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# HIV AIDS Case Trends According To Case Distribution, Employment And Sexual Orientation In Riau Province In 2018-2022

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## ABSTRACT

Background: HIV cases in Riau Province were first found by 1 person in 1997 in Dumai City. The findings of HIV cases continue to increase every year and as many as 8,278 cases have been reported by districts / cities until 2022. However, HIV cases have only reached 71.4% of the estimated 11,596 ODHIV in 2020 in Riau Province, according to the Ministry of Health. The government has sought easy access to HIV screening services for the community. But stigma and discrimination in society are one of the causes of low participation of people wanting to know HIV status, in addition to a lack of understanding about the dangers of HIV-AIDS. Method: This type of research is descriptive quantitative, using secondary data from the Riau Provincial Health Office, in the HIV AIDS Information System Report (SIHA) and Individual Data on AIDS Case Surveillance for 2018-2022. Results: The trend of HIV cases in 2018-2022 fluctuates, in 2022 it shows an increase in cases of 835 people, while the trend of AIDS cases in 2019 tends to decrease. The distribution of HIV cases is in all regencies/cities, where 58.8% of them are reported from Pekanbaru City. HIV cases are most common in the age group of 25-49 years (74.2), and in the male sex by 68.4%. The distribution of AIDS cases according to occupation is most employees, self-employed / self-employed, unemployed and housewives. According to sexual orientation in the last five years heterosexual risk factors still dominate, although there is a downward trend from 2018 to 2021 and increasing again in 2022. The gap between heterosexual and homosexual sexual orientation is very small in 2021.

Keywords : Trend, Case Distribution, HIV AIDS, Riau Province

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#### INTRODUCTION

*Human Immunodeficiency Virus* or HIV is a virus that attacks the immune system which can cause *Acquired Immuno-Deficiency Syndrome*. While *Acquired Immuno-Deficiency Syndrome* AIDS is a set of symptoms and signs of infection associated with a decrease in the immune system acquired due to HIV infection. The HIV virus can be transmitted through: (i) unprotected (anal or vaginal) sexual intercourse (without condoms), (ii) blood transfusions and organ transplants from HIV-infected people, (iii) the use of contaminated needles, and (iv) vertical transmission from an HIV-infected mother to her baby during pregnancy, labor and lactation (Kemenkes, 2022).

Acquired Immuno-Deficiency Syndrome (AIDS) is an advanced HIV infection, which occurs when HIV infection is not treated with Anti-Retro Viral (ARV) drugs. People who have AIDS become susceptible to opportinistic infections and some cancers. (Kemenkes, 2022).

People with HIV, abbreviated as ODHIV in Indonesia in 2020 were estimated to number of 543,100 people. This number decreased from the previous figure in 2016 of 643,443 ODHIV. New HIV infections in Indonesia continue to decrease in line with the decrease of new global HIV infections. However, the decrease in new infections has not been as much as expected (Kemenkes, 2022).

Key populations are community groups that have risk behaviors of contracting and transmitting HIV and Sexually Transmitted Infections (STIs) such as sex workers, injecting drug users or constituents, effeminate men, and men who have sex with men or MSM. Currently, there is still an increase in new HIV infections in key populations, especially in MSM and transgenders (effeminate men). However, most HIV cases are also found in "non-key populations", i.e. groups at risk of HIV infection outside key populations, including constituent sexual partners, sexual partners of bisexual men, former sex workers, pregnant women, TB patients, hepatitis patients, and people showing symptoms of immune decline (Kemenkes, 2022).

