
Conference Report

Scientists discuss AIDS in Africa

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Over 700 scientists from Europe, Africa, and North and South America gathered in Brussels, Belgium for an International Symposium on African AIDS. The conference, organized by physicians from the University of Brussels and the Paris Pasteur Institute, took place on Nov. 22 and 23 in the Palais des Congrès (Brussels Congress Center). In addition to oral presentations on the epidemiology, virology, and clinical aspects of AIDS in Africa, there were 59 poster presentations dealing with these matters.

The presentations

The opening scientific presentation was given by Dr. Robert Gallo of the National Cancer Institute, U.S.A. He discussed therapeutic approaches to treating AIDS based on interfering with cell to cell transfer of the virus, or attacking or deceiving reverse transcriptase, the enzyme responsible for converting the virus RNA into DNA in the host cell. He then asserted that the virus was spread by sex and blood, and discussed the spectrum of disorders caused by HTLV-III/LAV (the AIDS virus). In addition to AIDS and ARC (AIDS Related Complex), these include neurological (brain disease, which is becoming extremely important in the United States), congenital malformations, bleeding disorders due to destruction of platelets, and various cancers, such as Kaposi's sarcoma and lymphomas. After discussing the biology of infection by the AIDS virus, he then stated that the virus had been found in saliva, semen, tears, urine, blood, and brain and bone marrow.

Heterosexual transmission of AIDS in Africa was heavily emphasized in the next scientific presentation, entitled, "Sexually Transmitted Diseases in Africa" by Dr. H. Nanze of the Fiji Islands, and by most of the other speakers who addressed the question of epidemiology of the disease. This had certain consequences in the course of the meeting, which I shall report in more detail in the next issue, giving details of the oral presentations and a comprehensive overview of the political operations which took place.

After Dr. Nanze's presentation, Dr. Nathan Clumeck of the St. Pierre University Hospital in Brussels, the chief organizer of the conference, gave his presentation, "Overview of the AIDS Epidemic and Its African Connection." After reviewing the data from the United States and Europe, he concluded that AIDS did not exist in the United States before

1978, and that the same evidence exists for European cases among homosexuals, I-V drug users, or hemophiliacs whose infection can be traced to American contacts.

He then discussed a group of cases of heterosexual Africans, living in Europe or referred to Europe for medical care, which represented 12% of the total European cases. These cases came from 21 different African countries, mostly Zaire, Congo, and other Central African nations. Subsequent studies then revealed a high prevalence of AIDS cases and presence of antibody to AIDS virus in Uganda, Rwanda, Zambia, and Uganda, and AIDS is a leading cause of death in specific groups. He then referenced data that suggested strongly that AIDS virus, or a related virus, was present in Africa since the early sixties, particularly a study on serum from children in Burkina Faso, collected in 1963, which showed 2.8% of them to be positive by Western blot test.

After mentioning that 15% to 22% of AIDS cases in Central Africa are children, he discussed potential cofactors in African AIDS. These included environmental factors such as malaria infection, parasites, hepatitis-B, malnutrition, and poor sanitation, as well as possible genetic factors. Clumeck then concluded by calling for national surveillance systems and large sero-epidemiologic studies.

The next presentation by Dr. P. Van de Perre, entitled "HTLV-III/LAV Infection in Central Africa," discussed 31 adults with AIDS diagnosed in Kigali, Rwanda in January and February of 1984, and then reported studies on blood donors, hospital workers, young urban adults, young rural adults, and infants. These studies showed AIDS present in 10.5% of the blood donors, 18% of hospital workers in Kigali, 17.5% in young adults in Kigali, 3% in rural young adults, and 4.5% in rural children. The important factors apparently were: history of sexually transmitted disease, number of medical needle injections, and transfusions. Van de Perre laid heavy stress on the higher rate in urban areas, and among prostitutes, as the basis of a not-so-subtle polemic against cities and for the use of condoms.

This polemic was continued by the next speaker, M. Carael of the Institute for Sociology, University of Brussels, speaking on "Socio-Cultural Factors in Relation to HTLV-III/LAV Transmission in Urban Areas in Central Africa." This was an extensive discussion of the sociology of prostitution in Kigali, Rwanda, and heavily referenced the imme-

diately preceding talk on heterosexual transmission in the urban population.

This was followed by "Sero Epidemiological Studies of HTLV-III/LAV Infections in Southern African Countries" by Dr. R. Sher of Johannesburg, South Africa. Blood tests conducted in these countries revealed that 119 of 661 Zambians tested were positive for antibody to the AIDS virus (18%) and 21 of 87 individuals from Malawi were similarly positive (24%). The remaining southern African countries, including South Africa, had few, if any positives. Dr. Sher expressed his concern that these results did indicate that the virus was beginning to spread into Southern Africa.

