This study aimed to determine the relationship between age, place of residence, and

level of education of respondents with knowledge of HIV/AIDS.

RESEARCH METHOD

This research is a quantitative study using a cross-sectional design. Researchers used secondary data from the 2017 Indonesian Demographic and Health Survey (IDHS) data published by the Demographic Health Surveys (DHS) Program (Board et al., 2018). The population of this study was all female adolescents aged 15-24 years whose data had been recorded by the 2017 IDHS, totaling 14,766 people. The selection of the sample in this study used a purposive sampling method with the criteria of young Indonesian women in the 2017 IDHS data aged 15-24 years and have complete data, namely 12,723 respondents.

The independent variables in this study included age, place of residence, and education of the respondents, while the dependent variable in this study was the knowledge of young Indonesian women about HIV/AIDS. In this study, the chi-square test was used for statistical data analysis with SPSS.

RESEARCH RESULT

Based on the 2017 IDHS data, the results of Knowledge of Indonesian Young Women about

HIV/AIDS in the table below are obtained. Based on table 1, data was obtained that out of 12,723 the majority of female respondents aged 15-19 years (53.2%), respondents who lived in urban areas (58.8%), had a secondary education level (71.5%), and had sufficient knowledge about HIV/AIDS (45.8%).

Table 1
Characteristics of Respondents

Characteristics		N	%
Age	15-19	6.770	53,2
	20-24	5.953	46,8
Residence	Urban	7.479	58,8
	Rural	5.244	41,2
	No school	12	0,1
Level of education	Basic education	482	3,8
	Middle education	9.101	71,5
	Higher education	3.128	24,6
Knowledge of HIV/AIDS	Not enough	3.015	13,7
	Enough	5.821	45,8
	Good	3.887	30,6

Table 2
Cross tabulation of age, place of residence, and level of education of respondents with knowledge of HIV/AIDS

Variable		Knowledge about HIV/AIDS						p-value
		Not enough		Enough		Good		
		N	%	N	%	N	%	
Age	15-19	1.832	14,4	2.995	23,5	1.943	15,3	0,000
	20-24	1.183	9,3	2.826	22,2	1.944	15,3	
Residence	Urban	1.645	12,9	3.583	28,2	2.251	17,7	0,000
	Rural	1.370	10,8	2.238	17,6	1.636	12,9	
	No school	8	0,1	1	0,0	3	0,0	
Level of education	Basic education	166	1,3	161	1,3	155	1,2	0,000
	Middle education	2.364	18,6	4.006	31,5	2.731	21,5	
	Higher education	477	3,7	1.653	13,0	998	7,8	

In Table 2, it is known that the results of the chi-square test analysis show that the factors that influence the respondent's knowledge are age, area of residence, and level of education of the

respondent. The statistical test results for age, place of residence, and level of knowledge show a value of $p = 0.000 < 0.05$.

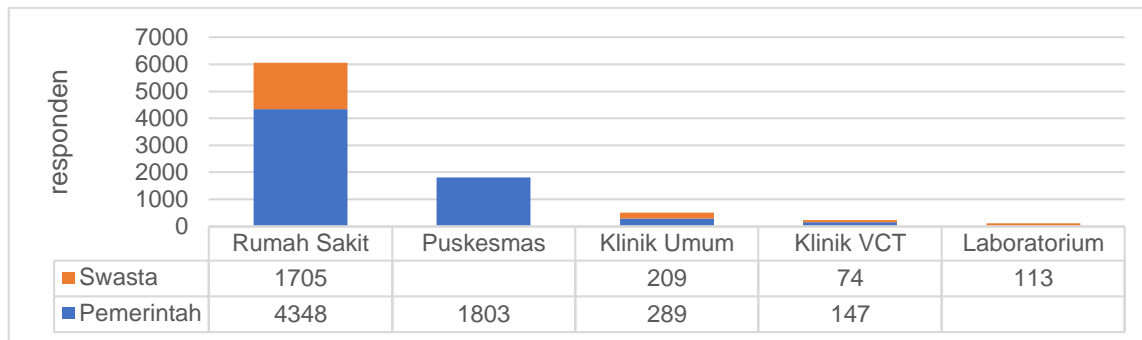


Figure 1.
Graph of respondent's knowledge about HIV testing places in the community

Based on Figure 1, it is known that only half of the respondents know where HIV testing places are in the community, including both government and private hospitals with a total of 6,053 respondents, health centers with 1,803 respondents, public clinics with 498 respondents, VCT clinics with 221 respondents and laboratories. as many as 113 respondents.

