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HIV Infection of Male in Pekanbaru in 2018

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Abstract

The case of HIV and AIDS in Pekanbaru in 2017 is 448 cases, this HIV-AIDS case is dominated by male gender, with each HIV is 66% and AIDS is 76%. The identification toward the infection risk factor of HIV-AIDS in some region become the basis of strategy determination and the policy of HIV-AIDS prevention in this region, which can be utilized well by the stakeholder or health service. The purpose of this research is to find out the infection risk factor of HIV in male in Pekanbaru with *case control* design. The research sample was taken to male which had *Voluntary Counseling Testing* in clinical service of VCT in the nearby Health Center in Pekanbaru with the total sample of 201 people, it was consist of 67 people's case and the control of 134 people. The result of the research shows that the risk factors which are related to the HIV infection of male in Pekanbaru are the usage of condom (OR = 3,041), condom usage consistency (OR = 7,010), couple switch (OR = 2,591), couple switch more than two (OR = 3,661), doing anal sex (OR= 6,486) and doing anal sex with condom (OR =16,923). Anal sex using condom also become the dominant risk factorof HIV infection of male Pekanbaru in 2018, with the OR value of 16,923 which means doing anal sex without condom is 17 times risk higher to get infected by HIV thandoing anal sex with condom. These risk factors give the 68% supports of HIV infection of men in Pekanbaru in 2018.

Keywords: HIV infection, infection risk factor of HIV, male, Pekanbaru

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1. Introduction

Indonesia becomes one of the countries in Asia which experience the epidemic of HIV-AIDS which is sharply increasing prevalence and has not shown a decrease even though various prevention efforts have been done. According to WHO and UN for AIDS (2009), the AIDS epidemy in Indonesia is the fastest growth in Asia. Indonesia is ranked the 14th for its people living with HIV in 2016 [1]. The key populations which is most exposed to HIV in Indonesia are (1) the sex workers with the HIV prevalence of 5.3%, (2) gay or men who have sex with men with the HIV prevalence of 25.8%, (3) injection of drug users with the HIV prevalence of 28.76%, (4) transgender with the HIV prevalence of 24.8%

and (5) the prisoners with the HIV prevalence of 2.6%. The male and female HIV ratio is 2: 1 with the percentage of HIV infection based on male of 66.2% and 33% female [2].

HIV-AIDS infections in Riau Province include in the big 15 categories of 34 Provinces in Indonesia. The total finding of HIV case in Riau Province, in cumulative, until 2017 has the total of 4.402 cases with the prevalence number of 66.04%, while the AIDS cases, in cumulative until 2017 has the total of 2.201 cases with the prevalence of 30,26%. For the finding of HIV-AIDS cases in2017 has the total of 732 cases [3]. For Region/City, Pekanbaru has the highest*case rate*ofHIV-AIDS in Riau. The total cases of HIV-AIDS in Pekanbaru are increasing continuouslysince 2000 to 2017. In 2017, HIV cases in Pekanbaru as many as 247 cases and AIDS stands for 201 cases.

Cumulatively, the finding of HIV cases in Pekanbaru City from 2004 to 2017 is 1406 cases, while AIDS cases cumulatively in total of 1206 cases. Based on the gender of cumulative HIV cases in Pekanbaru City until December 2017, there are 66% male and 34% female while the male AIDS cases were 76% and, the rest,female of 24%. Based on the risk group untilDecember 2017 in Pekanbaru CITY, the highest HIV cases are on the heterosexual risk group which has the total of 973 cases, and AIDS has the total of 820 cases, then the second largest risk group is bisexual with HIV cases in total of 267 and AIDS in total of 193 cases [4].

In the earlier survey of male visit data in the Health Center that serves the HIV Counseling and Testing in Pekanbaru 2017, there is apositive rate of 5% from the total visit of 3.115 peeple. In 2018, the positive rate number increases to 6,2% based on the visit data and male case data in the period of January – August 2018. This data gives an imagethat the HIV-AIDS cases are on the apprehensive condition.

