

## ANALYSIS OF HIV DATA IN MALUKU PROVINCE IN 2024

Berlian Febrin Salsabila<sup>1</sup>, Rizka Primanda Heristya<sup>2</sup>, & Zalfa Nabila Ertikasari<sup>3</sup>

<sup>1</sup>Department of Biology Education, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Indonesia, Email: [salsabilaberlian53@gmail.com](mailto:salsabilaberlian53@gmail.com)

<sup>2</sup>Departement of Biology Education, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Indonesia, Email: [rizkaprimanda@gmail.com](mailto:rizkaprimanda@gmail.com)

<sup>3</sup>Departement of Biologi Education, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Indonesia, Email: [zalfaertikasari@gmail.com](mailto:zalfaertikasari@gmail.com)

### Abstract

This study aims to analyze the increase in HIV/AIDS cases in Maluku, focusing on the influencing factors and the implications for prevention and education. The research method used is a library study, by collecting and analyzing data from literature, documents, and related reports from various sources, including scientific journals, books, and official reports from health organizations and the government. The results of the analysis indicate that factors such as risky behavior, low levels of public awareness, lack of access to health services, and social stigma have a significant role in the increase in HIV/AIDS cases. The implication of these findings is the need for increased efforts in prevention and education, with a focus on increasing awareness, reducing stigma, increasing accessibility of health services, and strengthening collaboration between various stakeholders in addressing this problem. This study makes an important contribution to understanding the dynamics of HIV/AIDS epidemiology in Maluku and provides a foundation for developing more effective intervention strategies.

Keywords: HIV, AIDS, Maluku.

### 1. INTRODUCTION

HIV (Human Immunodeficiency Virus) is a virus that attacks the human immune system. AIDS stands for Acquired Immune Deficiency Syndrome. AIDS develops after the HIV virus attacks the immune system for five to ten years or more. The immune system becomes weakened, and one or more diseases may arise. Due to the weakened immune system, some diseases can become more severe than usual. Problems often experienced during adolescence are those related to sexuality or reproductive health (Frisnoiry et al. 2024). Physical changes and the onset of adolescent reproductive function sometimes cause various problems, one of which is directly related to the sexual organs, especially among adolescents who lack knowledge about reproductive health. Complex problems associated with this transitional period include unwed pregnancy, abortion, infection with sexually transmitted diseases (STD), drug abuse, and HIV/AIDS. The transmission of HIV among adolescents is certainly also linked to their lack of knowledge about HIV/AIDS. Adolescents do not understand the importance of maintaining reproductive health and preventing promiscuity (Arini & Andhin Al Khasanah, 2021).

According to Arini & Andhin Al Khasanah (2021) in Suci Frisnoiry et al. (2024), due to a lack of accurate and important information about HIV/AIDS and the curiosity of adolescents, they are included in the population that engages in risky behavior. Furthermore, the problem of HIV/AIDS among the younger generation not only has a negative physical impact, but can also affect mental health, emotions, financial conditions, and social welfare in the long term. This not only affects adolescents themselves, but also their families, communities, and countries. Cases of HIV transmission among adolescents are certainly inseparable from the lack of knowledge among adolescents about HIV/AIDS. Adolescents do not understand the importance of maintaining reproductive health and preventing sex (Rohmatullailah & Fikriyah, 2021).

HIV can be transmitted through unsafe sex. This includes having sex with a partner who is infected with HIV, with a partner who works as a sex worker, and with homosexuals. In addition, the HIV virus can also be transmitted through repeated use of syringes, especially among intravenous drug users (Rohmatullailah & Fikriyah, 2021). Therefore, key populations play an important role in the dynamics of HIV transmission. Key populations are specific groups that engage in high-risk behaviors for HIV (PAHO, 2023).

The HIV epidemic in Indonesia has been ongoing for more than three decades and remains concentrated in four key populations: men who have sex with men (MSM), transgender women, female sex workers, and injecting drug users. In addition, the risk of transmission is not only found in high-risk groups but also in women who are partners of key populations, housewives, and children or infants infected by HIV-positive pregnant women (Afriana et al., 2023).