Table 3
Sources of Information Knowledge of AIDS

Resources	N	%
Radio	859	6,8
Television	6.879	54,1
Newspaper/Magazine	1.413	11,1
Poster	828	6,5
Health workers	2.013	15,8
Religious institutions	132	1,0
School/Teacher	7.968	62,6
Public	594	4,7
Friend	3.186	25,0
Workplace	396	3,1
Internet	4.563	35,9
Book	152	1,2
Seminars/Counseling	173	1,4
Other	83	0,7

Based on table 3, it can be seen that the majority of teenagers heard about AIDS from teachers amounting to 62.6%, so it can be seen that education is related to whether teenagers have ever heard about the disease.

DISCUSSION

Human Immunodeficiency Virus (HIV) is a virus that can cause Acquired Immuno Deficiency Syndrome (AIDS). Acquired Immune Deficiency Syndrome (AIDS) can be interpreted as a collection of symptoms or diseases caused by weakened immunity due to infection with HIV which belongs to the Retroviridae family, namely viruses that weaken human immunity. (Soselisa et al., 2012)

This study shows that the age of the respondent is related to the respondent's knowledge of HIV/AIDS. This is in line with research conducted by Yanuarti & Lestari (2019); Suara & Ariyanto (2019) which states that the knowledge of women of childbearing age about HIV/AIDS is related to the age of the respondent. According to Suwaryo & Yuwono (2017) the more mature a person is, the more mature his thinking is so it affects his cognitive abilities.

The area of residence also shows results related to the respondent's knowledge of HIV/AIDS with a p value = 0.000, this is in accordance with research by Mardhikawati (2019) which states that place of residence is one of the factors related to knowledge of HIV/AIDS. The low information on respondents who are in rural areas is caused by problems with rural infrastructure. Conversely, respondents who live in urban areas may have better knowledge than rural communities due to better access and better infrastructure to health information sources related to HIV/AIDS (Haque et al., 2018; Pradnyani et al., 2019; Schafer et al., 2017)

According to Husaini et al. (2017) Adolescents who are already sexually active often do not have basic knowledge about reproductive health, the ability to negotiate sexual relations and access reproductive health services, making them vulnerable to reproductive health problems such as HIV/AIDS. One way to obtain information is to obtain it through formal education. The results of this study indicate that there is a relationship between education level and respondents' knowledge of HIV/AIDS with a value of p=0.000. This is in line with research conducted by Yanuarti & Lestari (2019) and Mwamwenda (2014) which states that knowledge of women of childbearing age about HIV/AIDS is related to the respondent's last education.

Efforts to reduce the rate of HIV transmission can be carried out with early detection carried out in health facilities by both the government and the

private sector. Based on Figure 1, it is known that only half of the respondents know where Voluntary Counseling Testing (VCT) services are available, so only a few will take advantage of these facilities. This is consistent with research conducted by Maskuniawan & Azinar (2018) that the lower the attitude toward accepting VCT services, the higher the risk of spreading HIV/AIDS, and vice versa. One of the factors a person is willing to take an HIV test is family support in the form of providing information about HIV, advice for HIV testing, reminding them to take an HIV test, and taking them to existing VCT testing facilities.

HIV transmission can occur through casual sex, including sexual intercourse with multiple partners, and sexual intercourse with someone who has been infected with HIV without protection (condoms). Apart from that, HIV can be transmitted from using contaminated needles and through blood product intermediaries, such as blood or organ transplants. When infected, HIV positive sufferers appear healthy without symptoms of disease, but can transmit the AIDS virus to other people. While people with AIDS are people with a disease syndrome infected with HIV from time to time, usually occurring 5-10 years after HIV infection. HIV/AIDS is not transmitted as easily as the flu virus because the HIV virus is present in blood, semen, vaginal fluids and some breast milk. (Anda, 2015)

Exposure to information sources has a tremendous impact on HIV/AIDS prevention. Factors related to risky behavior in adolescents in Indonesia are knowledge, age, gender, educational background, attitudes, economic situation, access to information media, and communication with family and friends who are involved in risky behavior (Purnamaningrum et al., 2019). Comprehensive information about HIV/AIDS can increase public awareness about the impacts and consequences of HIV/AIDS (Son et al., 2020)