Modeling results with Asian Epidemic Model (AEM), showing 70% of the number of ODHIV comes from non-key populations. The discovery of cases to find 70% who are not key populations is carried out in health facilities, especially in pregnant women, TB sufferers, Sexually Transmitted Infections (STIs) sufferers, ODHIV couples, hepatitis sufferers, people who come to services with signs of symptoms of decreased immunity. Efforts to find HIV cases massively are in line with the spirit of the government to support efforts to achieve HIV AIDS elimination which has been agreed at the global level that by 2030, it will reach 95-95-95 for treatment, where 95% of ODHIV know the status, 95% of ODHIV knowing the status get treatment, and 95% of ODHIV treated with the virus suppressed. (Kemenkes, 2020)

National data shows that cumulatively since the first discovery of HIV infection in 1987 until March 2023, there have been 377,650 HIV cases and 145,037 AIDS cases. The highest percentage of HIV infections was reported in the age group 25-49 years (70.2%), followed by the age group 20-24 years (16%), and the age group  $\geq$  50 years (7.4%). Based on gender, the percentage of ODHIV found in men is 62% and women is 38% with a ratio of men to women is 2: 1. (Kemenkes, 2023)

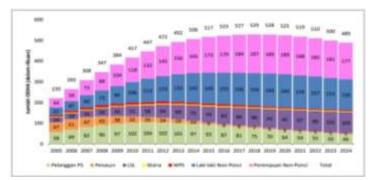


Figure 1: Estimation and Projection of the Number of ODHIV Above 15 Years in Indonesia Year 2005-2024

From figure 1 it can be seen that the estimated number of people with HIV at the age of over 15 years will increase non-key population women and men and MSM, while HIV infection in other age groups is likely to decline or stabilize until 2024. From these estimates, it can be concluded that previously high HIV infection

in key population groups will experience a shift in non- key population groups infected due to heterosexual and homosexual risk factors that will tend to increase among the community.

HIV cases in Riau Province were first found as many as 1 person in 1997 in Dumai City. The findings of HIV cases continue to increase every year and as many as 8,278 cases have been reported by districts / cities until 2022. The distribution of the most cases in Pekanbaru City is 4,865 people, according to the most age group at the age of 25-49 years 74.2%, and by sex in men 68.4% (Dinkes, 2022).

But it should be understood that the number of reported HIV cases is an identifiable problem only, far more undiscovered HIV cases are described as an iceberg phenomenon. ODHIV in Riau Province in 2020 was estimated by the Ministry of Health as many as 11,596 people. Although the findings of HIV cases every year have increased, the reality is that what has been found until 2022 has only reached 71.4%. The government has sought easy access to HIV screening services for the community. However, stigma and discrimination in society are one of the causes of low participation of people wanting to know HIV status, in addition to a lack of understanding about the dangers of HIV-AIDS. The discovery of HIV cases that are not optimal will have an impact on low efforts to control the rate of HIV transmission in the community. By understanding the trend of HIV and AIDS cases according to the distribution of cases, employment and sexual orientation in Riau Province, it is expected to encourage local governments to optimize specific activities to find new HIV cases, so as to contribute to efforts to achieve HIV-AIDS elimination.

On this basis, the purpose of the study is to analyze the trend and development of HIV AIDS cases according to case distribution, occupation and sexual orientation in Riau Province based on secondary data from the HIV AIDS Information System Report (SIHA) and Individual Data on AIDS Case Surveillance for 2018-2022.

#### **METHODS**

The type of research used is quantitative descriptive. The data sources used are secondary data from Riau Provincial Health Office, in the HIV AIDS Information System Report (SIHA) and Individual Data on AIDS Case Surveillance for 2018-2022. Data analysis is carried out descriptively where data is presented in the form of graphs and tables in the form of frequency distribution and narrative. The variables studied are the findings and distribution of HIV AIDS cases by year, district / city, age group, gender and number of cases based on risk factors, namely occupation and sexual orientation.

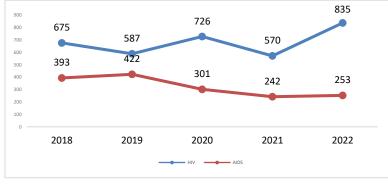
The data used in this study is cumulative, namely the number of HIV cases in Riau Province since the first HIV infection was found and reported in 1997 until 2022. The distribution of cases by district/city is the sum of HIV cases since they were first discovered and reported by the district/city until 2022. Sexual orientation is a sense of sexual or emotional attraction to a particular gender. This sexual orientation can be followed by sexual behavior or not. Heterosexual is a sexual activity in which the sexual partner she/he chooses comes from the opposite sex. Homosexual is a sexual activity in which the chosen sexual partner is of the same sex ; Homosexual men are called gays and homosexual women are called lesbians. (Yurni, 2016).