## 2. EXPLANATION

UNAIDS data shows that by 2020, the number of people living with HIV worldwide had reached 37.7 million after 1.5 million new cases and 680,000 deaths in that year. The main problem lies in access to treatment: around 10.2 million people still do not have access to medical services. This figure consists of 6.1 million people who know their health status but are not receiving treatment, and 4.1 million people who have not even been diagnosed as positive (Afriana, 2023).

In Indonesia, based on a report from the Indonesian Ministry of Health, there were 41,987 new cases and 32,925 of them received antiretroviral treatment. Of these, 4,004 cases were from West Java province, ranking fourth after DKI Jakarta province with 4,023 cases, Central Java in second place with 4,058 cases, and East Java leading with the highest number of new cases in 2020 at 5,396. Therefore, it can be estimated that the total number of HIV/AIDS patients in Indonesia in 2020 was 543,100 (Afriana, 2023).

The number of HIV/AIDS cases in Maluku in 2024, according to data released by the Maluku Provincial Statistics Agency (BPS), was 1,178 cases. This is an increase from 2023, when there were only 784 cases. According to Pratiwi and Basuki (2019) in Suci Frisnoiry et al. (2024), the increase in HIV cases among adolescents aged 15-24 years worldwide is also influenced by several factors, including economic factors, traditions, education, and knowledge about HIV. Knowledge is the information needed by an individual to gain experience and is a key aspect in the formation of attitudes and behaviors (Nurwati and Rusyidi, 2019). Other data also show that 16% of adolescents aged 12-16 years old obtain information about sex from their friends, 35% from pornographic videos, and only 5% of adolescents obtain knowledge/information about sex from their parents (Marni, 2020).

Teenagers need to be educated about HIV/AIDS prevention because they are considered a vulnerable group due to their attitudes and behaviors that tend toward self-discovery, making them susceptible to falling into risky situations (Marni, 2020). Therefore, lecturers and students designed educational counseling materials and quizzes to help increase teenagers' motivation to understand the concept and prevention of HIV/AIDS. Counseling on HIV/AIDS is carried out so that teenagers know and understand the conditions they are experiencing and are able to overcome health problems (Suci Frisnoiry et al., 2024).

Many people believe that HIV and AIDS cannot be cured. Many believe that once someone has HIV, they will carry the virus for the rest of their lives. Another fact is that no cure has been found for HIV and AIDS; there are only drugs to suppress the growth of the HIV virus in the body. This fear reinforces the informants' decision to use condoms because they do not want to contract HIV. In addition, seeing the lives of people living with HIV and AIDS (OHIDA) also encourages and reinforces people to take preventive measures against HIV and AIDS. Of course, people with HIV and AIDS have less productive lives. For instance, they face

social and economic difficulties; losing their jobs, facing discrimination from their surroundings, having to live with medication for life, and eventually passing away (Salbila & Usiono, 2023).

HIV & AIDS prevention involves various methods and strategies designed to reduce the risk of HIV transmission. The following are some commonly used methods of HIV & AIDS prevention. First, condom use: Condoms are protective devices that allow individuals to have safe sex. Condoms prevent direct contact between risky bodily fluids (such as semen or vaginal fluid) and mucous membranes (such as the mouth or genitals) that can receive the HIV virus. The correct and consistent use of condoms during every sexual encounter is a highly effective prevention method (Salbila & Usiono, 2023).

Second: Antiretroviral Therapy (ART): Antiretroviral therapy (ART) is a combination of drugs used by individuals who are already infected with HIV. ART helps inhibit the development of the HIV virus in the body, maintain low virus levels, and strengthen the immune system. This is not only beneficial for the health of the individual, but can also reduce the risk of HIV transmission to sexual partners (Srikartika et al., 2019).

Third: Pre-Exposure Prophylaxis (PrEP): PrEP is antiretroviral medication given to individuals who are not yet infected with HIV but are at high risk of exposure to the virus, such as serodiscordant couples. PrEP is taken regularly to provide additional protection against HIV infection in certain risk situations (Mahariski et al., 2023).

