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# Social Determinants of HIV/AIDS: a Public Health Perspective

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#### **Abstract**

**Background:** Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome or commonly known as HIV/AIDS is a disease that is still a problem in many countries, including Indonesia. HIV AIDS cases in Indonesia continue to increase from year to year. HIV cases in Indonesia reached its peak in 2019, which was 50,282 cases. This study aimed to determine the effect of social determinants of health according to healthy people on the incidence of HIV/AIDS in Indonesia.

**Methods:**The study design in this study uses a literature review to examine knowledge, ideas, or findings in academic-oriented literature. The type of data used is secondary data, namely data from journal articles, and literature reviews about HIV/AIDS. This research was conducted in November 2021. Based on the analysis of the articles collected, according to healthy people, there are several variables that influence the incidence of HIV/AIDS in Indonesia.

**Results:** In Economic Factors there are variables of employment and poverty that affect, on the determinants of education there are variables of early child-hood education and development, enrollment in higher education, secondary school education, and literacy. Meanwhile, on the determinants of neighbors and the environment there are variables of crime and violence as well as variables of environmental conditions, and on the determinants of health and health services there are variables of access to health services that affect the incidence of HIV/AIDS.

**Conclusion:** Based on the research that has been carried out, it can be concluded that 5 determinant factors according to the Healthy People theoretical framework related with the incidence of HIV/AIDS in Indonesia.

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#### INTRODUCTION

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is a global health issue, including in Indonesia. AIDS is an infectious disease caused by HIV infection. HIV is a virus that attacks and destroys T-helper cells, which produce antibodies in the body. The HIV virus multiplies in lymphocyte cells, which become infected. The virus then attacks the immune system, making the body vulnerable to disease. HIV is present in blood and semen (Pardita, 2001).

According to the United Nations Program on HIV and AIDS (UNAIDS) 2019 data, the largest population of HIV-infected individuals is in Africa (25.7 million people), followed by Southeast Asia (3.8 million) and the Americas (3.5 million). Indonesia needs to increase its awareness of the spread and transmission of HIV due to the high population of infected individuals in Southeast Asia. The number of HIV/AIDS cases in Indonesia has continued to increase over the years, as shown in the graph below. In 2019, the number of cases peaked at 50,282. Central Java has the highest number of AIDS cases, with 488 people (Kemenkes, 2019).

HIV/AIDS causes a lot of stigma in society. In addition, when viewed from various fields of life, the incidence of HIV/AIDS has a major impact. Starting from the social aspect where many people will stay away from the sufferer, from the psychological point of view the sufferer also feels it starting from them starting to know that they are infected with HIV/AIDS to the reaction of their environment. From an economic perspective, the HIV-AIDS epidemic will incur high costs, both for the sufferer and for the hospital. This is because the cure has not been found, so costs must continue to be spent only for treatment and prolonging the life of the patient. Judging from the existing impacts, it can be concluded that HIV/AIDS has affected people's lives and therefore it is also important to prevent and treat sufferers so as not to cause further problems.

Given the high number of HIV/AIDS cases in Indonesia, it is imperative to address this issue promptly. The government has taken steps to combat this problem, including

implementing a policy promoting condom use to prevent HIV transmission. Condoms have been shown to be an effective means of reducing the incidence of HIV/AIDS. The national policy on HIV & AIDS prevention advocates for the 100% use of condoms by sex workers and their customers. However, the Basic Population Law (UU No. 1 0/1992) of the BKKBN only allows married couples to access family planning methods provided by the government. Despite this, condoms have been promoted in various regions and provinces for double protection. For instance, the regulations in East Java Province and the draft law in Papua require the use of condoms as double protection in risky relationships. It is unclear whether this promotion of condom use for unmarried couples would violate the Population Law, given the availability of these legal products. Discrepancies between policies can lead to discrimination against groups at high risk of disease exposure (Latifa, no date).

Basri's research found that stigma has the strongest influence on the quality of life of people living with HIV/AIDS, along with depression, social support, and ARV therapy (Basri, 2018). Wulandari's research found that social determinants can affect women's vulnerability to STI and HIV transmission (Dewi, Wulandari, & Wirawan, 2018). Therefore, we conducted a study to investigate the impact of social determinants of health, based on the Healthy People framework, on HIV/AIDS cases in Indonesia.

