

CLINICAL–EPIDEMIOLOGICAL DATA ON HIV/AIDS PATIENTS ADMITTED TO A TOP REFERRAL HOSPITAL DURING 1997-2005. A DATABASE FOR ACTION IN THE FUTURE, REFERRING TO ANOTHER DEVELOPING COUNTRIES

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*If you know the enemy and know yourself,
you need not fear the result of a hundred battles.
If you know yourself but not the enemy,
for every victory gained you will also suffer a defeat.
If you know neither the enemy nor yourself,
you will succumb in every battle.*

(Sun Tzu)

ABSTRACT

HIV/AIDS, a frightened disease, was detected worldwide both in under developed, developing and developed country. The route of infection was similar in almost all countries, although differs in frequencies. The fate of the patient differed from each countries, with better outcome in the developed countries and worse in underdeveloped and developing countries. This report aims to collect epidemiology data of HIV/AIDS patients who was admitted to a top referral hospital in East Java, Surabaya Dr Soetomo Hospital. In this retrospective study, during the period of 1997 – 1905 it was found that 477 patients had been admitted to Dr Soetomo Hospital. First case was registered in 1997, but the number was increasing rapidly in the following years. The youngest patient was new born and the oldest was 54 years old man. The majority of patients were 20–40 year group of age. The ratio man to woman was 7:1. The most common risk factor was drug abuse and free-sex behavior. The most common co morbid was infectious disease, as diarrhea disease, tuberculosis. A large number of patients died in hospital. In seem that HIV/AIDS is unavoidable and uncontrollable yet. The increasing number of patients year by year must give alert for everyone the potential of the outbreak of disease in community. From literature study, it was four points should be born in mind : 1. Comprehensive health care for people infected with HIV. 2. Need for partnerships 3. Need for research. 4. Health Promotion. The high rate of hospital mortality showed us that the clinical management should be strengthened. As a crippling and deadly disease, the program of prevention should be strengthened, recruiting all of component of the public, private and community sectors. Research for better knowledge about HIV/AIDS should to be stimulated. Education for better health, by officially or non-government organization and family should be encouraged.

Keyword: *HIV/AIDS, epidemiological study, Dr Soetomo Hospital, infectious diseases, health care, partnership, health promotion, research*

INTRODUCTION

HIV infection is one of the greatest threats to the health of the community the world over. From a practical standpoint, the clinician should view HIV infection as a spectrum of disorder ranging from primary infection, with or without the acute HIV syndrome, from the asymptomatic infected state to advanced disease. Today,

HIV/AIDS is a global pandemic, especially in developing countries. The current estimate of the number of cases of HIV infection worldwide is ~40 million, two thirds of who are in Sub Saharan Africa; 50% of cases are in women. In the South East Asia Region, with about 5.5 million people already infected, the epidemic is still rising sharply. WHO estimated that by the year 2000 there will be 8 – 10 million persons living with the virus in South-Asia. Treatment with the HAART does delay the onset of AIDS but today the cost of the treatment is more than individual in the region can afford.

According to data from 2001 reported by Ministry of Health, there was an increasing number of HIV/AIDS patient during 1997 – 2001, HIV cases from 465

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patients in 1997 become 1904 patients in 2001; and AIDS cases from 153 patients in 1997 to become 671 patients in 2001 (Depkes, 2002). Other data from Center for HIV Information UCSF there was 110,000 patients – adults and children ages 0-49 – in the year of 2003.