Variable	Total (n) (%)	Percentage	Ket
Cumulative Cases by HIV-AI	DS Status from 1997 to	2022	
-			Estimate
HIV	8278	71,4	ODHIV Ria
			11,596 (in 2020)
AIDS	3761	-	
Distribution of HIV Cases by	District/City		
Pekanbaru	4865	58,8	
Bengkalis	732	8,8	
Dumai	642	7,8	
Contrarian	457	5,5	
Rokan Hilir	404	4,9	

361	4,4	
210	2,5	
103	1,2	
151	1,8	
159	1,9	
81	1,0	
113	1,4	
ge Group		
201	2,4	
115	1,4	
153	1,8	
1118	13,5	
6140	74,2	
551	6,7	
ex		
5665	68,4	
2613	31,6	
	210 103 151 159 81 113 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

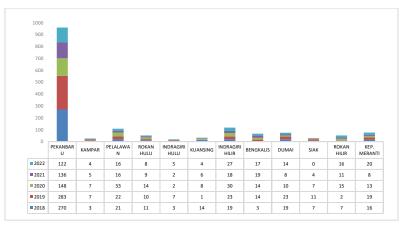
From table 1, it is known that the cumulative HIV cases from 1997 to 2022 in Riau Province were 8,278 people, or 71.4% of the 11,596 estimated ODHIV (in 2020) in Riau Province. Some of the HIV cases were found in the AIDS stage as many as 3,761 people.

The distribution of HIV cases is in all districts / cities in Riau Province, where 58.8% of them are reported from Pekanbaru City. HIV cases are most common in the age group of 25-49 years (74.2), and in the male sex by 68.4%.



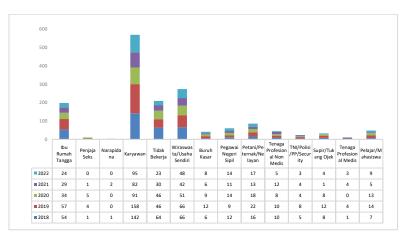
Graph 1. Trends in Case Findings by HIV-AIDS status in Riau Province in 2018-2022

Case findings according to HIV-AIDS status can be seen from graph 1, where some of the HIV cases reported when found are already at the AIDS stage. The trend of HIV cases in 2018-2022 fluctuates, in 2022 it shows an increase in cases of 835 people, while the trend of AIDS cases in 2019 tends to decrease.



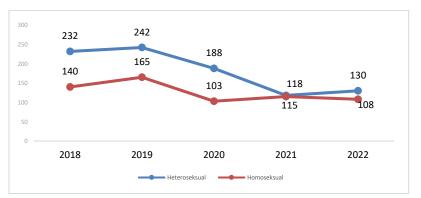
Graph 2. Number of AIDS Cases by District/City in Riau Province in 2018-2022

The distribution of AIDS cases by district/city can be seen from the graph above. Each region has reported the finding of cases at the AIDS stage, and the most reports in the last five years are Pekanbaru City, Indragiri Hilir Regency and Pelalawan Regency.



Graph 3. Number of AIDS Cases by Occupation in Riau Province in 2018-2022

The distribution of AIDS cases according to occupation is most employees, self-employed, unemployed and housewives. From this graph, it can be seen that the problem of HIV-AIDS is no longer segmented only in certain occupations, but has spread to various types of jobs.



Graph 4. Trends in Risk Factors according to Sexual Orientation in AIDS Cases in Riau Province in 2018-2022

The graph above shows the distribution of AIDS cases according to sexual orientation in the last five years in Riau Province. Heterosexual risk factors still dominate, however, in heterosexuals there is a downward

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trend from 2018 to 2021 although it increases again in 2022. The gap between these two sexual orientations is very small in 2021.