Fourth: Post-Exposure Prophylaxis (PEP): PEP involves the use of antiretroviral drugs after possible exposure to HIV, such as in the case of unprotected sexual intercourse with someone who is HIV positive. PEP must be started as soon as possible after exposure and carried out under the supervision of medical personnel (Ningrum et al., 2019).

Fifth: HIV Testing and Counseling: Routine HIV testing and counseling are important steps in prevention. Testing provides individuals with an understanding of their HIV status, and counseling can provide information, support, and guidance on appropriate preventive measures (Mulyaningsih, 2017).

Sixth: Health Education, HIV & AIDS health education aims to increase public awareness and understanding of HIV risks and how to protect oneself. These programs include information on condom use, HIV testing, and other risk reduction measures (Mulyaningsih, 2017).

Seventh: Reduction of Drug Abuse Risk: Individuals who use drugs and share syringes or injection equipment are at high risk of HIV exposure. Drug risk reduction programs include the provision of sterile syringes and needle exchange programs to reduce the risk of transmission (Salbila & Usiono, 2023).

Eighth: Reduction of Blood Transfusion Risk: Strict screening and procedures for blood transfusions ensure that the blood used is safe from HIV infection. This reduces the risk of HIV transmission through blood transfusions (Salbila & Usiono, 2023).

Ninth: Reduction of Mother-to-Child Transmission Risk: With proper medical care during pregnancy, childbirth, and breastfeeding, the risk of HIV transmission from an infected mother to her child can be significantly reduced. Antiretroviral therapy (ART) and delivery by cesarean section when necessary are examples of preventive measures in this context (Panjaitan, 2018).

Tenth: Reducing Stigma and Discrimination: Stigma and discrimination against individuals living with HIV & AIDS can hinder their access to necessary prevention and treatment services. Efforts to reduce stigma and discrimination help create a more inclusive and supportive environment for individuals affected by HIV (Latifa & Purwaningsih, 2016).

HIV & AIDS prevention often involves a combination of these methods, tailored to individual needs and risks. It is important to remember that each prevention method has certain advantages and limitations, and consulting with medical personnel or health care providers is a wise step in determining an appropriate prevention strategy (Salbila & Usiono, 2023).

### 3. RESEARCH METHODOLOGY

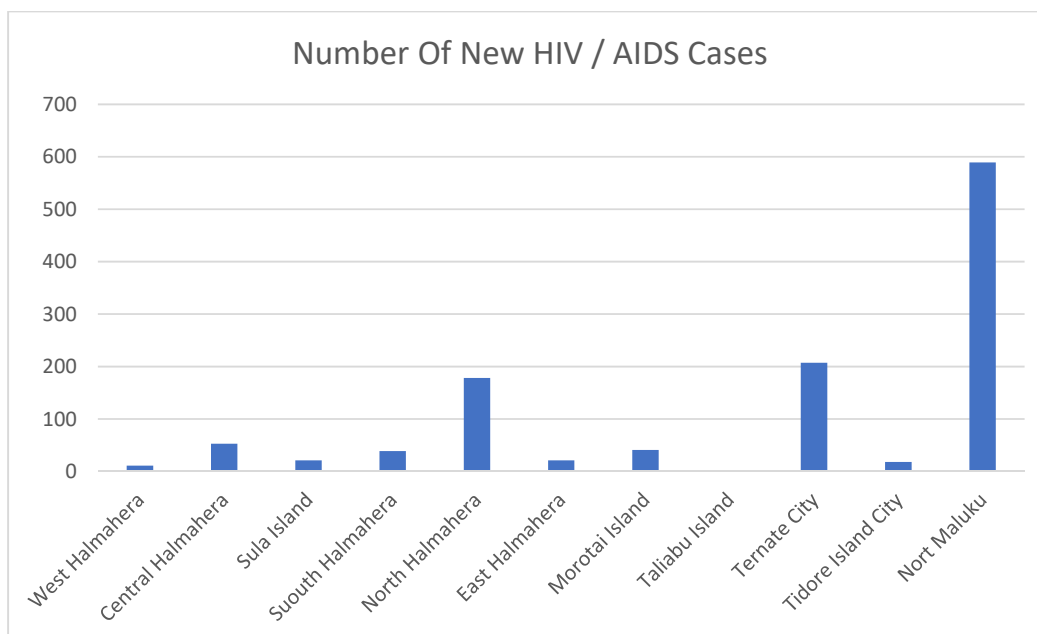
The research methods used in this study were literature review and case studies. The data used were data on HIV/AIDS patients in Maluku Province obtained from the AIDS Commission. These data included data on HIV/AIDS-infected patients, patients receiving treatment, and patients who died from 2013 to 2024, obtained from the Maluku Provincial Health Office.