By the late 1980s, HIV type 1 (HIV-1) began invading one Asian country after another, exploiting traditional behavioral patterns and secular trends to spread widely. In 1995 alone, there were an estimated 2.5 million new infections in South Eastern Asia (ranging from India through the Indonesian and Philippine archipelagoes), surpassing the combined incidence in sub-Saharan Africa (1.9 million) and the rest of the world (0.3 million). The beachhead for the AIDS pandemic in Asia was Thailand, where improved disease-control training and infrastructure produced exemplary systems of epidemiologic surveillance to record the arrival and dissemination of HIV-1. In Bangkok the prevalence among injection-drug users rose from 1 percent in late 1987 to over 30 percent eight months later. Beginning in 1989, routine semi annual province-level surveys tracked steady increases in rates of HIV infection. By mid-1993, the prevalence reached 35 percent among injection-drug users, 29 percent among female sex workers in brothels, 8 percent among male patients with sexually transmitted disease, 4 percent among military conscripts, and 1 percent among pregnant women. In 1993, six years after the epidemic exploded, roughly three quarters of a million Thais were infected, about as many as in the United States, which has a population four times as large and an epidemic that has lasted twice as long. Several other Asian nations are in various stages of this "pattern IV" sequence of explosive increase in HIV-1 infection among injection-drug users and female sex workers, who pass the virus to their male clients, who in turn infect their wives and thus newborns. As early as 1990, prevalence rates greater than 60 percent had been found among injection-drug users in some sites in Myanmar (Burma), India, and China. By 1993, the rates among injection-drug users exceeded 30 percent in parts of Malaysia and Vietnam. Surveys of sex workers between 1992 and 1994–1995 showed rates rising from 40% to 51% in Bombay, India; from 9 % to 38 % in Vietnam; from 4% to 18% in Myanmar; and from 2% to 10% in Cambodia. In Thailand, Bombay, Myanmar, and Cambodia over 2% of pregnant women are now infected with HIV.

Three modes of transmission had been documented: 1. sexual transmission, 2. blood-borne transmission, 3. perinatal transmission. The infection risk depends on the stages of HIV infection, being highest at sero-conversion and late stage, when the viral titer is the highest. Knowing better the path of infection is very important for decision maker to choose the best way to

stop the escalation of HIV/AIDS. This route of infection and other relating factor concerning epidemiological data will be useful if the number of HIV/AIDS was large enough. Comparing with other developing country experiences in HIV/AIDS management is the best way to make a plan.

Surabaya Dr Soetomo Hospital was a top referral hospital for Eastern part of Indonesia, especially for East Java province, for any diseases. The patients came from Surabaya and the surrounding, from East Java and the neighboring provinces, and sometimes from other islands as well. A great number of HIV/AIDS patients were admitted to this hospital last years, so it was possible to make a study about it. HIV/AIDS patients in Surabaya and East Java usually were sent to this hospital, because other hospital had not yet prepared to care this disease. The aim of the study was to evaluate epidemiological data among HIV/AIDS Dr Soetomo Hospital patient during the period of 1997- 2005. Information of these data is very important for decision maker to choose priority to prevent the escalation of HIV/AIDS in our country.

MATERIAL AND METHOD

All medical records of HIV/AIDS patient who had been registered during the period of study, between 1997 – mid 2005, were recruited for the study. The year of 1997 was selected as the start of study because it was the time where HIV/AIDS patients began to be treated by HIV/AIDS team properly. The patients were sent by private physician/hospital or came to hospital by themselves. Before the year of 2004, the patients were admitted to infectious ward in the Department of Internal - Medicine, and after the years 2004, the patients were moved to *Unit Perawatan Infeksi* ward, special ward for HIV/AIDS. The ward had personnel trained for special care. The diagnosis of HIV infection/AIDS was established by clinical and laboratory criteria. Some patients confirmed by Western Blot test. The patients were admitted to the hospital usually for diagnosis or for the complication treatment. The HIV /AIDS patients were cared by medical team from multidisciplinary specialists. They were discharged if the condition was permitted. Data concerning address, sex, habit, occupation, marriage, and other relevant was extracted, and had been tabulated. The results were plotted to appropriate table/graphic to show the trend of the disease. Comorbidity and clinical follow up were recorded, either.

RESULT

During the period of study 1997 – 2005 it was registered 477 HIV infection /AIDS patients. The patient's

characteristics are shown in Table 1. The patients were not only from Surabaya and surrounding area, but also from another city/province/island. Among 477 patients, 312 (65.4%) came from Surabaya. There were no foreigners reported. The patient from private sector was the majority. The number of HIV/AIDS patients increased sharply from year 1997 to present. Most of the

patients were male. The patients came from all group of age, but more than half of patients were in young adult group (less than 30 years old). The 21-30 and 31-40 years old group was predominating age group, 299 (62.7%) and 115 (24.3%) patients respectively. The youngest patient was a newborn baby and the oldest patient was 54 years old.

