

Hiv/Aids Control and Study Center

ABSTRACT

Objective: Prevention and treatment of Acquired Immunodeficiency Syndrome, AIDS patient care, and the study of AIDS.

Methodology: The five-year Phase II program of the AIDS Control Center enters its fourth year this year. This year, the center shall be continuing the work pursued in the five-year Phase I program, that is tracing the “Highly active antiretroviral therapy” (HAART) treatment conducted on AIDS patients at the NTU Hospital; including tracing opportunistic infections, clinical research, and new virus strains. This year, under a stable manpower environment, the study plans to continue the active usage of the software and hardware facilities of the center, and bring to fore the features of the center. The program shall mainly revolve around clinical medical services, and on the side, tackle fundamental research and behavioral science studies, enhance services provided to outpatients, and see to the improvement of composite therapy and medicine side effects.

Highlights of the implementation of the five-year Phase II program (Year 4):

1. Organized the “AIDS Research Group in Taiwan” and implemented other related research studies, and health & hygiene education work; details of study findings are shown in Appendix 1.
2. Conducted “An Analysis of the Correlation between the ApoA5 Gene Single Nucleotide Polymorphism (SNP) and the High Blood Lipids Levels of HIV-1 Patients”; details of study findings are shown in Appendix 2.
3. Clinical studies included the “Reverse Transcriptase, Proteinase, and the Application of vpu Gene Sequence in the AIDS Clinical and Molecular Epidemiology, and an Evaluation of the Impacts of Mutations of the HCV virus through HAART” program; details of study findings are shown in Appendix 3.
4. Executed the “Free Anonymous AIDS Medical Consultation Service Program in Designated Hospitals”; details of study findings are shown in Appendix 4.
5. In the matter of opportunistic infection research work, we plan to conduct a study on the “Impacts of a Hepatitis B or D Infection on drug users living with HIV/AIDS in Taiwan”; details of study findings are shown in Appendix 5.
6. The obstetrics and gynecology department conducted a study on the “Methods for Testing and Eliminating the HIV Viruses from the Seminal Fluid of HIV/AIDS Carriers”; details of study findings are shown in Appendix 6.
7. Conducted the “Evaluation of the Efficiency of the Medical Treatment and Care of AIDS

- Patients and the Individualized Health Consultation Case Management System (five-year program)” in line with the enhancement of behavioral science research campaign of the Centers for Disease Control; details of study findings are shown in Appendix 7.
8. On the matter of psychosomatic medicine, the “Psychosomatic Study on the Quality of Sleep among People Living with AIDS” was conducted; details of study findings are shown in Appendix 8.
 9. Conducted a study on the “Impacts of Government Guidance and Counseling Assistance on the Social Support, Depression Status, and Living Standards of Taiwan Drug Users Living with AIDS Undergoing Counseling” in line with the enhancement of behavioral science research campaign of the Centers for Disease Control; details of study findings are shown in Appendix 9.
 10. Conducted periodic localized “AIDS Medical Seminar for Clinical Physicians” to enhance the AIDS information and understanding of nursing professionals and clinical physicians. Held the “2006 Seminar for the Quality Upgrade of National Clinical Treatment and Care of AIDS Patients” and other AIDS related medical seminars for medical professionals.
 11. In line with the health department campaign, the different level of government educational institutions conducted community AIDS health education programs from time to time, in an effort to enhance the AIDS prevention and cure knowledge of the public, and reduce the spread of the disease.
 12. Reinforced the information gathering efforts, treatment and cure experience and technology exchanges with international organizations; encouraged participation in international seminars, research projects, or drug testing programs.
 13. Integrated all the AIDS prevention and control medical resources in the country and established a resource and information exchange network.
 14. Participated in the harm reduction program. Invited foreign experts and academicians actively involved in harm reduction endeavors to take part in the harm reduction seminar and workshop. Through the sharing of experiences and understanding of international developments, we established an effective model for the prevention and control of AIDS among the drug dependent individuals in Taiwan. Hand in hand, we faced the grim problems of drug dependency and AIDS.
 15. Prepared the “AIDS Medicine” for its second edition publication, as well as the publication of outstanding Chinese and English theses published by the HIV/AIDS Study and Control Center during the past years.
 16. Jointly conducted AIDS teaching classes with other medical societies (e.g. pediatrics, dentistry, surgery, orthopedics, and general practitioner); Centers for Disease Control approved and granted credit units for the said classes.

Significant Findings:

According to the latest statistics and reports of the Centers for Disease Control, the population of people living with AIDS in Taiwan has risen to 12,000 persons, and the number is growing by 10 newly infected persons per day. The cause of infection reported in the past AIDS infection reports showed sex to be the leading cause of infection. However, in 2005, new case studies showed that around 60% to 70% of the AIDS patients were drug users. It clearly indicated a rapidly rising trend in the population of drug users living with AIDS. Furthermore, it was noted that the ages of people living with AIDS in the recent years are getting younger. The main factors behind this rapid spread of the AIDS virus may be attributed to the sex liberation among the e-generation; the proliferation of prohibited aphrodisiac drugs, and drug-peddling night spots; the low general consciousness for safe sex; and the rise in the intravenous drug abuser population. Hence, it is apparent that the AIDS problem urgently requires the concern and attention of every sector of our society.