#### DISCUSSION

Based on the data presented in the table and graph above, information was obtained that the trend of HIV cases in the last 5 years in Riau Province fluctuated every year and increased in 2022, some of the HIV cases were found at the AIDS stage where the number tended to decrease. The same trend occurred in West Java in 2018-2020, it was stated that the addition of the number of new HIV positive cases was quite fluctuating from year to year in the last three years, the highest cases were in 2019 with 357 HIV cases and 113 AIDS cases. However, in 2020 there was a decrease in cases where the decrease was caused by service restrictions due to the Covid-19 pandemic so that service providers were not optimal in providing their services (Human *et al., no date*). This is different from what happened in Riau Province, because in 2020 the findings of HIV cases actually increased compared to 2019.

The increasing finding of HIV cases in Riau Province shows that health care facilities spread across districts / cities are making active efforts to dismantle the iceberg phenomenon which is assumed to be the number of HIV cases in the community. The Government's attention to the HIV problem was responded by the issuance of implementation guidelines for health facilities regarding *Provider Initiated Testing and Counselling* (PITC). If a person comes to a health care facility showing symptoms that point to HIV, the basic responsibility of the health worker is to offer HIV testing and counseling to the patient as part of clinical training. PITC also aims to identify invisible HIV infections in patients and visitors to health care facilities.

HIV testing and counseling are also offered to patients with symptoms that may not be related to HIV.

Another form of government responsibility is the issuance of Government Regulation of the Republic of Indonesia Number 2 of 2018 concerning Minimum Service Standards (SPM), namely every citizen, in this case people with a risk of being infected with a virus that weakens the human body's resistance (*Human Immunodeficiency Virus*) are entitled to health services. SPM's priority targets are pregnant women, TB patients, Sexually Transmitted Infection (STI) patients, sex workers, transgenders, men with sex with men (MSM), injecting drug users (IDU) and Correctional Assisted Citizens (WBP). This government policy also supports the high discovery of HIV cases, because with the ease of HIV testing and mandatory screening for priority groups, the opportunity to capture HIV-infected people is increasingly wide open.

The number of HIV cases found should have a positive impact on ODHIV, as an *entry point* to access support care and Anti-Retroviral (ARV) treatment. ARV functions to inhibit the growth of HIV virus cells in the body of ODHIV, if taken regularly then the growth of virus cells is very low or even no longer detected so that the quality of life of ODHIV becomes better and will reduce the risk of HIV transmission. HIV testing carried out will be followed by preventive services with counseling by health workers so that someone with HIV negative status can maintain that status, if HIV positive status, it can be prevented from transmitting to others, including from mother to baby. Therefore, the Riau Provincial government must improve its performance in finding HIV cases in the community, because although there has been an increase in cases in the last 5 years, what has been found has only reached 71.4% of estimates. Non-optimal case discovery will provide opportunities for HIV transmission to continue to occur in the community which will increase morbidity and mortality in ODHIV because it is found too late which will be a burden on health care facilities, family social order and community.

Most cases of HIV and AIDS are found and reported from Pekanbaru City, with a fairly high gap with other regions in Riau Province. The spread of HIV and AIDS in Pekanbaru City is the fastest, because as the capital of Riau Province, which is the center of trade, investment, and culture that is able to bring many tourists, both local and foreign, some of whom have bad habits that ultimately cause HIV and AIDS transmission among the wider community, such as the behavior of changing partners, consume drugs through syringes together, Lesbian, Gay, Bisexual, Transgender (LGBT), women sex workers (WPS), customers who peddle sex (PJS), and so on.

On the other hand, community contribution or participation is still considered less optimal due to little knowledge about HIV and AIDS, plus the issue of HIV and AIDS is less attractive to the community which causes difficulties in implementing the prevention and control of HIV and AIDS. (Metra, 2020).