### 4. RESEARCH RESULTS

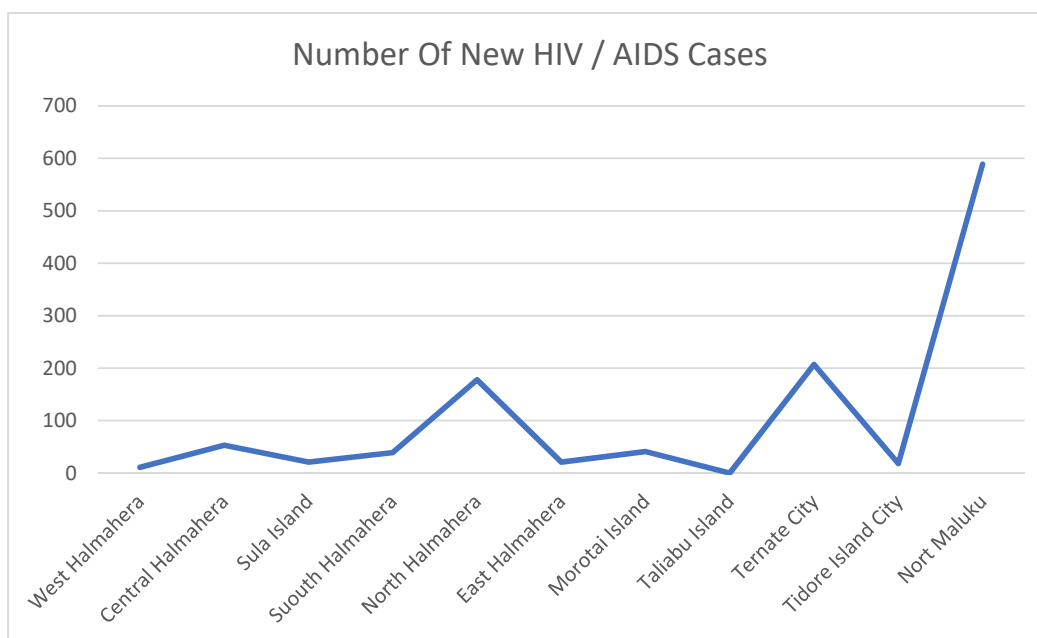
Based on Table 1 data taken from the Maluku Province Central Statistics Agency in 2024, information was obtained regarding the demographic, social, and health conditions of the community, which formed the basis for analyzing the development of HIV cases in the region.

**Table 1. HIV/AIDS Data in Maluku Province in 2024**

District / City	Number of New HIV/ AIDS Cases
West Halmahera	11
Central Halmahera	53
Sula Island	21
South Halmahera	39
North Halmahera	178
East Halmahera	21
Morotai Island	41
Taliabu Island	...
Ternate City	207
Tidore Island City	18
North Maluku	589



**Figure 1. HIV/AIDS graph in Maluku Province in 2024**



**Figure 2. HIV/AIDS graph in Maluku Province in 2024**

Source: Disease Cases by Regency/Municipality and Type of Disease in North Maluku Province, 2025 – Statistical Table – Statistics Indonesia (BPS) of North Maluku Province

Based on the results of literature studies and secondary data analysis obtained from the Maluku Provincial Statistics Agency and reports from regional health agencies, it was found that the number of HIV/AIDS cases in 2024 increased compared to the previous year. There were 1,178 cases recorded in 2024, an increase from 784 cases in 2023. This increase shows that HIV/AIDS transmission is still a serious public health problem and requires comprehensive attention.

