Opportunistic Infection of HIV-infected/AIDS Patients in Indonesia: Problems and Challenge

Herdiman T Pohan

ABSTRACT

Infectious diseases are one of the biggest health-problem in the world, while HIV/AIDS itself ranks second in mortality. The latest situation shows a remarkable increase of HIV/AIDS cases in Indonesia. About 90,000 to 130,000 people in Indonesia are predicted of being infected with HIV nowadays. HIV may progress to AIDS as patient’s immune status decreases. As well to the condition, opportunistic infections will occur and eventually it may lead to death. An efficient and effective approach in early detection and proper management of opportunistic infections, followed with sufficient anti retroviral administration, may reduce mortality. Other approaches in managing HIV/AIDS and opportunistic infections are needed to support a complete and holistic management for patients with HIV. Full participation from family, medical experts, government and public is strictly a must to overcome this problem.

Key words: HIV, AIDS, opportunistic infections.

INTRODUCTION

Infection is a major global health problem in developed and developing countries. In developing countries, the problem is more complicated and associated with various social and economic problems. Among all infectious diseases, the greatest problem includes infection of respiratory lower tract, HIV/AIDS, diarrhea, tuberculosis and malaria. The world’s HIV/AIDS pandemic is a great challenge in the 21st century.1,2

Actually, the AIDS patient usually died because of opportunistic infection and not by the HIV itself directly. This fact encourages me to explore further about problems of HIV infection.

First, please allow me to quote the utterance of Professor Zubairi Djoerban in his affirmation speech, i.e. he reminded and suggested us to discard the terminology of AIDS patient and substitute it with the terminology of people with AIDS/Odha (orang dengan HIV/AIDS) so the AIDS patient will be treated more humanly, as a subject and not as an object or as patient with certain stigma.1

HIV infection was first recognized in 1981, since then the amount of HIV/AIDS cases in the world keep increasing significantly. During the next two decades the amount of HIV cases in the world is estimated about 40 million people, and only in the next four year, the amount will be twofold. Based on those estimations, the amount of people with AIDS in the world recently was predicted approximately 60 million people.2,3,4 The total mortality rate of HIV/AIDS reported in 2004 was almost about 25 million people.

Indonesia as an archipelago country in South East Asia, also deals with that danger. The WHO data in 2003 indicated that Indonesia is on the 4th rank country, which has the most rapid growth of HIV infection cases. This statement is supported by the report of CDC Directorate General about the amount of HIV/AIDS cases in Indonesia. At the end of 2001, the amount of recorded data was 2575 cases. Based on the last three-month report, until the end of September 2005, the accumulation of those cases increased up to 8,251 cases.5

Indeed, the amount of recorded data is much lesser than the actual amount. It is caused by a poor recording and reporting system in the hospital and other health services. As an estimation, the Department of Health, Republic of Indonesia together with UNAIDS predict the number of Indonesian citizen with HIV infection is ranged between 90,000-130,000 people.3,4,5 However, according to statistical data of National Narcotics Committee, the number of narcotics user with syringe needle at the end or year 2005 is about 572,000 people and 60% of them (approximately 340,000 people) is estimated as HIV positive. This number certainly does

Division of Tropical-Infectious Disease, Departement of Internal Medicine, Faculty of Medicine, University of Indonesia-dr.Cipto Mangunkusumo Hospital, Jakarta
not include the number of HIV patient infected through sexual transmission and HIV maternal-fetal vertical transmission. These facts indicate that Indonesia has been on initial phase of AIDS epidemic.\(^6\)

Recently, HIV/AIDS has been a global problem and it does not exist merely as health problem but it also associated with economic and social problem.\(^7\) Indeed, this fact will have major effect to the country. The advanced physical and human resources development, which has been established for years may be vanished because the country has lost a great number of skilled and educated human resources.\(^1\)

AIDS and The Problem of Opportunistic Infection

Advanced HIV infection is known as AIDS, which is characterized by opportunistic infection. Opportunistic infection is defined as an infection occurs due to decreased immunity system. This infection may occur through new infection by other microorganism (bacteria, fungi, and virus) or through reactivation of latent infection, which in normal condition it is controlled by the immune system.\(^8\)

A HIV-infected patient initially was asymptomatic and later the clinical manifestation appears because of immunologic impairment. Clinical manifestation in AIDS is numerous, from mild clinical manifestation to severe manifestation, which has a fatal potency.