## **METHODS**

The study design used in this research is a literature review to examine knowledge, ideas, or findings in academic-oriented literature, and formulate theories and methodologies on certain topics. Literature review studies can be obtained from various sources such as books, journals, documentation books, internet, and libraries. In this case, a literature study was conducted which was obtained from various journal articles related to the social determinants of HIV/AIDS. Article search results were shown in table 1.

Table 1. Article Search

Web browser	browser Keyword			
	" Social determinants of HIV/AIDS"	5 articles		
Google Scholar Pubmed	"Relationship between Employment and HIV/AIDS Cases"	2 articles		
	"Relationship between Income and HIV/AIDS Cases"	1 article		
	" Housewives at Risk of HIV/AIDS"	1 article		
	"Social determinants of HIV/AIDS"	3 articles		
	" Sex Workers at Risk of HIV/AIDS"	1 article		
	" Living Environment and HIV/AIDS"	3 articles		
	"Geographical Environment and HIV/AIDS"	2 articles		
	"Relationship between education level and HIV/AIDS"	3 articles		
	"Risk factors that influence the incidence of HIV/AIDS"	3 articles		
	" Literacy of HIV/AIDS sufferers "	1 article		
	" Health education on HIV/AIDS transmission from an early age "	1 article		
	"Support for families and health workers for HIV/AIDS sufferers"	1 article		
	" Discrimination of People with HIV/AIDS "	1 article		
	" HIV/AIDS sexual violence "	1 article		
	" Access and quality of health services for HIV/AIDS "	1 article		
	" Quality of health services "	1 article		
	Total	31 articles		
	Screening Articles with HIV/AIDS Topic	26 articles		
	Articles Containing Research Variables	9 articles		

This research was conducted in November 2021 using a literature review search study. The independent variable of this study is the social determinant of health according to healthy people. While the independent variable is the incidence or increase in the number of HIV/AIDS cases. The type of data used is secondary data, namely data from journal articles, and literature reviews about HIV/AIDS. Data collection techniques start from searching articles from the internet, screening the articles obtained, to getting articles related to research variables, as shown in table 1.

This research is a descriptive analysis, namely the elaboration of the data obtained, then further explanation is given so that it can be well understood by the reader. This analysis

is used to explain several factors, including social determinants of the increase in HIV/AIDS cases. The data that has been analyzed is then concluded so as to get a conclusion.

### RESULTS AND DISCUSSIONS

Healthy people is used as a strategic management tool by federal, state, community, and other public and private sector partners. A comprehensive set of goals and targets is used to measure the progress of a health problem in a specific population and serves as the foundation for prevention and health activities across sectors and within the federal government, and a measurement model at the state and local levels. Social determinants of health are one of the main focuses of Healthy People 2030.



Figure 1. Framework for Social Determinants of Health

In this framework, there are several social factors that can influence the occurrence of a disease. These factors include factors of access and quality of education, quality of health

services, environmental factors, social and community contexts, and economic stability. Each factor consists of several parts, as shown in table 2.

Table 2 Social determinants of HIV/AIDS health

Economic	Education	Social and	Neighborhood and	Health and
Stability		Community	Built Environment	health Care
Employment Poverty	Early childhood education and development Enrollment in higher education High school education Literacy	Discrimination	Crime and Violence Environmental Conditions	Access to health care

Occupational diseases are illnesses that workers suffer due to work-related factors. An example of such a disease is HIV/AIDS, which primarily affects individuals in their productive years. There are two types of work related to HIV/AIDS: risky work and non-risky work. Occupations at risk of HIV/AIDS include prostitutes and female sex workers, while jobs that are not at risk include entrepreneurs, traders, and housewives.