Although there are several characteristics that complicate HIV prevention efforts in Pekanbaru, based on data from the Riau Provincial Health Office, there are factors supporting the high discovery of HIV cases in this area, including; the number of *hot spots* / locations / nightlife venues that are allegedly places of risky behavior activities of HIV transmission, the number of health care facilities that are able to carry out HIV screening not only owned by the government but also involving private health services, partnerships with HIV-based Non-Governmental Organizations (NGOs) that educate and reach key population groups to get tested for HIV because these populations are very vulnerable to HIV infection due to their high-risk behaviors.

Referring to the above conditions, the Health Office needs to carry out educational activities about HIV / AIDS more intensively to the community. Optimal results will be obtained if the education is carried out continuously, involving all sectors, both government and private, by utilizing various print and electronic communication media, especially social media that is being loved by the community today. If people have understood HIV-AIDS information, it is hoped that they can protect themselves, their families and people in their environment from the threat of HIV infection. In addition, it is necessary to strengthen partnerships and encourage the performance of NGOs so that they can optimally outreach key populations in Pekanbaru.

HIV cases in Riau Province are concentrated in the age group of 25-49 years by 74.2%. The same pattern was found nationally that until March 2023 the number of ODHIV is mostly in the age group of 25-49 years (70.2%) (Kemenkes, 2023) Research in Dili City, Timor Leste, found that age group is statistically related to the incidence of HIV/AIDS (p = 0.004 OR=3.937 95% CI = 1.564-9.908), where respondents aged 28-44 years are 3,937 times more likely to suffer from HIV / AIDS compared to respondents aged 25-27 years. This happens because at that productive age is generally still active outside the home, still likes to gather outside the home with the same age group so that it has the potential to be at risk of falling into promiscuity and free sex. (Amelia *et al.*, 2017). The high prevalence of HIVAIDS in productive age is due to being an age group that is active in various activities, making contact with other people, including contact with people with HIV-AIDS. In addition, the production of sex hormones in this age group is very large so that sexual activity increases, if there is no self-control it will fall into free sex which can cause transmission of HIV-AIDS. (Pramitasari *et al.*, 2018). This problem must be addressed immediately, otherwise it will threaten the number of productive age groups, which will have an impact on the socioeconomic status of families in society.

One of the efforts to prevent HIV in this productive age group is education about HIV-AIDS for employees in companies / offices / institutions regularly. Education in the workplace will be more focused, measurable and actionable with HIV screening. Therefore, the Health Office needs to establish cooperation and agreements with companies/offices/institutions with a potential number of employees.

The findings of HIV cases in Riau Province according to gender, the most in men is 68.4%. This trend also occurs nationally that HIV is found in men (62%) and women 38% with a male to female ratio of 2:1 (Kemenkes, 2023). This condition is supported by research conducted at the Puskesmas Decline in Bengkulu City in 2022, where there is a relationship between sex and the incidence of HIV/AIDS (Chi-Squere Test and obtained *Continuity Correction* P-Value value of 0.001), where respondents suffering from HIV / AIDS are male 6.5 times at risk of experiencing HIV / AIDS than women.(Herlinda *et al.*, 2023).

In line with the impact on the high number of HIV infections in the productive age group, socioeconomic changes will also be felt by families due to high HIV infection in men, because men as heads of families are disrupted in their productivity at work. Another situation will arise psychosocial problems if the loss of the head of the family will have a wider impact such as the threat of poverty, health and children who drop out of school.

The distribution of AIDS cases in Riau Province according to employment is most in employees, selfemployed, unemployed and housewives. Similarly, nationally reported data are non-professional workers (employees): 25,119, housewives: 20,785 and self-employed / self-employed people: 19,470 (Kemenkes, 2023). Another surprising fact is a written statement submitted by Ministry of Health Spokesman Muhammad Syahril through Kompas.com, which states that Human Immunodeficiency Virus (HIV) cases in Indonesia will increase in 2023. Case transmission is dominated by housewives, where based on data from the Ministry of Health, the number of housewives infected with HIV reaches 35 percent. This figure is higher than HIV cases in other groups such as husbands, sex workers and MSM groups (man sex with man). This activity has accounted for about 30 percent of husband-to-wife transmission. As a result, new HIV cases in the group of housewives increased by 5,100 cases every year.