Some strategies and policies are done for eliminating HIV-AIDS cases. In the aim for the *Sustainable Development Goals* (SDGs) in the health sector, it is planned to immediately end AIDS in 2030 by accelerating AIDS prevention efforts globally. One of the programs which are done by the Ministry of Health with the full support from the local government is the implementation of HIV test at the Health Center and Regional Public Hospital (RSUD). Besides, there is also *Voluntary Conseling Testing* (VCT) test which is conducted by *mobile*in the socialization. By the existence of this strategy, then, the health service for people who had a risk to be infected by HIV becomes one of the concerns for health service facility to provide serviceas minimum standards by referring to the Republic of Indonesia's Minister of Health Regulation No. 43 of 2016 about the Minimum Service Standards (MSS) in the Health Sector where the standard requirements of each person is at HIV infection risk (pregnant women, TB patients, STI, FSW, PPS, MSM,

transgenders, drug users, and inmate community) to get an HIV examination based on the standard.

In the effort of accelerating AIDS prevention as SDGs vision in 2030, UNAIDS has carried out the *Fast Track* 90-90-90 strategy tostop AIDS. Technically, the strategy accelerationis realized in the DCK program (Discover, Cure, Keep) by the endeavored target in 2020 to find 90% people with HIV who already knows the status; cure 90% people with HIV who already know the statusthen begin the *Anti Retroviral* (ARV) therapy; and Keep up 90% people who have started ARV therapy which show the *viral-load* HIV level pressure in the body. Based on the HIV service cascade and ARV therapy in Pekanbaru until February 2018, it is discoverd as great as 89,47%, curedas 81,57% andkept up as 34,51% [3]. AIDS prevention program of Pekanbaru which has included in theStrategic Plan of Pekanbaru Health Service in 2017-2022 alsorefers to the SPM as fit as the City of Pekanbaru condition. For the health service of the HIV infection riskhas the basic quality which required the standard to get HIV examination, with the service receiver of the people who have the risk of HIV infection with the range achievement indicator of the HIV infection risked people can receive HIV examination as it is.

Nowadays, in effort to prevent HIV-AIDS, new policyis implemented, which is"*Test and Treat*". The *Test and Treat* approach is based on the concept of, first, early diagnosis and immediate treatment which will reduce the morbidity of PWHA, both due to HIV or the other causes; second, the reduction of HIV viruses number (*viral load*) which will reduce HIV infectionin a meaningful way. *Test and Treat* has the aim of improving the health of PWHA who do not know their HIV status. The early treatment, in other words, prolongs life expectancy and reduces the number of mortality because of the better treatment results.

An effective HIV-AIDS prevention strategy can be done when the main risk factors of HIV-AIDS infection have been well identified.For this reason, it is necessary to know the risk factors for HIV-AIDS infection.HIV infectionis generally happened from the risky human behavior, causing some individuals to be susceptible to the infection.The main factor which is associated with infection of HIV-AIDS is the risky sexual behavior.Having a lot of sex partners and not using condoms in doing the risky sexual activities are the main risk factor for HIV-AIDS infection.In fact, the use of condom is a way to effectively prevent HIV-AIDS infection.Anal sex is also a factor in sexual behavior whichsupports theinfection of HIV-AIDS.The history of sexually transmitted infections that have been suffered caused by sexual behavior can also be an entrance for the HIV virus infection. The purpose of this researchis to find out the risk factor of HIV infection of male in Pekanbaru 2018.

2. Research Method

This research was observational analyticwith*case control* design. The research location wasthe existing Health Center around Pekanbaru City which has the HIV casesthere are Harapan Raya Health Center, Melur Health Center, Sidomulyo Inpatient Health Center, Simpang Tiga Inpatient Health Center, Payung Sekaki Health Center, Tenayan Raya Inpatient Health Center, Senapean Health Center, Limapuluh Health Center and Langsat Health Center. This research was conducted in 2018.

The total sample based on the*case control* formulation of Lemesshow, at.al (1990) it must contain 60 respondents in minimum, but because the finding of positive HIV cases during January – August 2018 are 67 people, all cases were going to be the sample, and for the controlled group in ratio of 1: 2, so the respondent in the controlled group was going to betaken 134 male with the negative HIV test result. The method of sample collection used the*consecutive sampling* technique. The needed sample was male who accessed the service of Voluntary Counseling Testing/*Konseling Testing Sukarela* (VCT/KTS) in Health Center around Pekanbaru City. The research analysis used univariate, bivariate and multivariate.