Based on table 3, it can be seen that the majority of teenagers hear about AIDS from schools or teachers. According to research by Aryani et al. (2021) Respondents who received information from non-health professionals were 3.9 times less likely to have information about HIV/AIDS prevention than respondents who received information from health workers. Lack of information received by adolescents, such as counseling from educational or health institutions, and exposure to information from the media and the internet affects adolescents' understanding of the importance of self-protection against HIV/AIDS and influences adolescents' attitudes in responding to adolescent association with HIV/AIDS. Research Jung et al. (2013) stated

that the use of media can increase knowledge about HIV/AIDS. Sources of correct and appropriate information and ways to obtain information about HIV/AIDS are important points in efforts to prevent HIV transmission. Good knowledge about HIV/AIDS will lead to a positive attitude towards HIV/AIDS in terms of avoiding HIV/AIDS transmission, preventing HIV/AIDS transmission to attitudes in dealing with HIV/AIDS sufferers (Iswahyuni et al., 2019).

Efforts to increase knowledge are not only obtained in educational settings, but can be obtained through outreach in the community by health workers so that adolescents have a correct understanding of HIV/AIDS. The knowledge needed by the community regarding HIV/AIDS is in the form of knowledge about ways of transmitting or transmitting HIV/AIDS, ways of prevention (use of condoms), early detection of HIV to health centers, and changing bad perceptions in society regarding people with HIV/AIDS (PLWHA) (Pradnyani et al., 2019). High knowledge can foster attitudes to behave more healthily and be able to prevent the spread of HIV/AIDS. Based on Husaini's research (2017), female students who receive counseling about HIV/AIDS have an attitude of 2, 208 times better than female students who did not receive counseling. Counseling can affect a person's attitude in healthy behavior.

HIV/AIDS has an impact on slowing economic growth by destroying the number of people with production capabilities (human capital) (Darti & Imelda, 2019), therefore efforts are needed to prevent HIV/AIDS transmission, especially to adolescents. The United Nations Children's Fund (2021) has 5 approaches to the HIV/AIDS work program, namely differentiate, integrate, partner, innovate, and advocate. The five approaches in their application to prevent youth from HIV are carrying out multi-sectoral integration with other youth health programs in order to form layered protection for adolescents with HIV; conduct mapping and set priorities to increase the target range of at-risk youth (key population); do an HIV self-test, availability of digital data on Oral Pre-Exposure Prophylaxis (PrEP) or consumption of retrovirus drugs and digital data services to identify adolescents, and links or website addresses that can be accessed by at-risk adolescents; free partnership on HIV Prevention Coalition Education; advocate for the integration of HIV knowledge with education and other organizations and create youth-friendly policies.

Efforts to prevent HIV/AIDS in women are further explained by WHO by providing comprehensive sexual education, health promotion on contraception to prevent HIV transmission in the

form of condoms, conducting HIV services and testing, performing male circumcision, harm reduction in injecting drug users, and prevention programs targeting young sex workers and other key populations. (World Health Organization, 2018)

CONCLUSION

Education has been shown to have a relationship with youth's knowledge of HIV/AIDS, but there are still many misconceptions about how HIV/AIDS is transmitted. The main source of information for teenagers hearing about the disease is their school teacher, then electronic media, social media, print media, and their social environment. Efforts to increase adolescents' knowledge about HIV/AIDS can be done by approaching these sources of information, by providing counseling by education and health workers, in the form of knowledge about how HIV/AIDS is transmitted or transmitted, how to prevent (use of condoms), detect HIV early warning to health centers and changing bad perceptions in society regarding people with HIV/AIDS (PLWHA) through electronic media,

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SUGGESTION

The government and the private sector are expected to be more aggressive in carrying out health promotion in order to reach the information needed by the community, in this case related to HIV/AIDS. Dissemination of information not only with related parties in the fields of education, religion, and community, but also through internet-based media which is currently in great demand by young Indonesian women.

REFERENCES

- Aisyah, S., & Fitria, A. (2019). Hubungan Pengetahuan dan Sikap Remaja tentang HIV/AIDS dengan Pencegahan HIV/AIDS di SMA Negeri 1 Montasik Kabupaten Aceh Besar. *Jurnal Bidan Komunitas*, 2(1), 1–10.
- Andari, S. (2015). Pengetahuan Masyarakat tentang Penyebaran HIV/AIDS. *Jurnal PKS*, 14(2), 211–224.
- Aryani, A., Widiyono, & Anitasari, A. (2021). Gambaran Pengetahuan Remaja tentang

Penyakit HIV/AIDS. *Jurnal Ilmu Keperawatan Indonesia (JIKI)*, 14(2), 44–50.