Research conducted in Semarang City based on the type of work shows that cumulative data on AIDS cases within a period of 12 years (2007-2018) is most found among employees with 109 cases. Some of the factors behind the high cases of AIDS in employees are because; A company that has more male employees

than women has a tendency that men are more informed to "have fun" than women, so male employees are more susceptible to contracting it through risky sex. Companies with high employee mobility that results in them being away from family and tend to engage in high-risk sexual behavior. (Pramitasari *et al.*, 2018)

The high level of HIV infection in the employee group was also related to the level of knowledge about HIV and AIDS. This is explained by a Case Study on Employees with HIV / AIDS in Semarang City, which obtained the results that there are still informants who do not know what HIV / AIDS is, there are still many informants who do not know how to transmit and how to prevent contracting HIV / AIDS and there are even those who say that HIV / AIDS can be prevented by maintaining personal hygiene. (Fitri Anis Annisa *et al.*, 2021).

Another journal can be seen from the results of research on several factors related to the incidence of HIV / AIDS in women (case study in Kendal Regency), that the variable history of HIV / AIDS in husbands has a significant relationship and is a risk factor for the incidence of HIV / AIDS in women (p = 0.001; OR=83,746; 95%CI=6,723-1,043). This means that women whose husbands have a history of HIV / AIDS have a risk of HIV / AIDS 83,746 times greater than women whose husbands have no history of HIV / AIDS, even with a minimal number of samples. Furthermore, the number of sexual partners had a significant relationship and was a risk factor for HIV-AIDS incidence in women (p = 0.003; OR=23,321; 95% CI=2,969-183,187). This means that women who have more than one sexual partner have a risk of HIV/AIDS 23,321 times greater than women who have only 1 sexual partner. (Musyarofah et al., no date). Another factor that supports the high rate of HIV-AIDS in housewives is the lack of information about HIVAIDS transmission and cultural problems. The number of "good" housewives contracting the HIV-AIDS virus from their husbands who often have sexual relations other than with their wives is due to permissive culture, so that women are helpless and do not have bargaining position (bargaining position) against her husband. Women have no knowledge of the dangers that threaten them. (Handayan, 2018). From the above phenomenon, it can be seen that the estimation and projection of the number of ODHIV at the age of 15 years and over in Indonesia has become a fact with the high findings of HIV cases in employees, self-employed and housewives who are not key population groups.

Number of HIV AIDS in employees has a huge socioeconomic impact on the world of work, because it will inhibit investment and business growth, reduce work productivity, burden the social security system and health services, reduce family income and household productivity and increase poverty, and increase other socioeconomic problems. Therefore, the Health Office needs to encourage the performance of health care facilities in conducting HIV screening, especially through the initiative approach of health workers described above. Especially for housewives or women, HIV case screening can be done through mandatory HIV examination/screening for every pregnant woman integrated with Maternal and Child Health (MCH) services, because pregnant women are one of the targets of Minimum Service Standards (SPM) in the health sector. The optimal implementation of SPM will be able to increase efforts to prevent HIV transmission from mother to baby, because every HIV pregnant woman will get Anti-Retro Viral (ARV) treatment as an intervention to break the chain of transmission.

According to sexual orientation, it is known that heterosexuality still dominates as a risk factor for AIDS cases in Riau Province in the last 5 years. National data also showed that the most risk factors for transmission were through sexual intercourse, heterosexual risk 66.5% and homosexual 10.4% (Kemenkes, 2023). Many studies that support this fact include the results of research conducted at RSU Anutapura Palu which obtained heterosexual results are a risk factor for the incidence of HIV / AIDS with an Odds Ratio (OR) = 2.236 (CI 95% .910-5.493), meaning that having heterosexual sexual intercourse has a risk of having 2 times greater chance of suffering from HIV / AIDS compared to respondents who do not have heterosexual sexual intercourse is not at risk, and Male Sex Male (MSM) is a risk factor for HIV/AIDS incidence with Odds Ratio (OR) = 1.971 (CI 95% .871- 4461), meaning that sexual intercourse Male Sex Men (MSM) are at risk of having a 2 times greater risk of suffering from HIV/AIDS compared to respondents who have sexual intercourse Male Sex Male (MSM) is not at risk. (Nurhayati *et al.*, 2018)