3. Research Result

3.1. Univariate analysis

3.1.1. Respondent characteristics

Respondents in the case and controlled groupis mostly 26-35 years old of male who accessed the VCT, which is averagely male who has sexually active tendencies, one of which wis in the range of 26-35 age, and this range of is also considered as early adulthood [5].The level of education of the case group and the respondents are mostly high school and diploma / bachelor. High school and diploma or bachelor tends to be at risk of HIV infection because this level is accustomed to use electronic media, so it is easy to access porn. Maybe they have a history of smoking and alcoholic drink, and having risky sexual behavior too in comparison to lower levels of education ([6].

Related to the profession, the case and controlled group mostly works in the private sector and odd jobs. Beside, the largest proportion of male workers in Pekanbaru is in the private sector [4], for those who work in the private sector is more likely got HIV infection easier because it is related to their ability to buy sex [7]. The male which is working on odd jobs is also ranked the second most infectedgroup after the worker of

the private sector. In this research, there are some respondents who workin the odd jobs category as same as a sex worker, but they are not admitting and certainly become the group at the most risk of HIV infection.

Marital status in the case and controlled group is largely unmarried. The unmarried status can increase the behavior of sexual activity with multiple partners [7]. The residence of the case and controlled respondent group is mostly on a rental house, and the conditions of the rental housing is tend to have more freedom in doing the desired sexual activity compared to living in a dormitory / boarding house or living with parents. The respondent characteristic can be seen in the following table:

TABLE 1: Respondent Characteristic in the service of VCT in Pekanbaru 2018.

No	Variable	HIV Status			
		HIV Cases (+)		HIV Control (-)	
1	**Ages**				
	17 – 25 Years Old	25	(37%)	41	(31%)
	26 – 35 Years Old	27	(40%)	66	(49%)
	36 – 45 Years Old	7	(10%)	18	(13%)
	46 – 55 Years Old	7	(10%)	8	(6%)
	>55 Years Old	1	(1%)	1	(1%)
2	**Educational Background**				
	Elementary School	1	(1%)	3	(2%)
	Junior High School	7	(10%)	13	(10%)
	Senior High School	40	(60%)	86	(64%)
	Diploma/Bachelor Degree	19	(28%)	32	(24%)
3	**Occupation**				
	College Students	6	(9%)	10	(7%)
	Entrepreneurs	11	(16%)	20	(15%)
	Employee	27	(40%)	62	(46%)
	Civil Servant	3	(4%)	4	(3%)
	Labor	2	(3%)	3	(2%)
	Trader	1	(1%)	2	(1%)
	Freelancer	12	(18%)	21	(16%)
	Honorary Staff	1	(1%)	2	(1%)
	Sex Labor	0	(0%)	4	(3%)
	Salon/Massage Parlors	2	(3%)	2	(1%)
	Unemployed	2	(3%)	4	(3%)
4	**Marriage Status**				
	Not Married Yet	35	(52%)	78	(58%)
	Married	30	(45%)	54	(40%)
	Divorce Alive	0	(0%)	2	(1%)

No	Variable	HIV Status			
		HIV Cases (+)		HIV Control (-)	
	Divorce Dead	2	(3%)	0	(0%)
5	**Main Income**				
	Employee Salary (permanent)/Entrepreneur	42	(63%)	88	(66%)
	Freelancer	15	(22%)	25	(19%)
	Pocket Money/College Students	4	(6%)	10	(7%)
	Working at Salon/Massage Parlors	2	(3%)	2	(1%)
	Selling Sex	0	(0%)	4	(3%)
	Driver of Online Transportation	1	(1%)	1	(1%)
	From Parents/Family	2	(3%)	2	(1%)
	Honorary	1	(1%)	2	(1%)
6	**Residences**				
	Boarding House/Dormitory	15	(22%)	42	(31%)
	Rented House	24	(36%)	43	(32%)
	Self-Owned House/Family	18	(27%)	37	(28%)
	Parents House	10	(15%)	11	(8%)
	Friends' house/Relatives'	0	(0%)	1	(1%)
Source: Research Result Data 2018					