Opportunistic infection has been proven causing death in more than 90% patient with AIDS.\(^9\) According to the data from Directorate General of CDC until late September 2005, the most common opportunistic infection in patient with AIDS recently is candidiasis, followed by tuberculosis and other opportunistic infections such as fungal infection, herpes, toxoplasmosis and CMV.\(^5\) The knowledge about clinical spectrum of AIDS indicates that opportunistic infection is associated with the number of CD4 cells.

**OPPORTUNISTIC INFECTION: TREATMENT AND PREVENTION**

Principally, the treatment of opportunistic infection in patient with AIDS is inseparable from treatment with antiretroviral (ARV) drugs. Both components should be given concomitantly and as a synergy, because one will support the other efficacy. In certain condition, the treatment of opportunistic infection should be given first, and later followed by ARV administration. By treating the opportunistic infection first, it will prevent mortality in people with AIDS.

Dealing with opportunistic infection treatment in people with AIDS is not easy, we often fail. Therefore, we should remember the basic principal of diagnosis and treatment for opportunistic infection in patient with AIDS, so either medical personnel or people with AIDS will not feel desperate. Furthermore, as we have known, “prevention is better than treatment”, therefore the prevention aspect of opportunistic infection should be concerned and become a priority.

**OPPORTUNISTIC INFECTION: THE CURRENT CHALLENGE**

The major challenge in the management of opportunistic infection is initiated by difficulty to diagnose a HIV/AIDS new case early. Ironically, when there is a suspicion of HIV/AIDS or when diagnosis of HIV/AIDS has been established, usually people with AIDS already have clinical manifestation, because those symptoms lead them to the health care unit. If patient with AIDS has experienced this stage, then he/she already had an opportunistic infection and advanced condition, or we may say that his/her condition will be more difficult to be managed.

Generally, opportunistic infection involved multiple pathogens which attack simultaneously. Therefore, we need a strategy for diagnosis and treatment by using antimicrobial, which usually have to be given in combination form. The selection of antimicrobial drugs is preferably adjusted with the diagnosis ad pathogen of causative agent; but in clinical setting, the treatment usually is given empirically because of difficulty and limitation in diagnosis equipment. The other problem is ARV treatment may have a potency of drug interaction with antimicrobial given for treatment of opportunistic infection.

Moreover, the other important problem is drug availability and treatment cost because it will affect the therapeutic achievement. The episode of opportunistic infection treatment is relatively longer because the antimicrobial drugs given are not only for therapy but also function as primary or secondary prophylaxis.\(^10\)

**STIGMA AND DISCRIMINATION: UNPREPARED COMMUNITY AND MEDICAL PERSONNEL**

When International AIDS Conference on Critical Themes for AIDS in South Asia was hold in Bangkok, Thailand in 2004, the issue about stigma and discrimination to people with AIDS and the gender issue still become two largest challenge of AIDS prevention in South Asia\(^11\) Poverty, discrimination, and violence have made women vulnerable to HIV infection, therefore half of 40 million people with HIV are women.\(^12\)

To date, there are two epidemic hazards that keep spreading, the first one is AIDS, and the second is stigma.
and discrimination attached to people with AIDS.\textsuperscript{11,13} When stigma arises, the community and including people with AIDS naturally will try to ignore the fact that they may be infected by HIV. This condition will increase risk of rapid disease development and also the risk of contamination to the other.