Table 1. Patients' Characteristics

N0	PATIENT	1997	1998	1999	2000	2001	2002	2003	2004	2005	TOTAL	%
	TOTAL NUMBER	1	5	9	15	27	52	70	168	130	477	100.0
	CHARACTERISTICS											
	HOME ADDRESS											
	- Surabaya	-	2	7	10	16	36	47	104	90	312	65.4
	- Outside of Surabaya	1	3	2	5	11	16	23	64	40	165	34.6
	Total	1	5	9	15	27	52	70	168	130	477	100.0
	SEX											
	- male	1	3	8	13	22	50	60	146	112	415	87.0
	- female	-	2	1	2	5	2	10	22	18	62	13.0
	Total	1	5	9	15	27	52	70	168	130	477	100.0
	JOB											
	Private sector	-	4	5	11	16	43	66	156	114	415	87.0
	Job free	-	-	-	1	2	2	-	6	3	14	2.9
	Beauty salon	-	-	2	1	4	4	-	-	3	14	2.9
	Student	-	1	-	1	2	3	1	-	6	14	2.9
	Merchant	-	-	-	-	-	-	3	3	2	8	1.7
	Sailor	1	-	2	-	1	-	-	2	1	7	1.5
	Female sexual worker	-	-	-	1	2	-	-	1	1	5	1.3
	Total	1	5	9	15	27	52	70	168	130	477	100.0
	AGE GROUP											
	- 10	-	-	-	-	1	-	-	5	3	9	1.9
	11-20	-	-	-	1	3	1	-	5	3	13	2.7
	21-30	1	3	-	11	15	30	47	107	85	299	62.7
	31-40	-	1	7	3	6	15	16	40	28	116	24.3
	41-50	-	1	1	-	2	6	6	10	9	35	7.3
	51-60	-	-	1	-	-	-	1	1	2	5	1.3
	>60	-	-	-	-	-	-	-	-	-	0	
	Total	1	5	9	15	27	52	70	168	130	477	100.0
	RISK FACTORS											
	Drug/alcohol abuse	-	2	-	10	12	40	49	101	72	286	59.9
	Free sex	1	3	6	3	9	11	11	50	45	139	29.1
	Transexuality / Homosexuality	-	-	3	2	4	1	8	11	10	39	8.2
	Parent	-	-	-	-	1	-	-	5	3	9	1.9
	Female sexual worker	-	-	-	-	1	-	2	1	-	4	0.8
	Total	1	5	9	15	27	52	70	168	130	477	100.0

N0	PATIENT	1997	1998	1999	2000	2001	2002	2003	2004	2005	TOTAL	%
COMORBID												
	- Diarrhea acute gastro enteritis	-	3	6	3	13	18	21	46	35	145	30.4
	- Tuberculosis	-	-	1	6	6	18	15	25	35	106	22.2
	- sepsis	-	2	5	3	7	20	18	7	11	73	15.3
	- Pneumonia	-	1	2	4	4	10	18	17	12	68	14.2
	- Candidiasis	1	1	2	-	1	2	3	16	16	42	8.8
DISCHARGE												
	- Dead	-	-	8	6	11	22	30	58	47	182	38.1
	- Alive	1	4	1	9	8	12	22	46	65	168	35.2
	- Others	-	1	-	-	8	18	18	64	18	110	26.7
	Total	1	5	9	15	27	52	70	168	130	477	100.0

The number male patients outnumbered female patients. Male to female patients ratio was 7:1. Female sexual worker plays a very small percentage (1%). Four hundred and fifteen (87.0%) patients came from private

sector. Drug abuse and behavior of free sex showed important proportion, as can be seen that 286 (59.9%) and 138 (29.1%) patients from this group of behavior risk factor.