3.1.2. Risk factor

The result of the research shows that in the HIV (+) case group, there are only 34% of the respondents which use condoms during sex, with consistently condom usage of 21%. Whereas in the controlled group, there are 64% of the respondent which use condom during sex and those who consistently used condoms are in the percentage of 60%. In the HIV(+) case group, the respondent who switches partners is in the percentage of 63% and has more than two sex partners are 60%. In the controlled group the respondent who does the switch partner are 38% and those who have more than two couples are 28%. In the case group, the respondents who do the oral sex are 82% and do the oral sex without condoms are 78%. In the controlled group, 74% respondents do the oral sex and 72% respondents do the oral sex without condom. In the case group, the respondent who does the anal sex is 88% and those who have anal sex without condom are 79%. In the controlled group, 40% stands for anal sex respondents and 27% for anal sex without condom. In the group of homosexuals it is in the percentage of 64%, heterosexual 64% and bisexual 28%.In the controlled group the homosexual is in the percentage of 72%,

heterosexual 60% and bisexual 31%. Univariate Analysis of risk factor can be seen in the following table:

3.2. Bivariate analysis

The result of Odds ratio (OR) test in the significance of 5 %and CI of 95% can be seen that there is a relation in condom usage, consistent condom usage with the risk of HIV infection, switching sex partner, switching with more than two sex partners, doinganal sex, doing anal sex with condom with the risk of HIV infection. While, there is also no relation in doing oral sex, oral sex with condom, homosexual, heterosexual and bisexual orientation with the risk of HIV infection of male in Pekanbaru. The result of relation test between risk factor and HIV cases can be seen in the following table:

3.3. Multivariate analysis

The multivariate final modelling analysis results with all meaningful variable (p value < 0,05) and without*confounding* variable which can be seen in the following table:

The formed multivariate model is fit or worth to be used, the worthiness is seen from the *p value omnibus test* <0,001, which means the multivariate final modeling is explaining enough. To see the contribution of independent variable to the dependent variable, it is used the value of *Cox & Snell R Square* and *Nagelkerke R Square.*The value of *Nagelkerke R Square*is in the number of 0,684 which shows that support of risk factor incondom usage, condom usage consistency, switching partner, switching with more than two partner, doing anal sex anddoing anal sex with condomare in the percentage of 68% to the HIV infection of male in Pekanbaru.

4. Discussion

4.1. The risk factor in doing anal sex with condom to the HIV infection of male in Pekanbaru in 2018

The research result shows the relation between anal sex without condom to the HIV infection of male in Pekanbaru in 2018. Men who do the anal sex without condom has the risk of 17 times (OR = 16,923) of HIV infection than men who do it with condom.

Most of the male with HIV is infected because doing the anal sex [8]. Receptive anal sex (in the bottom position) is far too risky to be infected by HIV. The partner in receptive

TABLE 2: Resume of the Analysis Result of HIV Infection Case Risk Factor of Male in Pekanbaru 2018.

No	Risk Factors	HIV Status				Total (%)	
		HIV Cases (+)		HIV Control (-)			
1	Condom Usage						
	Yes	23	(34%)	86	(64%)	109	(54%)
	No	44	(66%)	48	(36%)	92	(46%)
2	The Consistency of Condom Usage						
	Yes	14	(21%)	81	(60%)	95	(47%)
	No	53	(79%)	53	(40%)	106	(53%)
3	Always Changing Sex Partners						
	Yes	42	(63%)	52	(39%)	94	(47%)
	No	25	(37%)	82	(61%)	107	(53%)
4	Changing Sex Partners More Than Two						
	Yes	40	(60%)	38	(28%)	78	(39%)
	No	27	(40%)	96	(72%)	123	(61%)
5	Doing Oral Sex						
	Yes	55	(82%)	99	(74%)	154	(77%)
	No	12	(18%)	35	(26%)	47	(23%)
6	Doing Oral Sex By Using Condom						
	Yes	15	(22%)	37	(28%)	52	(26%)
	No	52	(78%)	97	(72%)	149	(74%)
7	Doing Anal Sex						
	Yes	59	(88%)	54	(40%)	113	(56%)
	No	8	(12%)	80	(60%)	88	(44%)
8	Doing Anal Sex By Using Condom						
	Yes	14	(21%)	98	(73%)	112	(56%)
	No	53	(79%)	36	(27%)	89	(44%)
9	Homosexual						
	Yes	43	(64%)	96	(72%)	139	(69%)
	No	24	(36%)	38	(28%)	62	(31%)
10	Heterosexual						
	Yes	43	(64%)	80	(60%)	123	(61%)
	No	24	(36%)	54	(40%)	78	(39%)
11	Bisexual						
	Yes	19	(28%)	42	(31%)	61	(30%)
	No	48	(72%)	92	(69%)	140	(70%)

Source: Research Result Data 2018

has 13 times risk to be infected than the insertive (in top position). The consistent condom

TABLE 3: The Relation betweenRisk Factor and HIV Cases of Male in Pekanbaru 2018.