HIV/AIDS can occur in both risky and non-risky jobs. According to a survey conducted in November 2017 with commercial sex workers in Dasin Hamlet, Sugiwaras Village, Jenu District, Tuban Regency, it was found that many customers were reluctant to use condoms, which increases the risk of HIV/AIDS transmission. It is important to promote safe sex practices to prevent the spread of HIV/AIDS (Utami and Fikriyah, 2018). Research conducted on 50 female sex workers in the city

of Padang shows that there is no significant relationship between condom availability and HIV/AIDS prevention behavior. Although condoms are readily available, some customers are still reluctant to use them during sexual intercourse, thereby increasing the risk of contracting HIV/AIDS (Yuliza, Hardisman and Nursal, 2019).

According to research conducted on workers in the city of Semarang over a 12-year period (2007-2018), 109 employees in low-level positions such as parking attendants, flight attendants, artists, and fishermen were diagnosed with AIDS. It is important to note that this information pertains only to jobs that are not at risk (Pramitasari and Aryani, 2018). This is also in line with the results of research where there are research results showing that of 312 patients who came to do HIV tests on women of childbearing age, HIV in women of childbearing age at the VCT Clinic UPT BLUD

Meninting Health Center in 2015-2017 the largest group was in the group. Jobs that are not at risk are 236 people (75.6%), while in jobs that are at risk are 76 people (24.4%) (Oktaseli, Rachmawati and Suliaty, 2019).

The research conducted in Jombang Village, East Java, revealed that housewives, who are often considered low risk, have a high HIV/AIDS transmission rate. Specifically, 31 housewives and 14 entrepreneurs were found to be infected (Meri, 2020). HIV/AIDS transmission among housewives in Kuningan Regency is caused by unprotected sexual intercourse with their husbands, wives, or other partners (Heriana, Amalia and Ropii, 2017).

Poverty and HIV/AIDS are closely related. Poverty is a factor that drives women to engage in risky jobs, such as prostitution, in order to obtain basic necessities and support their families financially (Regar and Kairupan, 2016). Female commercial sex workers in Jakarta are at high risk of contracting HIV/AIDS. Research shows that poverty is the main reason why women choose to work in prostitution (Dalimoenthe, 2018).

Cost constraints also affect the difficulty of accessing health services. Based on the results of research conducted on 5 commercial sex workers in Tuban Regency, it was found that 4 out of 5 informants did not screen for HIV/AIDS due to limited funds (Utami and Fikriyah, 2018). This is also in line with research conducted on 90 housewives infected with HIV/ AIDS in Kab. Belu, where the results were found that the majority of respondents with irregular husbands did not become BPJS participants due to difficulties in paying monthly premiums. This makes it impossible for the poor to take advantage of VCT (Voluntary Counseling and Testing) health services for HIV/AIDS (Yeni Tasa, Ina Debora Ratu Ludji, 2016).

Based on research conducted on street children in the city of Semarang, it was also found that poverty which is a factor in the emergence of street children also causes this group to become one of the groups that are vulnerable to risky behavior of HIV/AIDS transmission (Ningsih, 2014). Street children are very close to risky behavior such as free sex, drug use (especially injecting needles) which have the potential to transmit HIV/AIDS.

Increasing knowledge about HIV/ AIDS can be a solution to avoid HIV/AIDS by avoiding its risk factors. Through education about HIV/AIDS, the target is taught the mode of transmission and the risk factors, so that the target can avoid these risk factors. With increased knowledge, it is hoped that the target can maintain behavior towards changes in puberty and healthy sexual behavior so that in the future it can avoid risk factors for HIV/ AIDS. The results of the evaluation given to students at SDIT Buah Hati Cilacap based on the article showed that the average knowledge of students increased to 97% about HIV/AIDS after being given educational videos about HIV/ AIDS (Maryanti, Prasetyo and Sarwa, 2020).

Education level, Theoretically that a person's level of knowledge is influenced by the level of education. The level of relevant education will affect the understanding of the information he gets. Usually, the higher a person's education level, the easier it is to capture and understand the information obtained. The results of descriptive analysis in this study indicate that the higher the education, the better the knowledge. The results of descriptive analysis in this study indicate that the higher the education, the better the knowledge, so that a low level of education is declared to have an effect on the incidence of HIV and AIDS (Susilowati et al., 2019).