An interesting fact is the increasing number of homosexual risk factors in Riau Province, as seen from the smaller gap between these two sexual orientations in the last 2 years. Similar facts were reported from Kompas.id which stated that the number of HIV/AIDS sufferers from homosexuals in Temanggung Regency, Central Java began to show an increasing trend. The number of patients from the homosexual group is even almost equal to the number of HIV / AIDS sufferers from heterosexual circles who have been the majority group of HIV / AIDS sufferers. From January to September 2022, the number of HIV/AIDS sufferers from heterosexuals was recorded at 17 people, while from homosexuals there were 13 people. Many factors support the increase of MSM communities in today's society, including in Riau Province. In line with the development of the times all access to information and communication can be easily done, access to outside cultures regarding lifestyle (*life style*) entered Indonesia which triggered a shift in prevailing socio-cultural values such as the occurrence of sexual deviant behavior in adolescents, one of which was gay homosexual deviant behavior. Social media factors are one of the dominant factors that influence teenagers to become gay as in *dating apps* Especially for finding gay couples. (God *et al.*, 2022).

From the trends and phenomena of homosexuality that occur in Riau Province, specific interventions that touch adolescents are needed. Education about HIV and the dangers of homosexuality must be delivered to adolescents widely and continuously, more vigorously than the information about gays they get from social media. The Health Office must cooperate with the Education sector, so that HIV-AIDS education is delivered correctly regularly to school age groups (SLTP / Senior High School / Higher Education), so as to avoid risky behavior activities that cause them to be vulnerable to contracting and transmitting HIV.

Next is to increase the outreach of MSM groups that are generally hidden and not easily identified (*hiden*) through Non-Governmental Organizations (NGOs) engaged in HIV-AIDS. Outreach is essential for MSM groups to undergo HIV screening, and to be educated about prevention and treatment if infected with HIV.

### CONCLUSIONS

The cumulative number of HIV cases until 2022 in Riau Province is 8,278 cases (71.4% of ODHIV estimates), the trend of finding HIV cases in 2018-2022 is still fluctuating but shows an increase in 2022, while AIDS cases tend to decrease. The distribution of HIV-AIDS cases is highest in Pekanbaru City, which is concentrated in the age group of 25-49 years (74.2%) and in men (68.4%). The distribution of AIDS cases according to occupation is mostly Employees, Self-employed / self-employed, Non-Working and Housewives, and according to sexual orientation is still dominated by heterosexuals, although the gap in the last 2 years between heterosexuals and homosexuals is very small.

In order to achieve the elimination of HIV AIDS which is the commitment of the Government of Indonesia and the world, the Health Office is expected to increase the discovery of new HIV cases, because it is an *entry point* to obtain Anti-Retro Viral (ARV) treatment and treatment. ARVs taken by ODHIV regularly for life will suppress the amount of HIV virus until it is undetectable so that it can contribute to efforts to break the chain of HIV transmission in the community and improve the quality of life of ODHIV. This effort can be done by increasing the number of HIV examinations/screenings through the initiation approach of health workers in health care facilities, especially in the target of Minimum Service Standards (SPM) where not only key populations but also non-key populations including pregnant women. It is necessary to encourage the performance of NGOs in reaching key population groups, especially hidden ones, so that they can be educated about HIV prevention and want to undergo regular HIV screenings. No less important effort is to put HIV health promotion / education at the forefront, so that people have the right knowledge about HIV so that they can protect themselves, their families and their closest environment from the threat of HIV infection. Specifically, HIV-AIDS education is carried out regularly for productive age groups and employees in companies / offices / institutions. Education at school age is carried out in junior high school / high school / higher education so that they avoid the threat of HIV due to homosexual risky behavior which today shows an increase.

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