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Research Report

Description Analysis of Human Behavior that Causes the Emergence of HIV/AIDS Infectious Diseases in Surabaya

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ABSTRACT

HIV virus is transmitted to other individuals particularly through sexual contact with infected individuals, narcotic abuse using shared infected needle, maternal-fetal transmission in perinatal period, either during pregnancy, labor, and breastfeeding, or through infected blood donor. The diagnosis of HIV/AIDS infection is established using laboratory examination with the indication of clinical symptoms or high risk behavior. This descriptive study was intended to describe human behaviors that cause the occurrence of HIV/AIDS in Surabaya. To find the description of the disease, the percentage of total HIV/AIDS patients according to behavioral risk factors was estimated. Total patients in 9 hospitals at each risk factor were divided with total patients in those hospital, multiplied with 100. The description of the disease according to behavioral risk factors in Surabaya is as follows: total patients between January and December 2005 was 382 individuals; 204 due to sexual contact (53.40%), 161 due to injected drug use (IDU) (42.15%), 6 perinatal cases (1.57%) and 11 with unknown causes (2.88%). From risk factor sexual relationship behavior as many as 204 people, respectively heterosexual 174 people (85.29%), homosexual 17 people (8.33%) and bisexual 13 people (6.37%). Further analytical studies are needed to analyze correlation between human behavior and the occurrence of HIV/AIDS in Surabaya.

Key words: Description analysis, high risk behavior, HIV/AIDS

INTRODUCTION

HIV virus infectious to others primarily through: sexual contact with an infected person, the use of narcotic drugs interchangeably with syringe, mother to child transmission in the perinatal period either during pregnancy, childbirth or breastfeeding, or can also be transmitted through blood donation infected.¹ Behaviors at high risk for transmission of this virus, such as free sex, drug use amongst injecting drug turns, blood donors, perinatal period, health workers, occupational accident, are particularly vulnerable to the development of the HIV virus.

East Java Province which is ranked third highest prevalence of cases of HIV/AIDS after Papua and Jakarta, East Java under the following namely West Java, Bali and Riau. The six provinces have now signed Epidemic Levels in Concentrated zones that must be addressed.⁴ Number of People with HIV/AIDS in Surabaya, the highest among the 37 districts/municipalities in East Java with a total that reached 50% of all people with HIV/AIDS.¹⁰ But no one has ever done research to determine its prevalence in Surabaya

and how the description of human behaviors that cause the emergence of infectious diseases of HIV/AIDS in Surabaya, therefore we need to do research on this.

Human Immunodeficiency (HIV) is a virus that attacks the human immune system and cause AIDS (Acquired Immunodeficiency Syndrome). AIDS is a collection of symptoms caused by diseases of the immune system. Progressive damage to the immune system causes people with HIV/AIDS (ODHA) is very fragile and easily affected by various diseases. Disease that usually is not dangerous even in the long run will cause the patient severe pain and even death. The experts identified two types of HIV virus, HIV-1 and HIV-2. HIV-1 is the major cause of AIDS in the world, HIV-2 is found mostly in West Africa.^{2,9} HIV-2 cause of death that occurred more slowly than HIV-1.^{2,7}

Clinical manifestations of HIV infection can be caused by his own HIV (acute retroviral syndrome, HIV dementia), opportunistic infections or AIDS-related cancers. Travelling with HIV disease is divided into stages based on clinical and CD4 cell count: acute retroviral infection, an asymptomatic period, the early symptoms and the symptoms continued.

While HIV and AIDS diagnosis can be established through clinical manifestations and investigation. Early diagnosis is established by laboratory examination of clinical symptoms with the instructions or the existence of high-risk behavior. For HIV diagnosis, which is commonly used is the ELISA, Western blot and PCR. Diagnosis of AIDS is the final stage of HIV infection. Patients were expressed in the development of AIDS when HIV infection further indicates opportunistic infections and life-threatening cancer patients with CD4 count $< 200/\text{mm}^3$.¹¹

Development of HIV/AIDS epidemic in Indonesia is strongly influenced by the interaction of high-risk groups, among other groups of commercial sex workers, users of narcotic drugs and free sex adherents.^{3,6} There are not many epidemiological studies conducted on human behavior in the role of infectious diseases caused by HIV/AIDS in Indonesia. While a lot of areas in Indonesia with huge potential for development of the HIV virus.

Individual is an integral part of the social environment in which he lived. Individual behavior is psychologically very complex and difficult to learn without a long learning process associated with the form of his life experiences. Rotter, a psychologist provides psychological concepts such behavior⁵: 1) Behaviour is an event where individuals living organism as a subject, 2) Aspects of behavior always has a direction and goals, and objectives of this getting a big influence of reinforcement conditions. Reinforcement is a pleasant situation of the individuals who received social environment or of the results achieved through activities of its behavior.

The purpose of this study is to reveal the behaviors that cause the emergence of infectious diseases HIV/AIDS in Surabaya. Data from this study are expected to be useful to health stakeholder as a reference in determining the precautions to reduce the spreading rate or epidemic rate of HIV/AIDS in Surabaya and is also useful as a reference for further study in the future.

RESEARCH METHOD

This study was a descriptive study to know the description of human behavior that causes the emergence of HIV/AIDS infectious diseases in Surabaya. The population study was all patients with HIV/AIDS in Surabaya district. The samples are HIV/AIDS patients who carry out checks in the nine hospitals in Surabaya district. Region chosen as the research is Surabaya city. The choice of location was based because the absence of description data of human behavior causes the disease of HIV/AIDS in Surabaya Municipality Health Office. This research was conducted in the nine hospitals in Surabaya Municipality area.