Characteristics of Respondents based on elementary and junior high school education are the level of initial basic education. At this level a person has not been able to understand the information given about HIV/AIDS at the time of holding counseling or information about HIV/AIDS. Education will affect a person's absorption of the information he receives. So if a person's level of education is high, then that person also has high knowledge. Lack of public knowledge, especially about HIV/AIDS, the possibility of transmission and prevention of the disease cannot be known (Akhiat, 2014).

Health literacy is an individual's ability to communicate health information correctly, clearly and understand it. Health literacy is relevant in all parts of the continuum of care, disability and health, for the prevention and early detection of disease as well as for diagnosis and decision-making for self-care. Based on the

results of research in Garut on HIV/AIDS in an article, it shows that most of the respondents have low literacy as much as 56.7%, while for respondents with high literacy as much as 43.3%. The low level of health literacy in Garut is due to the difficulty of respondents in assessing health information and applying the health information they receive.

The low level of individual literacy about the disease has a risk of the low level of health that he has. This low literacy often makes individuals make mistakes in using therapy or medication, underutilize health service facilities, and lack self-care because of their limited understanding of health information. This has the potential to be a problem that will result in poor health behavior such as poor health care and health promotion, unable to prevent various diseases so that it has an impact on health outcomes (Kesumawati, Ibrahim and Witdiawati, 2019).

HIV/AIDS infection is a disease with a high mortality rate. Indonesia ranks first in the transmission of HIV/AIDS in Southeast Asia (Kemenkes, 2019). From the many cases in Indonesia, there is still a lot of stigma that develops in society. Environmental views and attitudes towards victims who generally cannot accept, are afraid, are labeled bad, which can have an impact on isolation/exclusion, exclusion and discrimination, making sufferers more depressed. (Vanchapo, 2019). In the article entitled "Peran Masyarakat Madani Dalam Mengurangi Stigma Dan Diskriminasi Terhadap Penderita HIV & AIDS" it was found that the issue of stigma and discrimination is closely related to issues of sexuality, gender, ethnicity, poverty, including the fear of being infected with the virus.

For example, fear can make stigma and discrimination against people living with HIV & AIDS even more difficult to remove. Here the role of the family is expected to be a support system for people living with HIV/AIDS. The family is a place where people with HIV I AIDS get support and care. However, it is not uncommon for families to give negative responses and actually take actions that lead to stigma and discrimination. The forms of negative actions include blame, rejection. Family refusal is influenced not only by the

status of the patient, but also by the stigma about homosexuality, the use of illegal drugs, and free sex.

In one study, it was stated that the role of the community was very influential on the incidence of HIV/AIDS. In the study, it was exemplified that there was a community called PKBI Indramayu where they made efforts to prevent and reduce stigma and discrimination against people with HIV/AIDS by disseminating information about HIV/AIDS to stakeholders, such as the Health Service, Trantib, police, paramedics and to other civil society groups. Through this information, it is hoped that the community will become more cooperative, give a positive response to events or to people with HIV/AIDS.

Another effort made by PKBI Indramayu is to assist the process of health services and referrals related to HIV/AIDS to health clinics. From the statement above, it can be concluded that the role of society and organizations is very important for HIV/AIDS sufferers, they can be a support system and help change the stigma and discrimination that develops in society so that sufferers do not have any fear of taking treatment or admitting about their illness.

The determinants of neighbors and the environment that have an influence on HIV/AIDS infection are crime and violence. Women have a high risk of contracting HIV due to sexual violence by an HIV-infected partner. This is in accordance with research conducted by Ernawati suggesting sexual violence in general increases the risk of transmission because shields are generally not used, resulting in physical trauma to the vaginal cavity thereby facilitating transmission of the virus during sex (Ernawati and Aisah, 2017). One example of sexual violence is that as many as 3 out of 15 people living with HIV/Aids in Kudus are female migrants.

They work in Malaysia and Saudi Arabia. One of these female migrant workers in Malaysia reported that she suffered from HIV/AIDS as a result of sexual violence by her employer's family. When migrants return to Kudus, they do not know that they are infected with HIV/AIDS, so they can transmit it to their husbands through sexual intercourse. The impact of sexual violence felt by female migrant

workers still leaves trauma and prolonged stress and transmits infections to their husbands.