The United Nations Population Fund (UNFPA) in 2003 revealed that the main reason for lack of resources against HIV/AIDS is persistence stigma and discrimination in people with AIDS. Violation of human rights drives the development of this disease.\textsuperscript{14} HIV/AIDS does not only affect physical condition in people with AIDS but also their mental condition. HIV/AIDS may cause anxiety and depression, or even dementia and psychosis. Of course, it will affect their quality of life.\textsuperscript{3}

Various refusal acts to treat people with AIDS still occur in hospitals. Unprepared medical assistance in treating opportunistic infection and HIV/AIDS is very important for management quality of people with AIDS. Opportunistic infection which should be treated or minimized had become neglected. Various feeling of unfair treatment, isolation, insult, the ability of medical staff which is not well distributed, and refusal acts to treat people with AIDS will aggravates their health condition.

\textbf{SUGGESTIONS FOR SOLVING PROBLEM: WHAT CAN BE DONE?}

The situational report of UNFPA in 2005 proclaim to the world leaders to fulfill the agreement of equality and equivalent dignity in various life aspects for women and girls of various race, religion, groups, and class. If not, poverty will become a history and the goal of improvement will not be achieved.\textsuperscript{12} The agreement of equality and equivalent dignity poured out in the objective of Millennium Development Goals (MDGs). We expect that it would be able to be implemented in the next 2015. There are 8 important programs that should be implemented; one of them is fight against HIV/AIDS. The effort of fighting against HIV/AIDS and the other diseases is included on the 6th point. It has an objective that the world is able to stop the growth rate and reverse the disease spread in 2015.\textsuperscript{15}

The world’s AIDS day on 1 December is a precious moment that should be appreciated so that it may increase the community awareness and concern about HIV/AIDS elimination. This opportunity may become a trigger for implementation of HIV/AIDS program and it will be implemented continuously.

In order to overcome HIV/AIDS spread and pandemic, prevention effort is the main concern. If HIV infection can be prevented, the opportunistic infection will be automatically prevented. Various efforts of HIV infection suggested by WHO for developing countries, actually has been successfully implemented in Indonesia. Unfortunately, those programs have not been continuously implemented and it has been not well-distributed in all over Indonesia.\textsuperscript{1}

\textbf{EARLY DIAGNOSIS EFFORT AND TREATMENT EVALUATION}

The best method to increase clinical ability and early precaution for HIV/AIDS and opportunistic infection is through education about those topics for medical profession. Specific course about HIV/AIDS in curriculum for undergraduate and postgraduate medical students, post graduate of other biomedical fields is obviously necessary. Moreover, there should be a continuous medical education for medical staff in order to renew knowledge and to get the current information. Such continuous medical education should be carried out by everybody including students, doctors, nurses, and educational staff in university, government and private sectors. For HIV/AIDS, everyone should be able to cooperate and help each other to create a good National Health Service System.

Commitment Declaration of UN General Meetings of HIV/AIDS in 2001 declared that care, support and treatment are the basic component for every human.\textsuperscript{16} In order to support the commitment, Department of Health, Republic of Indonesia in 2003 has published a book of “National Guidance of health care, support and treatment for people with HIV/AIDS. It is intended to provide overall description for the health care personnel and the community, and it is expected to be able to motivate them to carry out the health care, support and treatment for people with HIV/AIDS.\textsuperscript{16}

This guidance book should be properly well distributed to all of health services unit in Indonesia and to be implemented further for management of HIV/AIDS cases. The function of referral hospital for HIV/AIDS is to guide and monitor the management of this case. The availability of diagnostic equipment/simple examination with reasonable cost is extremely required for diagnosis; at least it should be available in all of referral hospital for HIV/AIDS.

A good coordination between National Committee of AIDS Management and the Regional Committee of AIDS Management should be well-developed, and it should involve the referral hospital for HIV/AIDS and the primary health care unit/puskesmas. In order to
facilitate this process, an easy and fast referral/consultation system should be available to facilitate the referral process of management for people with HIV/AIDS.