The distribution of cases by district/city shows that the areas with the highest number of cases are in urban areas and economic centers, such as Ternate City with 207 cases and North Halmahera with 178 cases. Meanwhile, several other areas such as West Halmahera, Sula Islands, and East Halmahera show lower numbers, but still require attention due to the potential for an increase in cases in the future. Overall, North Maluku recorded a total of 589 new cases, indicating a concentration of spread in certain areas with relatively high population mobility.

The results of the literature analysis show that the increase in HIV/AIDS cases is influenced by several main factors, namely risky sexual behavior, low use of protective equipment, and the practice of using unsterilized syringes among drug users. In addition, the low level of knowledge among adolescents about reproductive health and HIV/AIDS is a significant factor in the dynamics of transmission. Data shows that most adolescents obtain information about sex from peers and unregulated digital media, while the role of families in providing education is still very limited.

Other contributing social factors include stigma and discrimination against people living with HIV/AIDS (PLWHA), which leads to delays in testing and treatment. Barriers to accessing health services, especially in island and remote areas, also exacerbate this situation. Although antiretroviral therapy (ART) services are available, not all patients have optimal access due to limited facilities and distribution of health workers.

Overall, the results of this study indicate that the increase in HIV/AIDS cases in Maluku in 2024 is the result of the interaction of various behavioral, social, economic, and structural factors. These findings emphasize the importance of integrated interventions through strengthening school- and community-based education, expanding access to health services,

reducing social stigma, and collaboration between local governments, health workers, educational institutions, and community organizations in HIV/AIDS prevention and control efforts.

## 5. PHILOSOPHY OF BATIK MOTIF

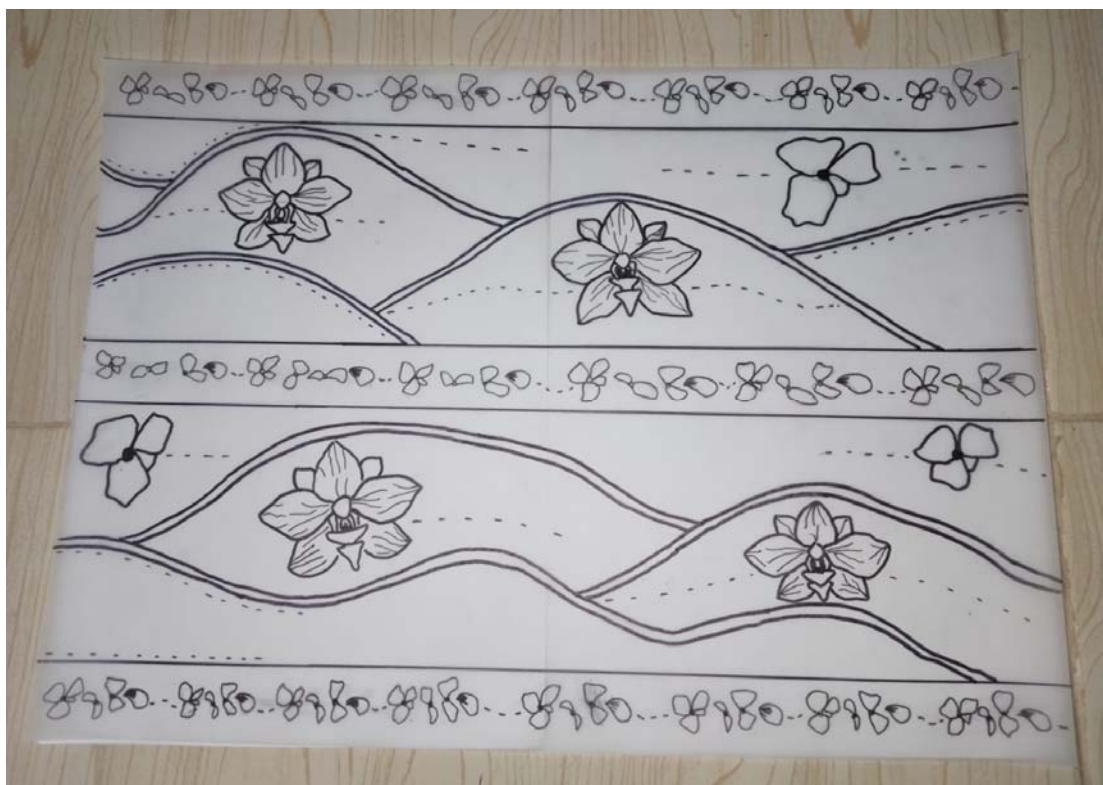
The batik motifs presented in this study represent the dynamics of HIV/AIDS cases in Maluku Province through simple yet meaningful visual compositions. The diagonally arranged wavy lines represent the ongoing movement and spread of HIV cases across various regions. The slanted direction indicates that this spread is dynamic and influenced by various factors, such as geographic, social, and behavioral conditions. The recurring wave pattern also illustrates the trend of increasing cases over time.