The environment is a medium in which living things live, seek, and have distinctive characters and functions in reciprocity with living things. The environment is a place to socialize, grow, and develop. The environment can be distinguished in the form of the physical environment, biological environment, socio-economic. The first stage, humans try to recognize their environment, then adapt. In one study, environmental variables had a significant direct and positive effect on HIV/ AIDS prevention behavior in commercial sex workers. It can be interpreted that the environment has a good influence on HIV/ AIDS prevention behavior (Liawati, 2018).

Research by Burhan shows that there is a relationship between access to health care and the incidence of HIV. With distant access to health services, people rarely receive health education and people are lazy to go to health services for consultation and treatment related to HIV so that HIV prevalence increases. Provision of knowledge by quality health services about HIV is needed to prevent new infections by teaching how to prevent transmission of the virus to others. In addition, enabling and empowering people living with HIV/AIDS to improve their quality of life, as well as the basic needs of basic HIV information and treatment, so that people living with HIV can access medical services and HIV treatment (Burhan, 2015).

From Wulandari's research, data shows that health services have a contribution to vulnerability and HIV is associated with a person's ability to maintain their health which is influenced by access to information about STIs, HIV, and condoms, the quality of services provided, and the behavior of health workers (Dewi, Wulandari and D.N. Wirawan, 2018). If access to information is lacking, the quality and behavior of the officers are unsatisfactory, it will lead to a crisis of trust in the client and leave and even refuse service. Service quality has something to do with the motivation of health workers. Health services are important to control the increasing prevalence of HIV in Indonesia. Availability and accessibility of health services such as the provision of consonants to reduce HIV prevalence, routine screening carried out by health services because many people with HIV do not show symptoms or signs, while many people are at high risk of being infected with HIV (Septarini, 2014).

Poor quality health services can leave people at risk of HIV confused and unsure where to find accurate information or how to access HIV-related healthcare. Adequate numbers of trained health workers are essential providing effective HIV/AIDS especially as the number of people living with HIV/AIDS continues to rise. Health workers play a crucial role in providing health services for people living with HIV/AIDS (PLWHA). To overcome HIV/AIDS, it is essential to develop and empower a diverse and skilled workforce, particularly in the health sector. This includes ensuring equitable access to quality training and resources for health workers (Mujiati, Lestary and Sugiharti, 2017). Good quality health services can increase public awareness and trust in the healthcare system. Quality assurance measures can also encourage the community to utilize healthcare services (Sutriani, 2013).

One of the efforts made by the government in the prevention and control of HIV-AIDS is the provision of Voluntary Counseling and Testing (VCT) Clinics in health facilities such as hospitals and health centers. VCT is an entry point to get the services needed by people living with HIV-AIDS. In addition, there is also a Care, Support, and Treatment (CST) clinic which is an integrated and continuous service to provide support for people living with HIV-AIDS during care and treatment. The hope is that the clinic can be used optimally by the community, especially those who are at risk of HIV-AIDS and people with HIV-AIDS. With the trust from the community because of the good quality of health services, people who are at risk of contracting HIV will access health services and there will be a decrease in HIV prevalence (Burhan, 2015).

## CONCLUSION

Based on the research conducted, it can be concluded that the incidence of HIV/AIDS is influenced by five determinant factors according to the Healthy People theoretical framework. Economic factors such as employment and

poverty, as well as determinants of education such as early childhood education and development, enrollment in higher education, secondary school education, and literacy, have an impact. Meanwhile, variables of crime, environmental violence, and conditions affect the incidence of HIV/AIDS, as well as the determinants of neighbors and the environment. Access to health services is also a crucial determinant of health and health services. In this study, we limit ourselves to the framework of social determinants of health as defined by Healthy People. Therefore, suggestions for further research should consider using other frameworks of social determinants of health to obtain a more diverse range of results and a broader understanding of the social determinants that affect HIV/AIDS. Efforts to overcome the incidence of HIV/AIDS must be synergistic. Support for those affected by HIV/AIDS is crucial. Stigma surrounding HIV/AIDS must be eliminated to encourage openness and prompt addressing of the issue.

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