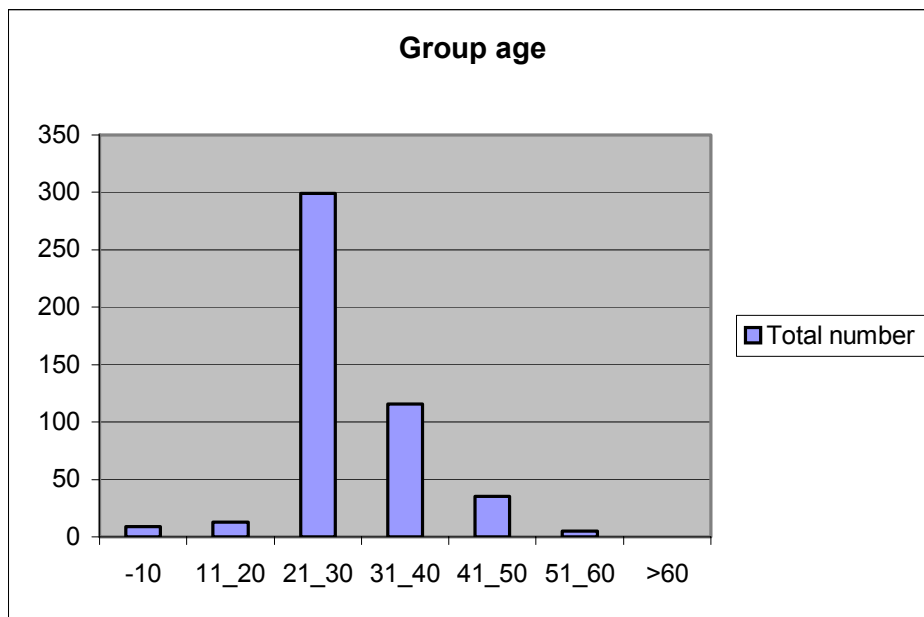


Figure 1. Age distribution of HIV/AIDS patients

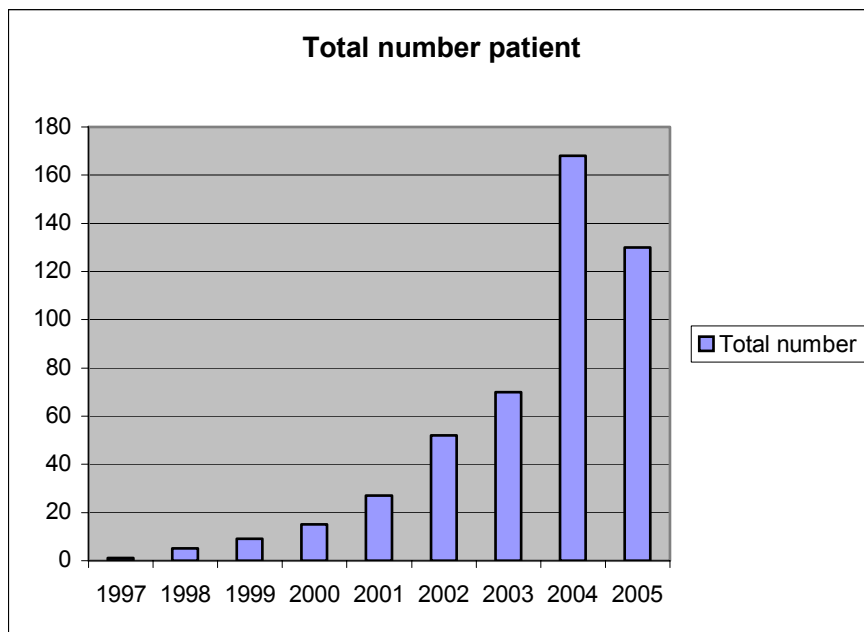


Figure 2. The number of HIV/AIDS patient by years

Homosexual route of infection was suspected in some patients. One case was suspected as perinatal infection: a newborn from mother positive for HIV (Figure 2). The five most frequent of co morbid is infection as diarrhea disease, tuberculosis, sepsis, and candidiasis (Figure 3). A large number of patients died during hospitalization, One hundred eighty six patients were reported died. The

most frequent causes of dead were infection and malnourished. Some patients (26.7%) were sent home because the family asked them. The majority of treatment consisted of supportive – symptomatic therapy. Only small proportion of the patients had been treated with anti-retroviral drug.

