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SPECIAL
PROGRAMME
ON **AIDS**

REPORT OF THE
THIRD MEETING OF
THE WHO COLLABORATING
CENTRES ON AIDS

WASHINGTON DC
6 JUNE 1987



WORLD
HEALTH
ORGANIZATION



THIRD MEETING OF THE WHO COLLABORATING
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1. INTRODUCTION

The WHO Collaborating Centres on AIDS met in Geneva in September and in December 1985. A third meeting was called on 6 June 1987 to coincide with the III International Conference on AIDS in Washington, D.C. (USA) from 1 - 5 June 1987.

2. OBJECTIVES

The third meeting of the WHO Collaborating Centres had three objectives:

- i) to update the Collaborating Centres on the current status of WHO's Special Programme on AIDS;
- ii) to determine the current position of Collaborating Centres on specific technical questions of international concern; and
- iii) to determine how the role of the Collaborating Centres could be strengthened by establishing priorities for research and training issues and interaction among Collaborating Centres.

3. THE SPECIAL PROGRAMME ON AIDS

The Special Programme on AIDS (SPA) was formally established on 1 February 1987. SPA has developed a global strategy for AIDS prevention and control (WHO/SPA/GEN/87.1), has received pledges of over US\$ 34 million from 12 countries and UNDP for activities in 1987, and has received the unanimous support of the Fortieth World Health Assembly (WHA 40.26), as well as a message of strong support from the "Venice Summit".

SPA activities include support to national AIDS programmes (national programme support unit) and global leadership, cooperation and collaboration (health promotion unit, surveillance forecasting and impact assessment unit, research and development unit).

A unit for administrative service is attached to the Director's office. Pending the establishment and filling of posts in the programme, activities are ensured by staff seconded within WHO or from countries or by staff recruited as short-term consultants or temporary advisers. It is estimated that by the end of 1987, 20 professional staff will be working at the headquarters level, and 12 to 16 professionals at the regional level.

4. ACTIVITIES IN THE FOUR PROGRAMME UNITS OF SPA

The following updates the Progress Report No. 1 (WHO/SPA/GEN/87.2) issued in April 1987:

a) National Programme Support

Activities have mainly, but not exclusively, been directed towards support of countries in the African and American regions. The workplan of the programme follows that outlined in the progress report. An initial visit will have been completed in 41 countries by mid-July and the same number of countries will then have established short-term plans while 14 will have completed medium-term (5 years) plans. The process reached the stage of a donors' country meeting in Uganda in May 1987. Funds were pledged for the full operation of Uganda's national AIDS programme for one year, and to a large extent also for the following four years of the medium-term plan. Similar meetings of donors will be held in Ethiopia, Rwanda and Tanzania during July 1987.

Other SPA activities in support of national programmes include workshops on HIV laboratory diagnosis, and consultants' advice on blood transfusion, laboratory strengthening, epidemiology and health education. In ten workshops held from 1 January 1987 to 31 May 1987, nearly 200 laboratory staff were trained. Fourteen further workshops will be held during 1987 in the African, American, Eastern Mediterranean and European regions, and possibly also in the South East Asian Region. The scope of SPA's support to countries will be expanded to include other areas of training and education, especially case management and epidemiological surveillance.

b) Research and Development

An advisory group on behavioural research met to establish priority issues in social and behavioural areas for the next several years. The network of Collaborating Centres on AIDS needs to be strengthened to include behavioural and social aspects of HIV infection. A steering committee will be established to guide research in the areas of sexual behaviour, counselling and social impact of AIDS and HIV infection.

c) Surveillance Forecasting and Impact Assessment

The first priority is to develop methodologies for serological surveys to assure accurate and comparable information on seroprevalence. A protocol for such studies is being developed and will be reviewed by a group of experts in late June 1987. Other priorities include: assessing accuracy and completeness of reported data on AIDS and existing seroprevalence studies; determining the direct and indirect costs of AIDS in developing countries; evaluating the demographic impact of AIDS; and participating in studies to model the HIV epidemic.

d) Health Promotion

Following the meeting on educational strategies in June 1986, a manual for a comprehensive strategy intended for national use was drafted. It will be reviewed in a meeting in July 1987. The public information campaign started with the launching of the WHO AIDS poster on 27 May, and a pamphlet with basic facts on AIDS and HIV infection, which were distributed during the Third International AIDS Conference.