- Board, N. P. and F. P., Indonesia, S., Kemenkes, M. of H., & ICF. (2018). Indonesia Demographic and Health Survey 2017—Adolescent Reproductive Health. <https://dhsprogram.com/publications/publication-FR343-Other-Final-Reports.cfm>
- Darti, N. A., & Imelda, F. (2019). Upaya Pencegahan dan Penanggulangan HIV/AIDS Melalui Peningkatan Pengetahuan dan Screening HIV/AIDS pada Kelompok Wanita Beresiko di Belawan Sumatera Utara. *Jurnal Riset Hesti Medan*, 4(1), 13–17.
- Haque, A., Hossain, S. N., Chowdhury, M. A. B., & Uddin, J. (2018). Factors associated with knowledge and awareness of HIV/AIDS among Married Women in Bangladesh: Evidence from a Nationally Representative Survey. *SAHARA J: Journal of Social Aspects of HIV/AIDS Research Alliance*, 15(1), 121–127. <https://doi.org/10.1080/17290376.2018.1523022>
- Hidayangsih, P. S., Tjandrarini, D. H., Mubasyiroh, R., & Suparmi, S. (2011). Faktor-faktor yang Berhubungan dengan Perilaku Berisiko Remaja di Kota Makassar Tahun 2009. *Buletin Penelitian Kesehatan*, 39(2), 88–98. <https://doi.org/10.22435/bpk.v39i2>
- Husaini, H., Panghiyangani, R., & Saputra, M. (2017). Pengaruh Penyuluhan HIV/AIDS terhadap Pengetahuan dan Sikap tentang HIV/AIDS Mahasiswi Akademi Kebidanan Banjarbaru Tahun 2016. *Buletin Penelitian Kesehatan*, 45(1), 11–16. <https://doi.org/10.22435/bpk.v45i1.5787.11-16>
- Iswahyuni, S., S. S. H., & Herbasuki. (2019). Hubungan Pengetahuan dan Sikap tentang HIV/AIDS pada Remaja di Kabupaten Boyolali. *Avicenna: Journal of Health Research*, 2(1), Article 1. <https://doi.org/10.36419/avicenna.v2i1.260>
- Jumhati, S., & Rahayu, S. A. (2016). Gambaran Tingkat Pengetahuan Remaja Tentang HIV/AIDS Pada Siswa/i Kelas XI di SMK Karya Wijaya Kusuma Jakarta Timur Periode Juli 2016. *Jurnal Ilmu Kesehatan*, 8(2), 54–47.
- Jung, M., Arya, M., & Viswanath, K. (2013). Effect of Media Use on HIV/AIDS-Related Knowledge and Condom Use in Sub-Saharan Africa: A Cross-Sectional Study. *PLoS ONE*, 8(7),