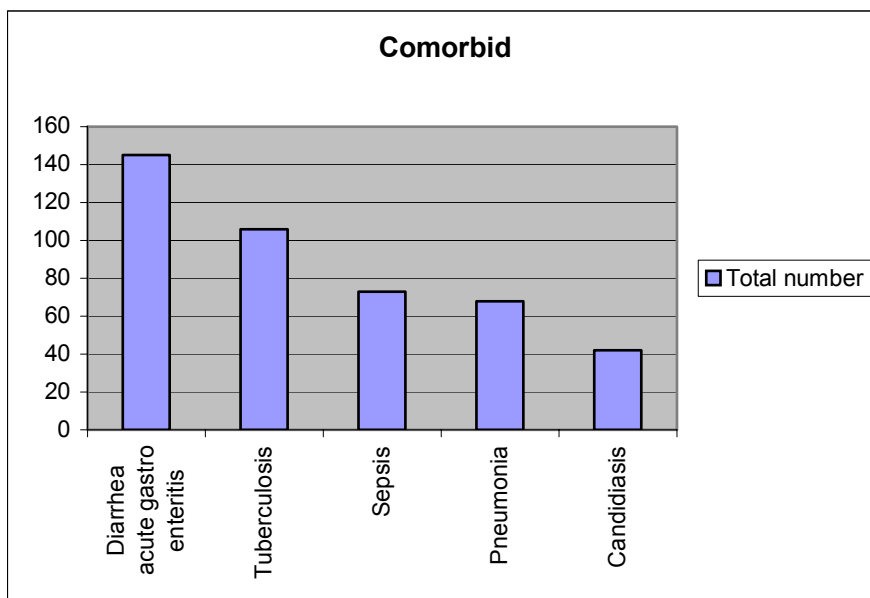


Figure 3. Comorbid in HIV/AIDS patients

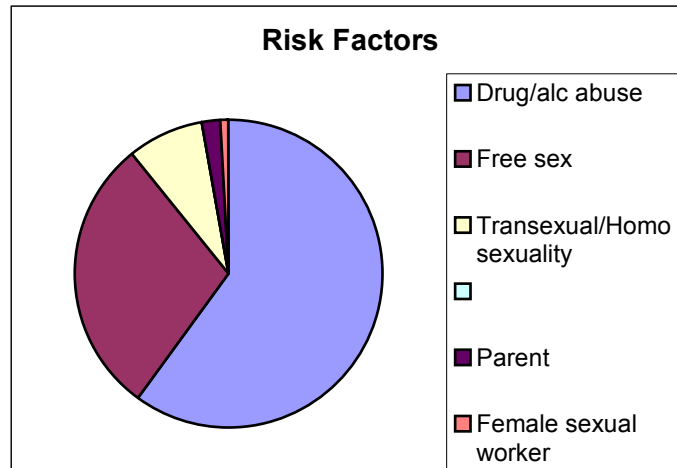


Figure 4. Risk factor in HIV/AIDS patients

DISCUSSION

As a new emerging disease, HIV infection/AIDS was a deadly disease. The disease manifestation at the onset was no specific, with flu like syndrome, followed by organic manifestation, and ended with infection complication and death. In developing countries such as Indonesia and those in Asia-Africa, HIV infection / AIDS posed big problem. In this study the number of the patients increased sharply, from one patient in 1997 to 168 patients in 2004. This pattern of HIV/AIDS patients followed the pattern of disease in underdeveloped or developing countries. From many source of information, Indonesia also had increasing problem (Depkes, 2002; Indonesia comprehensive Report, 2005))

The disease now known as the acquired immunodeficiency syndrome, or AIDS, was first reported 20 years ago in the *Morbidity and Mortality Weekly Report* under the quiet title "*Pneumocystis pneumonia* — Los Angeles." The description was not the lead article; that distinction went to a report of dengue infections in vacationers returning to the United States from the Caribbean. Not even the most pessimistic reader could have anticipated the scope and scale the epidemic would assume two decades later. By December 2000, 21.8 million people worldwide had died of the disease, including more Americans (438,795) than died in World War I and World War II combined. Many important developments were found in the first 20 years of AIDS. Early Years: Free Fall, The Late 1980s: Slow Progress, The Mid-1990s: High Hopes, The Late 1990s: Global Crisis (Sepkowitz, 2001).