The final paper of the epidemiology session was "HTLV-III/LAV Infection in Patients at the Internal Medicine Department of University Clinics of Monto Alba-Kinshasa XI," presented by Dr. Z. Lurhuma of Zaire. This reported on detection of AIDS virus by both antibody studies and virus cultures in patients with a spectrum of diseases associated with AIDS in Africa. These included, in addition to frank AIDS and Kaposi's sarcoma, tuberculosis, malaria, intestinal disorders, malignant lymphomas, and dermatitis. All told, 60 of 117 patients had evidence of infection by AIDS virus.

In the clinical sessions, a presentation on the "Clinical and Biological Profile of African AIDS" described the different presentation of the disease in African patients, as opposed to U.S. and European patients. Weight loss, diarrhea, and itching skin lesions are common in African patients, whereas swollen lymph glands are less common. Pneumocystis pneumonia, the commonest opportunistic infection in CDC-defined AIDS, is relatively uncommon, and infections by parasites, such as toxoplasmosis, and fungus, such as cryptococcus, are more common in Africans.

Kaposi's sarcoma, a tumor of blood vessels, has been endemic in Africa for many years. It is frequently seen in AIDS patients in the United States and Europe. The next two clinical presentations discussed the relation between AIDS and Kaposi's sarcoma in Africa. The conclusions were that the majority of so-called endemic Kaposi's sarcoma cases in Africa were not AIDS-related, but that a more aggressive clinical form, which is AIDS-related, is now spreading in Africa, but not replacing the endemic type.

The next clinical paper, "Cryptococcal Meningitis and AIDS in Kinshasa, Zaire," described a 7.5-fold increase in this fungus disease of the brain between 1978 and 1984 in one referral hospital. These cases were AIDS-associated, and had a much higher fatality rate than earlier cases treated in this hospital.

A good deal of turmoil was created by a paper entitled "HTLV-III/LAV Antigens and Detection of Possible Variants in Lymphocyte Cultures of AIDS Patients and Healthy Carriers from Central Africa and Belgium," in which it was reported that 27% of spouses of AIDS and ARC patients were *virus carriers, who were negative by antibody testing*. Another paper, "HTLV-III/LAV Infections of Humans and

Chimpanzees," provided additional evidence for a prolonged antibody-negative virus-carrier state.

The final paper was "Simian T-Lymphotropic Virus Type III (STLV-III AGM) in African Green Monkeys and Its Relationship to Human Retroviruses in Africa," presented by Dr. Myron Essex of the Harvard School of Public Health. In this presentation, Dr. Essex described a virus present in African green monkeys, which shows strong serologic cross reaction with the AIDS virus. In addition, he reported studies in Western Africa which indicate that many people have antibodies to the monkey virus, but not to the AIDS virus.

The politics

The political undertone of the conference was set by a delegation of a dozen Yugoslavs, and a half-dozen Poles, who, working under the supervision of two Russians, were spreading the KGB line that the CIA developed AIDS as a biowarfare weapon, and that the Western countries were using the conference to blame the disease on the Africans. At the same time, some of the Belgian doctors were presenting such formulations as choosing between screening blood transfusions for AIDS virus or hepatitis-B virus, or finding some way to safely re-use disposable needles. The conference had started out with rumors that the Africans would stage a boycott, but this did not materialize. On the last day, the Africans met as a group and produced the following document.

The recommendation of the African participants

1. a) During this symposium, papers presented did not show any conclusive evidence that AIDS originated in Africa. It is a global problem and *not* an African problem alone. Therefore, efforts directed in African association with AIDS do not contribute to future control programmes.
- b) There is no evidence of any relationship between AIDS and endemic Kaposi sarcoma in Africa.
2. The group considered important aspects related to AIDS management in Africa. These include:
 - a) Knowledge of the epidemiology of the disease.
 - b) Clinical definition of AIDS with characteristic features to Africans.
 - c) Development of simple and inexpensive laboratory procedures for diagnosis.
 - d) Combined actions in control measures.
3. Recognize that heterosexual promiscuity with multiple sexual partners is one of the high-risk factors for AIDS and therefore the public should be informed.
4. Intensified research and training efforts need to be made at the regional, subregional, and national levels.
5. That these controlled efforts should be aided and funded by active participation of WHO, OAU, major donor agencies, and national STD control committees.

To be continued.