The amended Article 7 of the Acquired Immune Deficiency Syndrome (AIDS) Control Act that took effect on February 5, 2005, placed AIDS testing and treatment under the general government budget. Based on the present HIV infection growth rate, it is estimated that by year 2011, the nation's health insurance expense on AIDS treatment would accumulate beyond NT\$25 billion, and in year 2021, the AIDS medical treatment bill would exceed NT\$100 billion. On the other hand, higher salary losses, social welfare losses, and other social costs would soar several times higher than the national health insurance expenditures. If we were to estimate treatment expenditures based on the actual population of people living with HIV, social losses would be even more astounding. The HIV/AIDS Study and Control Center, in cooperation with the AIDS Society, especially conducted a nationwide "Defining the Guidelines for the Testing and Treatment of AIDS and Related Opportunistic Infection Symptoms" conference. The conference made several proposals, including: (1) the inclusion of all anti-AIDS virus drugs and the testing of the infection status and CD4 lymphocyte levels of HIV/AIDS patients into the general government budget expenses; (2) assurance of an AIDS medical expense and testing expense value point of NT\$1 per point; (3) temporary exclusion of the prevention and treatment expense of AIDS related opportunistic infection from the general government budget subsidy payments; (4) definition of the Guidelines of AIDS Medication and Testing to provide a reference for present and future budget evaluation and approval.

Conclusion and suggestions:

In an effort to upgrade the health education services and efficiency of the HIV/AIDS Study and Control Center, and to cope with the aggravating problems of drug users living with AIDS, this year, we conducted a number of major national level seminars, workshops, and

education & training programs. That is, including:

- (1) The “2006 Seminar for the Quality Upgrade of National Clinical Treatment and Care of AIDS Patients” was held in Lecture Room 101 of the NTU College of Medicine on Apr. 29th. During which, Prof. Jens Dilling Lundgren of the Danish Research on the NRTI Drug Resistance and Clinical Therapy and Prof. Peter Reiss of the National AIDS Therapy Evaluation Center of the Netherlands shared their study findings. A number of doctors specializing in HIV/AIDS care and treatment in the country also presented AIDS treatment related reports. A total of 150 medical professionals from the infectious diseases departments of state-run and private hospitals and medical centers in Taiwan, as well as medical professionals from the disease infection control and health departments of the government participated in the seminar.
- (2) June 8 to 9. The NTU College of Public Health invited an American clinical psychologist, Dr. Patt Denning to speak in the two-day “Harm Reduction Psychotherapy Workshop”. The 175 workshop participants included physicians from the department of infectious diseases of AIDS designated hospitals, AIDS related private institutions, hospital drug rehabilitation department, private drug rehabilitation establishments, rehabilitation clinics, and social workers, nurses, guidance counselors, psychologists, drug rehabilitation department doctors, and psychiatrists who provide direct services to drug users.
- (3) July 8. The NTU College of Public Health opened a class in “Professional Skills in AIDS Therapy for Medical Professionals - Primary Level Education and Training Course”. A total of 355 medical professionals interested in AIDS patient care and treatment (including physicians specializing in infectious diseases, obstetrics and gynecology, pediatrics, family medicine, psychiatry, internal medicine, and surgery departments; as well as pharmacists, nursing professionals, and social workers) attended the class. A certificate of completion was issued to every participant who completed the entire course.
- (4) Nov. 18. In an effort to enhance the AIDS and infection control mutual care system of medical professionals, we open an “AIDS Infection Control Education and Training Course”, a project conducted in cooperation with Chang Hwa Hospital of the Department of Health.
- (5) Nov. 25. In line with the Centers for Disease Control 042 general government budget subsidize project that requires all clinical physicians attending to HIV/AIDS patients to participate in the annual professional skills in AIDS therapy training classes, a “Professional Skills in AIDS Therapy for Medical Professionals - Advanced Level Education and Training Course” will be held at NTU Hospital International Convention Center. This particular training course is opened to medical professionals who are concerned about AIDS infection prevention and protection, as well as the rights and

regulations governing people living with AIDS. We project an enrolment population of 230 participants. Certificates of completion shall be issued to participants who complete the entire course.

The seminars, workshops, and lecture or training courses mentioned in the preceding paragraphs had been well attended. In fact, recent participant populations were several times more than those of previous years. Moreover, participants actively participated in the activities and the seminars or courses produced quite enriching results. We plan to continue holding these types of seminars, workshops, or courses in the future.

Key Words:

Human Immunodeficiency Virus (HIV), Acquired Immunodeficiency Syndrome (AIDS), The HIV/AIDS Control and Study Center , Highly Active Antiretroviral Therapy (HAART), Opportunistic Infections, Taiwan HIV Study Group, HIV infection depending on drugs through intravenous injection.