ACCESS, INTERACTION, DRUG COST AND TREATMENT COMPLIANCE

Availability, access and drug distribution for opportunistic infection and HIV/AIDS have a very important role in successful treatment for people with HIV/AIDS.

The treatment cost is still a complicated problem, but the sincere government commitment to overcome HIV/AIDS problem and opportunistic infection is expected to be able to motivate pharmaceutical industries to increase local/generic drugs production with less expensive price compared to imported drugs. Hence, the treatment cost that should be endured by the people with HIV/AIDS can be minimized.

In monitoring drug distribution the Department of Health is expected to improve coordination with the Health Official Services and Local Government in order to assure a well-distributed drug distribution. Institution of Self-Supporting Community concerning on HIV/AIDS, which has a lot participation in the management of HIV/AIDS cases, such as Pelita Ilmu Foundation, the Working Group on HIV/AIDS and National Movement of Improving Therapeutic Access for HIV/AIDS (GN-MATHA), should be continuously utilized. As a reward of appreciation and a facility to preserve motivation, the government appreciation will be given periodically based on performance of related Institution of Self-Supporting Community in certain period of time.

The development of ARV treatment in Indonesia since 1999 has brought consequences of drug availability for ARV drugs in 25 hospitals in all over Indonesia since July 2004. According to CDC Directorate General, they are trying to add the amount of availability drug up to 75 hospitals. The availability of ARV drugs is correlated to Indonesian sincere concern and commitment to be actively involved in HIV/AIDS management, in keeping with 3 by 5 treatment proclaimed by WHO since April 2004.

THE COMMUNITY PREPARATION: MINIMIZE STIGMA AND DISCRIMINATION

Community participation is one part of important factor for succeeding treatment series for patient with HIV/AIDS. Sharing knowledge about HIV/AIDS should be conducted so that there is no more misunderstanding of this problem in community. Individual counseling support is necessary to overcome this problem.

Furthermore, supporting effort and legal government support is also necessary to overcome the problem of stigma and discrimination. Legal provision concerning human rights of people with HIV/AIDS is extremely essential in order to assure effective response in controlling this epidemic.

PREPARATION OF MEDICAL PERSONNEL AND CENTRALIZATION EFFORTS ON HEALTH CARE SERVICES

Organizing an integrated health care centre for people with AIDS is one of several attempts to enhance the health care services for people with AIDS. This centre will make a more focus and coordinated health care services for them. It should be equipped with adequate health care facilities including comprehensive universal precaution supported by professional medical personnel and adequate medical ward. The term of “HIV/AIDS infection” should be avoided and it should be substitute by the term of “specific infection” in order to prevent ostracized impression.

Continuous medical education and various courses to change behavior and enhancing capability of medical personnel in providing health care services for patient / people with AIDS should be conducted so that every medical personnel has at least a necessary standard capability to provide a health care services as mentioned above.

CONCLUSION

There are some basic requirements for a success HIV/AIDS management and prevention program at national level. First, there is government’s political enthusiasm and leadership to implement the program. Coordination with international institution/organization facilitating the program fund and HIV/AIDS training should be enhanced continuously. Coordination is extremely necessary in order to optimize our limited ability for HIV/AIDS program.

Second, partnership and active participation of the whole community, not only by medical and health care society but also the religion leaders, family, activist, students and private society, should have contribution in every stage of program planning and implementation.

Third, there is a source of fund to perform various activities.

Fourth, a correlation between prevention and supporting effort / treatment and care should be concerned. Fifth, a program proclaimed for social context should be applicable. Sixth, we have to strengthen the community acceptance against people with AIDS and, seventh, those
programs should be completed involving multi sector disciplines.\footnote{1}

Ultimately, we have to understand that HIV/AIDS is not merely a responsibility for doctors and nurses but it is a responsibility for all of us: whatever we are, for any social class, religion or political orientation. AIDS is a problem for all of us and we can not delay its solution. We have to begin management steps directly when we realize the epidemic threat of this disease. If not, everything will be too late.\footnote{1}

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