Data needed for research are primary and secondary. The primary data obtained from research instruments such as questionnaires given to patients with HIV/AIDS who carry out checks in the nine hospitals in Surabaya city area. Secondary data obtained from the data of HIV/AIDS are collected by the nine hospitals in the area of Surabaya Municipality either actively or passively. Active data is data obtained actively from activities within the hospital for examination of patients with HIV/AIDS and activities that serve the system of referral from other health units. While passive data is data obtained from the reports-external (public/community organizations, government agencies, LSM, etc.).

To know the description of infectious diseases, HIV/AIDS calculate the percentage of HIV/AIDS according to behavioral risk factors. Number of patients at nine hospitals each risk factor divided by the total number of patients at nine hospitals, multiplied by 100%.

RESULTS AND DISCUSSION

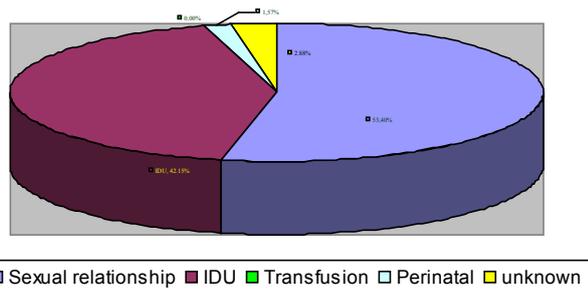
From the research results can be reported that during the month of January 2005–August 2006 there were 382

Table 1. Distribution of HIV-positive patients based on behavioral risk factors in January 2005–August 2006 in Surabaya

Hospital	Risk Factors										Total	
	Sexual Relationship		Injection drug user (IDU)		Transfusion		Perinatal		unknown			
	Jlh	%	Jlh	%	Jlh	%	Jlh	%	Jlh	%	Jlh	%
Dr. Soetomo	157	50.00	151	48.09	0	0	6	1.91	0	0	314	100
Navy hospital	37	100.00	0	0	0	0	0	0	0	0	37	100
Dr. Soewandhi	3	100.00	0	0	0	0	0	0	0	0	3	100
Karang Tembok	4	80.00	1	20.00	0	0	0	0	0	0	5	100
Darmo	0	0	3	60.00	0	0	0	0	2	40.00	5	100
Al Irsyad	0	0	0	0	0	0	0	0	6	100.00	6	100
Budi Mulia	2	25.00	5	62.50	0	0	0	0	1	12.50	8	100
Dankesda	0	0	0	0	0	0	0	0	2	100.00	2	100
Air force hospital	1	50.00	1	50.00	0	0	0	0	0	0	2	100
Total	204	53.40	161	42.15	0	0	6	1.57	11	2.88	382	100

Tabel 2. Distribution HIV/AIDS patients with sexual relationship risk factor in month January 2005–August 2006 in Surabaya

Hospital	Heterosex		Homosex		Bisex		Total	
	Jlh	%	Jlh	%	Jlh	%	Jlh	%
Dr.Soetomo	142	90.45	15	9.55	0	0	157	100
Navy hospital	24	64.86	0	0	13	35.1	37	100
Dr.Soewandi	2	66.67	1	33.33	0	0	3	100
Karang Tembok	3	75	1	25	0	0	4	100
Budi Mulia	2	100	0	0	0	0	2	100
Air force hospital	1	100	0	0	0	0	1	100
Total	174	85.29	17	8.33	13	6.37	204	100

**Figure 1.** The percentage of HIV/AIDS according to behavioral risk factors

people with a positive HIV test results, where 204 people (53.40%) were obtained from a sexual relationship, 161 people (42.15%) due to injection drug user (IDU), people with children who got HIV from their mothers on perinatal cases, either during pregnancy, childbirth or breast-feeding as many as six people (1.57%) and 11 people has no known cause (2.88%).

From risk factor sexual relationship behavior as many as 204 people, respectively heterosexual 174 people (85.29%), homosexual 17 people (8.33%) and bisexual 13 people (6.37%). Distribution data amount of HIV/AIDS patients based on sexual relationship behavioral risk factors can be showed in tabel 2.

From the data distribution above showed that risk factors sexual relationship behaviour occupied the top-ranking were heterosexual behaviour (85.29%) and that was sexual relationship behaviour the most susceptible to spreading of HIV infection. Whereas the second-ranking was homosexual behaviour (8.33%) and the third-ranking/last was bisexual behaviour (6.37%).

CONCLUSION AND RECOMMENDATION

Conclusion

1. Description of HIV/AIDS infectious diseases according to behavior risk factor in Surabaya: for month January 2005–August 2006 in Surabaya were found HIV/AIDS patients as many as 382 people. 204 people cause of sexual relationship (53.40%), 161 people due to Injection drug user/IDU (42.15%), 6 patients perinatal case (1.57%) and the cause unknown 11 people (2.88%).

2. From risk factor sexual relationship behavior occupied the first-ranking were heterosexual behaviour (85.29%), the second-ranking was homosexual behaviour (8.33%) and the third-ranking/last was bisexual behaviour (6.37%).

RECOMMENDATION

1. Further analytical studies are needed to analyze correlation between human behavior and the occurrence of HIV/AIDS in Surabaya.
2. Further studies are needed to identified HIV virus type that infected patients in Surabaya as basic for effort to prevent and therapy.

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