The seriousness of the threat of disease in this study was showed by the very sharp increased in the number of registered patient. The mode of infection was similar to the reports from another countries. The high cost of care for HIV/AIDS patients for developing country such as Indonesia would give our country with unbearable cost. Report from the United Kingdom Health Protection Agency for each newly diagnosed HIV patient consumes about £12 500 (\$22 600; Σ18 200) in healthcare costs each year. The lifetime costs of care for the current 50 000 infected individuals in the United Kingdom, with a life expectancy of 20 years, is at least £12.5 bn. UNAIDS recommendation that to support global HIV/AIDS program strong political leadership, better funding, and coordination are needed (Robinson, 2005). Eastern Europe and Asia have the fastest growing HIV/AIDS epidemics in the world, the latest report from UNAIDS says. Epidemics in Eastern Europe and central Asia are fuelled by injecting drug use, and 80% of the new infections occur in people aged under 30 years. Similar with the other country at the initial stage of HIV/AIDS epidemic, homosexual activity was the main route of infection. In this study, this unusual behavior at first appeared in a group of *waria*, a group of person with transsexual development. The infection route usually by oral or anal coitus. Although this deviation of behavior in the community of East Java was not common, it had potentiality as a source of infection because it can spread the diseases to her innocent sex partner. So the *waria* group should be put into priority in anti HIV/AIDS campaign. The number of male patients in this study was found to be outnumbering that of female patients. This preponderance for men was similar with sexual distribution of patient in other countries. Male

tendencies of this disease usually correlated with more mobile, more sexual active live of the patients.

Transmission through sexual contact accounts for 75 to 85 % of the nearly 28 million infections with the human immunodeficiency virus (HIV) that have occurred so far (Royce et al 2002). The probability of infection through sexual contact, although it varies greatly, appears to be lower than that of infection through other routes of exposure. The variability observed among and within routes of HIV exposure depends partly on the viral dose and also on whether the virus is transmitted directly into the blood or onto a mucous membrane. In addition, these differences are influenced by a variety of host factors, including both factors common to all routes of exposure and those unique to sexual transmission.

Injections are one of the most frequently used medical procedures. The World Health Organization (WHO) estimates that 12 billion injections are given annually, 5% of which are administered for immunization and 95% for curative purposes. Unsafe injection practices (especially needle and syringe re-use) are commonplace in low-income country health settings, and place both staff and patients at risk of infection with blood-borne viruses. It is estimated that up to 160,000 human immunodeficiency virus (HIV), 4.7 million hepatitis C and 16 million hepatitis B infections each year are attributable to these practices. The problem is complex and fuelled by a mixture of socio-cultural, economic and structural factors. An appropriate response on the part of international organizations, governments, health administrators, community organizations and health workers, including those who work in the area of HIV/AIDS prevention, has been slow to emerge. This paper reviews the literature relating to unsafe injection practices and the transmission of blood-borne viruses in low-income countries in order to raise awareness of the issue and the consequent need to promote injection safety messages among both consumers and providers of health care services in these countries. The nature and extent of unsafe injection practices, the burden of blood-borne viral illness attributable to unsafe injection practices, and the factors contributing to these practices are summarized, and possible strategies for promoting injection safety discussed (Havlir et al, 1999). Drug abuse seemed as dominant risk factor among the patients admitted to this hospital. This data was similar to those from other countries where HIV/AIDS problem begun to arise. The intravenous infection route and homosexual activity are indicators of the threat of this emerging infectious disease. The role of commercial sexual worker, free-sex habit would accentuate the epidemics of HIV/AIDS. Commercial sex worker population would act as reservoir of the disease, as pig