- e68359.
<https://doi.org/10.1371/journal.pone.0068359>
- Mardhikawati, B. R. (2019). Determinan Pengetahuan Komprehensif tentang HIV/AIDS pada Wanita Usia Subur di Indonesia tahun 2017 (Analisis Data Survey Demografi Kesehatan Indonesia Tahun 2017) [Bachelor Thesis, UIN Syarif Hidayatullah Jakarta-FIKES].
<https://repository.uinjkt.ac.id/dspace/handle/123456789/49739>
- Maskuniawan, & Azinar, M. (2018). Faktor-Faktor yang Berhubungan dengan Praktik Tes HIV pada Waria Pekerja Seks di Kota Semarang. *Journal of Health Education*, 3(1), Article 1.
<https://doi.org/10.15294/jhe.v3i1.23024>
- Mwamwenda, T. S. (2014). African University Students' Knowledge of HIV/AIDS and Mosquito Bites. *Mediterranean Journal of Social Sciences*, 5(20), Article 20.
- Mwamwenda, T. S. (2014). Education level and human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) knowledge in Kenya. *Journal of AIDS and HIV Research*, 6(2), 28–32.
<https://doi.org/10.5897/JAHR2013.0279>
- Notoatmodjo, S. (2014). *Promosi Kesehatan dan Perilaku Kesehatan*. Rineka Cipta.
- Pei, R., Ji-ke, C., Yang, S., Nan, L., Wang, Q., Zhang, S., Liao, Q., Yu, G., Xiao, L., Gong, Y., Zhang, J., Wang, K., Wang, J., & Wang, Z. (2018). Risk factors for HIV infection among 15 to 25-year-old rural unmarried Yi adolescents in an ethnic minority region of China. *Medicine*, 97(36), e12279.
<https://doi.org/10.1097/MD.00000000000012279>
- Pradnyani, P. E., Wibowo, A., & Mahmudah. (2019). The Effects of Socio-demographic Characteristics on Indonesian Women's Knowledge of HIV/AIDS: A Cross-sectional Study. *Journal of Preventive Medicine and Public Health*, 52(2), 109–114.
<https://doi.org/10.3961/jpmp.18.256>
- Purnamaningrum, Y. E., Nugrahawati, R. E. P. C., Hernayanti, M. R., & Vajee, A. (2019). Factors Related to Adolescent Behavior towards HIV/AIDS Prevention. *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)*, 13(4), 195–201.
<https://doi.org/10.21109/kesmas.v13i4.2698>
- Rizaty, M. A. (2021). *Kasus HIV di Indonesia Terus Meningkat, AIDS Cenderung Turun*. Databoks.
<https://databoks.katadata.co.id/datapublish/2021/07/02/kasus-hiv-di-indonesia-terus-meningkat-aids-cenderung-turun>
- Schafer, K. R., Albrecht, H., Dillingham, R., Hogg, R. S., Jaworsky, D., Kasper, K., Loutfy, M., MacKenzie, L. J., McManus, K. A., Oursler, K. A. K., Rhodes, S. D., Samji, H., Skinner, S., Sun, C. J., Weissman, S., & Ohl, M. E. (2017). The Continuum of HIV Care in Rural Communities in the United States and Canada: What Is Known and Future Research Directions. *Journal of Acquired Immune Deficiency Syndromes* (1999), 75(1), 35–44.
<https://doi.org/10.1097/QAI.0000000000001329>
- Son, N. V., Luan, H. D., Tuan, H. X., Cuong, L. M., Duong, N. T. T., & Kien, V. D. (2020). Trends and Factors Associated with Comprehensive Knowledge about HIV among Women in Vietnam. *Tropical Medicine and Infectious Disease*, 5(2), 91.
<https://doi.org/10.3390/tropicalmed5020091>
- Soselisa, S. M., Palandeng, H. M. F., & Andries, L. (2012). Gambaran Pengetahuan Remaja tentang HIV/AIDS di Pusat Pengembangan Anak ID – 127 Kelurahan Ranomut Manado. *Jurnal Biomedik: JBM*, 4(3), Article 3.
<https://doi.org/10.35790/jbm.4.3.2012.1204>
- Suara, M., & Ariyanto, J. (2019). Hubungan Umur, Pendidikan dan Pengetahuan dalam Pencegahan Penularan HIV/AIDS. *Jurnal Antara Keperawatan*, 2(2), 80.
<https://doi.org/10.37063/antaraperawat.v2i2.80>
- Suwaryo, P. A. W., & Yuwono, P. (2017). Faktor-Faktor yang Mempengaruhi Tingkat Pengetahuan Masyarakat dalam Mitigasi Bencana Alam Tanah Longsor. *URECOL*, 305–314.
- UNAIDS. (2020). UNAIDS data 2020.
<https://www.unaids.org/en/resources/documents/2020/un aids-data>
- United Nations Children's Fund. (2021). UNICEF follow-up to recommendations and decisions of the forty-fifth and forty-sixth Joint United Nations Programme on HIV/AIDS Programme Coordinating Board meetings (Oral Report Background Note UNICEF/2021/EB/2). UNICEF.
<https://www.unicef.org/executiveboard/media/2776/file/2021-EB2-HIV-AIDS-EN.pdf>
- Wahdini, M., Indraswari, N., Susanti, A. I., & Sujatmiko, B. (2021). Faktor-Faktor yang Berhubungan dengan Perilaku Berisiko pada Remaja. *Jurnal Kebidanan Malahayati*, 7(2),

- Article
<https://doi.org/10.33024/jkm.v7i2.3411>
- World Health Organization. (2018). WHO Recommendations on Adolescent Sexual and Reproductive Health and Rights. World Health Organization.
2. Yanuarti, T., & Lestari, I. D. (2019). Evaluasi pengetahuan wanita usia subur tentang HIV AIDS di puskesmas kelurahan duren sawit Jakarta Timur. *Jurnal Antara Kebidanan*, 2(1), Article 1. <https://doi.org/10.37063/ak.v2i1.34>