A number of messages on specific issues addressing very precise but sometimes controversial issues will be formulated and disseminated. The Collaborating Centres on AIDS have an important role in advising on issues anticipated to raise public concern and discussion. Informal meetings of small groups of directors from WHO Collaborating Centres on AIDS representing the whole network could be arranged quickly. To have maximum impact, the consensus statements should be published widely: for example, in medical and scientific journals, in addition to the traditional WHO outlets.

Contacts have been established with other UN agencies, EEC and non-governmental agencies to strengthen collaboration in fields such as immunization, country projects, education, family planning, and international research.

5. Special technical questions of international concern

a) Case definitions of AIDS

The CDC case definition of AIDS has been revised: (1) to allow for reporting of cases of severe dementia and wasting syndrome without opportunistic infections or cancer; (2) to include laboratory tests for HIV antibody or antigen; and (3) to permit the diagnosis of a presumptive case of AIDS if standardized tests were not carried out. The new case definition will be published in MMWR shortly and will be used in the United States of America from September 1987.

Since the former CDC case definition was adopted unmodified as the CDC/WHO case definition it is necessary to consider WHO's position on the revised definition. Moreover,

the case definition, based on clinical criteria established at the workshop in Bangui in 1985 has now been evaluated in several studies in Africa. The results of these studies should also be considered if the clinical (Bangui) definition is to be revised. As an initial step, the use of the present CDC/WHO and clinical case definitions by countries will be assessed by SPA. The Collaborating Centres on AIDS will review the revised CDC case definition and communicate their recommendations on the suitability of this new definition for WHO.

b) Other matters

Three consensus statements were prepared during the meeting and adopted:

1. Transmission of HIV (Annex I)
2. HIV infection and health workers (Annex II)
3. Present status and future developments in laboratory testing for HIV (Annex III)

In addition, draft texts on criteria for HIV screening and advice to international travellers were distributed for comment.

6. FUTURE ROLES OF THE WHO COLLABORATING CENTRES ON AIDS

Many of the WHO Collaborating Centres on AIDS are actively working with SPA by training laboratory workers, preparing documents, evaluating test kits, and preparing and standardizing reagents and reference material. Technical support has been drawn from several centres to conduct epidemiological assessments in countries in Africa and formulate short-term plans of action. There is scope for expanding their role to include standardization of laboratory techniques, and possibly translation and adaption of documents and health education and social/behavioural research.

The communication between SPA and the WHO Collaborating Centres on AIDS needs to be improved. It was recommended that better use be made of existing mechanisms for information exchange, including the Weekly Epidemiological Record. A mechanism for regular updates of planned meetings and other events within the programme should also be established and such information communicated to all centres. This would also help coordinate research efforts and meetings, and help avoid duplication.

Important findings, which might create media interest or which otherwise need to be communicated rapidly to all centres, should be sent to SPA for further relaying.

7. FUTURE ACTIONS

a) Comments on the draft text 'Criteria for HIV screening' will be sent by the Collaborating Centres to the centre in Antwerp where the final text will be consolidated and forwarded to SPA before 13 June;

b) Collaborating Centres will send their comments on the revised CDC case definition directly to SPA before 6 July;

c) A meeting of Collaborating Centres was recommended in conjunction with the Fourth International AIDS Conference in Stockholm in June 1988;

d) SPA will establish closer and more regular communication with the network of Collaborating Centres on AIDS;

- e) SPA will publish and distribute the consensus statements adopted during the meeting;
- f) Prior to next year's meeting, the Collaborating Centres on AIDS will consider ways and means of lending further support to national, regional and global SPA activities, including training and availability of human resources.

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ANNEX 1

CONSENSUS STATEMENT

TRANSMISSION OF HIV

Epidemiological studies in Europe, the Americas, Africa and Australia repeatedly have documented only three modes of HIV transmission:

- 1) Sexual intercourse (heterosexual or homosexual);
- 2) Contact with blood, blood products, or donated organs and semen. The vast majority of contacts with blood involves transfusion of unscreened blood or the use of unsterilized syringes and needles by IV drug abusers or in other settings;
- 3) Mother to child - mostly before, and perhaps during or shortly after, birth (perinatal transmission).

There is no evidence to suggest that HIV can be transmitted by the respiratory or enteric routes, or by casual, person-to-person contact in any setting, including household, social, work, school or prison settings.

Epidemiological and laboratory studies have established that, of the "body fluids", transmission seems limited to blood, semen, and vaginal/cervical secretions. Kissing has not been documented to pose a risk of HIV transmission. While unproven, some theoretical risk from vigorous "wet" kissing (deep kissing or tongue kissing) may exist.

There is no evidence to suggest that HIV transmission involves insects, food, water, toilets, swimming pools, sweat, tears, shared eating and drinking utensils, or other items such as second-hand clothing or telephones.