in epidemiological of Japanese B encephalitis. The difficulty in controlling this population, economics problem, low knowledge of health prevention behavior, high rate of STD and other infectious diseases, will accelerate the epidemics of the disease. Free sex behavior had predominant effect on the spreading of this disease. Although it was found in certain group in the community, these would be an explosive potential. To prevent the problem, it is important to strengthen moral education from children at elementary schools until students in university and at community level; as in religious education. The existence of the disease in these fragile mother-children group showed that the HIV infection /AIDS had been a true threatening problem in the area. They were victim of the wrong person with wrong behavior in wrong situation. The innocent mother would have innocent new offspring but with bad prognosis. The nation would be eliminated from human history if the disease could not be controlled, as showed by some countries in Sub Sahara. Over 600,000 infants worldwide are infected with HIV from their mothers each year. Transmission rates were as high as 35% when there was no intervention and below 5% when antiretroviral treatment and appropriate care were available. Antiretroviral treatment, as long or short course prophylaxis or for treatment of maternal condition, reduces the risk of mother to child transmission. Breast feeding was a major contributing factor to mother to child transmission. Implementing program to prevent mother to child transmission had been difficult and slow in poor countries. Future research should focus on the prevention of postpartum infection and operational issues (McIntyre, 2002). At a certain stage of the disease, there was a threat of infection by exogenous or endogenous microorganism. The lowered body defense mechanism by the HIV infection would make the patients prone to common disease in Indonesia, for instance tuberculosis, diarrhea, or others. In some instance, it made the diseases progress uninhibited, which will deadly. The short source of drug, poverty, low facility of treatment, stigma of the disease will make the prognosis worsened.

What next?

The real threat of the disease, “favorable” of condition for spreading of the HIV/AIDS, the iceberg phenomenon of the disease, all of these characteristic should be noticed by all personnel in private or public health sector. Regulation, health education, learning religion should be stressed in every aspect of live. The Sub Sahara tragedy, a country with highest rate of HIV/AIDS and a bad future of the country, should give a bitter experience that we hope would not happen among us in Indonesia. An example case study came from Vietnam. HIV infection is increasing among sex

workers and injection drug users in southern Vietnam. Vietnamese sex workers returning from Cambodia were an important factor. This phase I growth stage was being accelerated by widespread prostitution and escalating heroin use. Sexually transmitted disease (STD) rates were significant in sex workers but low in the general population. STD epidemics in developing countries might not follow the dynamic topology that was common in developed countries. Vietnam had the potential for significant HIV and STD epidemics but also the capacity to respond to these threats (Rekart, 2002)

Two key elements underlie the reduction in risky sexual behavior achieved in Thailand. One was the recognition, after initial complacency and denial, that AIDS threatens the nation and that studying the extent of the epidemic and publishing the information helped marshal resources and target defenses against it. The other is the acknowledgment that prostitution cannot be eradicated and that it is necessary to work with those involved in an overt, nonjudgmental way to reduce the role of commercial sex in HIV transmission. With infection in China still limited mostly to injection-drug users, sex workers, and their sexual partners in rural border regions of Yunan province, the next battleground of the pandemic would be the vast population of the Middle Kingdom (Wenger and Brown, 1996).

In rich countries antiretroviral treatment in pregnancy had been highly successful in reducing transmission of HIV from mother to child. James McIntyre and Glenda Gray examine whether the success of that treatment and other strategies, such as changing infant feeding practices could be repeated in poor countries, which lack both money and infrastructure. HIV infection and AIDS threaten to reverse the gains made in child survival through the more widespread use of childhood vaccines and improved management of diarrhea and acute respiratory infections. Although the use of antiretroviral prophylaxis has dramatically reduced mother to child transmission of HIV in the world's rich countries, the effects of these interventions on infant and child survival in poor countries remain undocumented. Our knowledge of the mechanisms and timing of transmission, associated risk factors, and successful methods to reduce the risk had improved over the past decade. Indeed we knew how to reduce mother to child transmission of HIV in even the worst affected regions. The World Health Organization has promoted a three pronged approach to reducing mother to child transmission: the prevention of (a) new infections in parents to be, (b) unwanted pregnancies in HIV infected women, and (c) transmission from an HIV infected mother to her infant. The focus to date had been on strategies to prevent transmission to the infant; much

was known about these strategies, but the challenge remains in their implementation.