No	Risk Factors	ρ Value	OR	(CI 95%)
1	Condom usage	*) 0,000	3,428	(1,852-6,344)
2	The Consistency of Condom Usage	*) 0,000	5,786	(2,922-11,457)
3	Always changing sex partners	*) 0,002	2,649	(1,447-4,851)
4	Changing sex partners more than two	*) 0,000	3,743	(2,021-6,929)
5	Doing oral sex	**) 0,220	1,620	(0,778-3,375)
6	Doing oral sex by using condom	**) 0,496	1,322	(0,665-2,631)
7	Doing anal sex	*) 0,000	5,608	(2,834-11,100)
8	Doing anal sex by using condom	*) 0,000	20,076	(8,742-46,105)
9	Homosexual	**) 0,331	0,709	0,380-1,325)
10	Heterosexual	**) 0,645	1,209	(0,659-2,219)
11	Bisexual	**) 0,746	0,867	(0,455-1,652)

Source: Research Result Data 2018

Description: *) significant relation (p < 0,05) **) no significant relation (p > 0,05)

TABLE 4: Multivariate Modelling.

No	Variables	P value	OR	95% C.I.for Exp (B)	
				Lower	Upper
1	Condom usage	0,001	3,041	1,788	16,976
2	The Consistency of Condom Usage	0,000	7,010	2,988	16,191
3	Always changing sex partners	0,008	2,591	2,010	20,191
4	Changing sex partners more than two	0,002	3,661	2,106	13,851
5	Doing anal sex	0,003	6,486	1,879	11,545
6	Doing anal sex by using condom	0,000	16,923	2,106	13,120

Source: Research data analysis, 2018.

usage reduces the risk of HIV infection through insertive anal sex. Insertive anal sex with HIV-positive partner is averagely in the percentage of 63%, and receptive anal sex with the HIV-positive partner is averagely in the percentage of 72% [8].

4.2. The risk factor of consistent condom usage with the HIV infection of male in Pekanbaru in 2018

This research result shows that there is a relation in the consistent condom usage to the HIV infection of male in Pekanbaru in 2018. Men who do not consistently using condom during sex will have the risk of HIV infection 7 more times (OR 7,010) than men who consistently use condom.

The re-check to the HIV *seroconversion* research shows that condom is 90 to 95% effective when used consistently, the consistent condom user from 10 up to 20 less times

to be infected by HIV virus than the inconsistent or not using condom. The same result is also obtained with model-based estimation technique, which shows that condom reduce the probability per HIV infection contact from man to woman around 95%. Even though it is not perfect, condom gives substantial protection toward HIV infection. Therefore, the promotion of condom still become an important internasional priority againts AIDS.

4.3. Risk factor of switching partner more than two with HIV infection of male in the Pekanbaru in 2018

The results of the research show that there is a relationship between switching partners more than two with the HIV infection of male in Pekanbaru in 2018. Male who switched partners more than two is risky of HIV infection 4 times more (OR = 3.661) than with male who does not switching partner more than two.

This is relevant to the research about *Male condom use, multiple sexual partners and HIV: a prospective case-control study in Kinshasa*. The result shows a relation between having two or more sexual partners simultaneously with HIV infection with OR value of (OR = 3.58, 95% CI: 2.31-5.56), this value was higher than the relation which is found between never use condoms with HIV (OR = 3.38, 95% CI: 1.15–9.93) [9]. Having more than two sexual partners at a time is identified as a possible support of the HIV infection.

4.4. Risk factor of oral sex and sexual orientation with HIV infection of male in Pekanbaru City Tahun 2018

In this research, there is no relation between oral sex and doing oral sex using condoms with HIV infection of male in Pekanbaru. This result is in line with a research which states that it is unlikely that HIV-negative people will be infected by HIV from oral sex with HIV-positive partners. However, it is difficult to find the exact risks because many people who do oral sex also have anal or vaginal sex. The type of oral sex that may have the most risk is oral-to-penis sex. But the risk is still very low, and far lower than anal or vaginal sex. Although the risk of HIV infection through oral sex is low, several factors can increase the risk, including injuries in the mouth or vagina or on the penis, bleeding gums, oral contact with menstrual blood, and the presence of Sexual Transmitted Disease [10].