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ANNEX 2

CONSENSUS STATEMENT

HIV INFECTION AND HEALTH WORKERS

Reports of HIV infection of a small number of health workers have emphasized the need to adhere to existing guidelines for the prevention of blood-borne infections. Such existing guidelines refer to situations in which there is a possibility of exposure to blood or any body fluid, regardless of their source.

Available information indicates that health workers are normally at very low occupational risk of HIV infection. This very low risk can be further minimized if existing guidelines for avoiding any blood-borne infection are rigorously implemented and strictly enforced.

Routine HIV screening of patients to protect health workers should not be implemented without careful and detailed consideration of all of the HIV screening criteria developed by the World Health Organization.

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CONSENSUS STATEMENT

PRESENT STATUS AND FUTURE DEVELOPMENTS IN
LABORATORY TESTING FOR HIV

1. Introduction

The following types of tests are available or under development:

- measurement of antibodies against viral antigens;
- measurement of neutralizing antibodies;
- detection of viral antigens;
- detection of viral RNA or cDNA;
- virus isolation and characterization of virus isolates from various geographical regions.

2. Measurement of antibodies against viral antigens (anti-HIV)

Determination of anti-HIV should consist of a primary screening test to be followed by confirmation with a second supplemental assay based on a different test principle. Current antigen-antibody binding assays have a high degree of specificity and sensitivity. Second generation tests using recombinant antigens, or future use of synthetic peptides, promise to improve sensitivity and particularly specificity. Generally, these test systems measure antibodies of the IgG class, but test systems measuring specific IgA- and IgM-antibodies are needed also and should be developed further.

Although more specific ELISA or other antigen-binding assays may in future make supplemental (confirmatory) tests unnecessary, reactivities indicating presence of anti-HIV obtained with any of the currently available screening tests should be confirmed by another test method. Western-blot (immuno-blot) are the most widely used and reliable tests, but radioimmunoprecipitation (RIPA) or immunofluorescence may be used. The latter should, however, only be used by laboratories with extensive experience with this test system.

Test systems should be developed which detect antibodies to HIV-1 and HIV-2 either together in one test or individually. The antigenic specificities of HIV isolates from different parts of the world should be continuously characterized to assure that the diagnostic method covers the antigens of the viruses prevalent in a given region. Simplified, less expensive tests should be developed further. These test systems should have at least the same sensitivity as currently used test systems, but a slight decrease in specificity might be acceptable.

Annex 3

3. Measurement of Neutralizing Antibodies

Neutralization tests are used for research purposes and for evaluation of antibody responses following vaccination. The biological relevance of the antibodies measured by the various test systems needs further study, and all test systems must be standardized so that results obtained in different laboratories can be compared.

4. Detection of Viral Antigens

The tests available today need further clinical and technical evaluation. They are not recommended for routine diagnosis or screening of blood donors. Increase of HIV p24 antigen in serum has been associated with progression of disease but this does not occur in all cases. Decrease of HIV p24 in serum has been taken as an indication of a decrease of HIV replication and is used for evaluation of the effectiveness of antiviral therapy. These preliminary observations require additional studies. Absence of detectable antigen does not guarantee lack of infectiousness of a given serum, semen, body fluid or organ.

5. Detection of Viral RNA or cDNA

Methods for detection of viral RNA or cDNA in routine diagnostic laboratories are under development and may offer the most sensitive test systems for direct demonstration of HIV in fluids or tissues.

6. Virus Isolation and Characterization of Virus Isolates from Various Geographical Regions

Techniques are still cumbersome and time-consuming but have been considerably improved, so that an almost 100 per cent isolation rate can be achieved if multiple blood samples are examined. An optimized standard protocol should be worked out and made available to laboratories using this technique for basic or clinical studies. Virus isolates should be characterized to monitor the emergence of variant or new antigenic types.

7. Standardization and Reference Reagents

All of the above-mentioned test systems need further standardization. International antibody units should be established and appropriate reference reagents (both antigens and antibodies) should be prepared. The WHO Collaborating Centres on AIDS should play an active role in the preparation and evaluation of these reference reagents and WHO standards should eventually be established. WHO should also establish a repository of HIV-1 and HIV-2 as well as HIV isolates. In addition, it would be desirable to prepare a list of available clones of human and simian retroviruses.

8. HTLV-I and HTLV-II

The prevalence of HTLV-I and HTLV-II in various population groups should be monitored, but there seems to be no current need for general screening of blood or organ donors for HTLV-I and HTLV-II.

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Annex 4

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