1. Comprehensive health care for people infected with HIV. Universal access to comprehensive health services is needed to reduce HIV related morbidity and mortality worldwide. The World Health Organization's strategy for chronic disease management in resource poor countries could provide a model for delivering comprehensive services to people infected with HIV who have similar healthcare needs. Developing effective communication and referral systems to closely link primary providers to more specialized HIV services could start to address the need for HIV expertise. Integration and coordination of services could optimize the use of resources and increase access to HIV care. Health services research is needed to define the most effective ways to develop a comprehensive system of HIV care. Partnerships between donors, governments, non-governmental organizations, and local organizations are essential for developing effective and sustainable HIV and AIDS prevention and care programs that will improve long term patient outcomes (Kitahata et al 2002).
2. Need for partnerships. The global epidemic of HIV infection and AIDS continues to spread, and the number of people living with HIV infection continues to increase, with five million new HIV infections and three million deaths from AIDS in 2001. The numbers living with AIDS will probably increase further with effective deployment of HIV care, particularly if prevention efforts are not strengthened concurrently. Partnerships between donors, governments, non-governmental organizations, and local organizations are essential in developing effective and sustainable prevention and care programs. Experience with the WHO care model for chronic diseases may help inform the design of healthcare systems to provide comprehensive care for HIV infection in developing countries, and coordination between these efforts would likely benefit both initiatives. Universal access to comprehensive health services is needed to reduce substantially HIV related morbidity and mortality worldwide. These services must effectively address six needs:
 - a. Voluntary and confidential counseling and testing for HIV infection
 - b. Prevention of HIV transmission, including sexual, parenteral and mother to child transmission
 - c. Prophylaxis against opportunistic infections
 - d. Diagnosis and treatment of HIV related conditions including opportunistic infections and neoplasm

- e. Antiretroviral treatment
 - f. Palliative care.
3. Need for research. Health services research is needed to define the most effective and efficient ways for countries to move from their current state of healthcare provision to developing a comprehensive system of HIV care. This research must address questions such as whether and to what extent standardized approaches to antiretroviral treatment and treatment of opportunistic infections decrease HIV related morbidity and mortality, what approaches to providing patient and family support improve adherence to drug regimens, and how best to integrate education and counseling on prevention at patient and community levels. Studies of adherence in resource poor settings have shown that monitoring programs involving home visits can help patients attain high levels of adherence. Delivering care for other chronic communicable diseases such as tuberculosis shows the need for close follow up, prevention of antimicrobial resistance, and the effectiveness of directly observed treatment and such lessons can help guide the care of people with HIV infection and AIDS.
 4. Health Promotion. The state of health of South-East Asian nations depends as much or more on extra national forces beyond their control—global warming, economic boom and bust—as it does on their own policies and practices. Nonetheless, the political systems of the region, the scope that these allow for community participation, and their attitudes to human rights, are also key determinants of health status. Governments in the region hold different attitudes to the desirability of a monopoly of effective power in government hands, and therefore vary in their commitment to concepts of community empowerment for health promotion and the involvement of non-governmental organizations. Health promotion in these nations is inextricably linked with the creation of social capital. Thailand's example shows the way forward for health promotion in Asia. It is critical for the development and sustainability of a country's health promotion effort that an organizational structure be developed as a foundation for health promotion efforts. Such a structure serves as a focus for health promotion development and supports the building of health promotion capacity. Ideally, such a body is formed as a response to the demands of health groups working in particular areas; if no such pressure exists within a country but there is nonetheless a feeling at the level of government that health promotion shows promise, the initial task of such a body will be to market its services and its concepts to other groups until there is a sufficient demand to give it some influence and some

independence in relation to the government and the bureaucracy. (Moodie, 2000)

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