In this research, there is no relationship between homosexual, heterosexual and bisexual orientation with HIV infection of male in Pekanbaru in 2018. The risk of HIV infection through sexual intercourse is not because of the sexual orientation, but the condition during sexual intercourse (anal sex, vaginal sex and oral sex), one or both

with HIV (+). The difference of sexual orientation where about 90% people identifies as heterosexuals and homosexuals which is, in fact, the orientation is only 30% responsible to the diagnosis of new HIV [11].

4.5. Risk factor of drug user injection alternately and the risk factor of blood tranfusion with HIV infection of male in Pekanbaru city 2018

In this research, the variable of drug user injection alternately with blood transfusion cannot be interpreted because of the homogeneous data. But according to previous studies that HIV case of Narcotics and Addictive Substances Users (NASU) are quite large. In the journal about the prevalence of HIV and risky behavior drug injection users in six cities in Indonesia have the implications to the future HIV prevention programs. The research result gives the conclusion that people who inject drugs are at risk of HIV infection due to the condition of the syringe that has been used by HIV-positive people.

The infection of HIV through blood transfusion is possible when the giver and recipient of blood transfusion are people with HIV (+) [12]. Based on the data in Pekanbaru in 2017, by the examination of blood samples (screening) toward HIV in all donors as many as 45.257 people (78% male and 22% female) is found HIV (+) cases in the percentage of 0.10% (43 people). The 43 people with HIV (+) is consisted of 42 male and 1 female [13].

5. Conclusion

Based on the research related to the Risk Factor of HIV Infection of Male in Pekanbaru in 2018, it can be concluded that:

1. Male who never use condom during sexual intercourseis 3 times more at risk of HIV infection that the one who use condom (OR = 3,041). It is seen by the consistent usage of condom, male who does not consistent in using condom during sex intercourse is 7 times at riskof HIV infection than the one who consistent in using condom during sexual intercourse (OR =7,010)

2. Male in Pekanbaru who switchsex partner is 3 times more at risk of HIV infection than those who do not switch partner (OR = 2,591). Switching sex partner more than twois 4 times at risk of HIV infection than those who do not switch partner more than two (OR = 3,661).

3. Male who does anal sex is 6 times more at risk of HIV infection than those who do not do the anal sex(OR= 6,486), male who does anal sex without condom is 17 times more at risk of HIV infection than those who do the anal sex with condom(OR = 16,923).

4. The dominant risk factor to the HIV infection of male in Pekanbaru in 2018 is anal sex with condom with OR value of 16,923.

6. Suggestion

There is a need to increase the information and education activities on HIV-AIDS including the promotion of condom usage as the prevention tool for HIV infection ofmale in Pekanbaru, through the arrangement which is structured and systematic in activity planning in the Sustainable Comprehensive Service (SCS). These activities will certainly be done by some parties according to the roles including the APC of Pekanbaru, Pekanbaru City Health Service, Health Centers in Pekanbaru, the society through *Community Based Organizations* (CBOs), health cadres and AIDS Care Society (ACS) and the related RUW such as Education, Culture and Tourism Service.Optimizing community-based services (NGOs, CBOs) in Pekanbaru in the terms of outreach the risk group that is accurate and effective in mentoring by keeping people with HIV (+) to continue taking ARVs. The need to review on Riau Provincial Regulation No. 4/2006 about HIV-AIDS Prevention and Control in Pekanbaru, especially the chapters which is governing the provision, distribution and promotion of condom. How far the chapters can be realized as stated in chapter's verse 3 point (a) Conducting a correct, clear and complete communication, information and education program for HIV-AIDS prevention through mass media, community organizations, businesses, educational institutions and non-governmental organizations which is engaged in health periodically. In Chapter 10 where every person who knows that they are infected with HIV should not: Doing sexual intercourse with other people, except by using a condom, using jointly non-sterile syringes, medical devices or other devices that are known to be able to infect the HIV virus to others, donors blood or organs / tissues of the body and breast milk to others, take any action that is worth knowing to be able to infect or spread HIV infection to other people either by persuasion or violence. Do the monitoring and evaluation of HIV prevention in Pekanbaru to find out the impact of the program that has been running so far by involving many parties and funding.

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