The large floral motifs placed along the waves symbolize hope, life, and resilience. These flowers are inspired by the Larat Orchid, a native Maluku flora known as a symbol of beauty and resilience. In this context, the flowers represent people living with HIV/AIDS (PLWHA), who, despite facing stigma and various challenges, retain dignity, strength, and the right to live meaningful lives.

Between the waves, there is a small straight line decorated with small flowers. This element symbolizes the path of education, awareness, and prevention efforts. The small flowers represent cloves, a typical commodity and symbol of Maluku's cultural identity. Their presence demonstrates that simple steps, such as increasing knowledge, adopting healthy lifestyles, and reducing stigma, play a crucial role in suppressing the spread of HIV, while also reflecting the collective strength of local communities.

The repetition of patterns throughout the motifs reflects the interconnectedness of regions, individuals, and groups in addressing the HIV/AIDS challenge. This emphasizes that addressing HIV/AIDS requires collaboration between the government, health workers, educational institutions, and the wider community, reflecting the strong cultural ties of the Maluku people, reflected in their local floral symbols.

Overall, this batik motif conveys the message that behind the increase in HIV/AIDS cases in Maluku, there is still hope through increased awareness, education, and collective cooperation to create a healthier and more inclusive society, in line with the values of resilience and beauty reflected in the Larat Orchid and the spirit of togetherness symbolized by the Clove Flower.



**Figure 3. Batik Motif**

## 6. CONCLUSION

Based on the results of the 2024 HIV Disease Data Analysis in Maluku, it can be concluded that HIV/AIDS cases show a significant increase compared to the previous year. Data from the Maluku Provincial Statistics Agency recorded an increase in the number of cases, indicating that HIV/AIDS remains a serious challenge in public health in the region. This increase is inseparable from various interrelated factors, including individual, social, and structural factors.

The analysis shows that risky behaviors such as unsafe sexual intercourse and the use of unsterilized needles remain dominant factors in HIV transmission. In addition, low levels of knowledge and awareness among the public, especially among adolescents and people of productive age, contribute to the risk of spreading the infection. Stigma and discrimination against people living with HIV/AIDS (PLWHA) also hinder early detection and treatment efforts, as they discourage some individuals from getting tested or accessing health services.

From a healthcare perspective, although antiretroviral (ARV) testing and treatment facilities are available, access to them is uneven, especially in island and remote areas. Geographical conditions and limited healthcare resources pose particular challenges in controlling HIV cases in Maluku. Therefore, it is necessary to strengthen a more inclusive and equitable healthcare system.

Overall, this study confirms that HIV/AIDS prevention and control efforts in Maluku must be carried out comprehensively through increased school- and community-based education, reduction of social stigma, expansion of access to testing and treatment services, and cross-sector collaboration between the government, health workers, educational institutions, and the community. With targeted and sustainable intervention strategies, it is hoped that the number of HIV/AIDS cases can be reduced and the quality of life of the affected community can be improved.

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