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## On the Concept of Health and Disease Description and Explanation of the Health Situation

In the last 10 years the controversy over the concept of health and disease has been revived in some Latin American circles. It appears to us that three fundamental facts have contributed to this:

a. At the World Health Assembly of 1977 (WHA Resolution 30.43) <sup>(1)</sup>, the representatives of the Member Governments agreed that their main social goal and that of WHO should be to have all the citizens of the world reach a level of health by the year 2000 that allows them to live a socially and economically productive life (HFA 2000), and in the subsequent Declaration of Alma Ata (1978) it was emphasized, with the commitment of the governments of almost all the countries of the world, that primary health care was the road to these objectives, as part of an overall development with a spirit of social justice <sup>(2)</sup>. In 1980 in the XXVII Directing Council of PAHO, the Governments in the Region of the Americas agreed on Regional Strategies and Objectives <sup>(3)</sup>, establishing precise goals in terms of overall mortality and life expectancy at birth as well as total coverage of immunization, drinking water, disposal of excreta, and provision of medical services for all population groups. At this last opportu-

ity approval was also given for primary care to be conceived as a strategy of transformation of the health care model in relation to the criteria for efficiency, effectiveness, and equity and as the set of intersectoral actions oriented to the transformation of living conditions, especially of the "marginal" population groups.

This set of definitions and commitments, universally accepted as normative, has posed, to those who work in the health field, limitations on the theoretical and methodological bases traditionally utilized and has shown the need for new developments, that make it possible to treat the health and disease problem as an expression of the living conditions of different population groups and to understand the relationships between these and the most general social processes <sup>(4)</sup>.

b. One of the consequences of the economic crisis and the foreign debt of the Latin American countries has been a deterioration of the living conditions of most of the population groups and, at the same time, a trend toward a substantial reduction in the per capita expenditure on health and on social projects by the official sector <sup>(5)</sup> with the consequent progressive transfer of the costs of the services and

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## Working Group on AIDS Case Definition

### Introduction

In 1981, following the recognition of a new syndrome, the acquired immunodeficiency syndrome (AIDS), the United States Centers for Disease Control (CDC) in Atlanta, developed a working definition for this syndrome in adults with the purpose of monitoring the epidemic <sup>(1)</sup>. In 1985, the World Health Organization (WHO) adopted this definition for worldwide use <sup>(2)</sup>. WHO also proposed an alternative definition of AIDS based on clinical

criteria with the purpose of facilitating the recognition of this syndrome and the reporting of cases when laboratory facilities are not available <sup>(3)</sup>.

Although the WHO clinical AIDS case definition has been of value in many countries of sub-Saharan Africa, there are justifications for the development of another auxiliary adult AIDS case definition in Latin America and the Caribbean. Among the main reasons are: 1) the increasing importance of specific endemic infections (e.g. tuberculosis) in the clinical presentation of AIDS cases in Latin America and

the Caribbean, 2) the availability of laboratory capacity to confirm clinical findings of HIV infection by antibody testing using ELISA, immunofluorescent or Western blot methods, and 3) the fact that the WHO/CDC case definition for AIDS cannot be applied widely among countries of the Region of the Americas, because diagnostic methods requiring culture, histology, cytology or proper radiographic imaging are not routinely available.

## Methods

The Pan American Health Organization (PAHO), Regional Office of the WHO, and the WHO/Global Program on AIDS convened a working group of experts from seven countries (Argentina, Brazil, Canada, Honduras, Mexico, United States, and Venezuela), with the following objectives:

- 1 To review the application of the existing adult AIDS case definition currently in use<sup>(3,4)</sup> in countries of the Americas, and
- 2 To propose a case definition of AIDS more suitable for use in the Americas that would supplement the existing standard one<sup>(4)</sup>.

The working group met in Caracas, Venezuela from 20 through 22 February 1989, and drafted a preliminary case definition based on empirical data<sup>(5,6)</sup> and the collective professional experience of the participants.

## Results

The group of experts proposed an AIDS case definition requiring a positive serologic test for HIV, plus the presence of a combination of one or

**Table 1. Working group on AIDS case definition.**

<i>Symptom/sign/diagnosis</i>	<i>Point</i>
Kaposi's Sarcoma	
Disseminated/extrapulmonary non-cavitary pulmonary tuberculosis	
B + Oral candidiasis hairy leukoplakia	3
+ Pulmonary tuberculosis with cavitation or unspecified	3
+ Herpes zoster ≤60 years age	3
+ Central Nervous System dysfunction	3
C + Diarrhea ≥1 month	2
+ Fever ≥1 month	2
+ Cachexia or >10% weight loss	2
+ Asthenia ≥1 month	2
+ Persistent dermatitis	2
+ Anemia, lymphopenia, and/or thrombocytopenia	2
+ Interstitial infiltrates, diffuse and/or bilateral	2
+ Persistent cough	2
<b>Total</b>	<b>≥6</b>

*Plus:* Positive HIV serology.

*Exclusions:* Cancer, chemotherapy, or steroid treatment; or when the listed conditions result from known causes not associated with HIV infection.

**Footnotes to Groups A, B, and C**

<i>Tuberculosis</i>	in the absence of chest x-ray, the diagnosis of pulmonary tuberculosis should be considered a Group B condition.
<i>Central nervous system dysfunction</i>	indicated by (1) mental confusion (e.g., temporal or spatial disorientation); (2) dementia; (3) decreased level of consciousness (e.g., stupor or coma); (4) convulsions; (5) meningitis or encephalitis, and/or (6) abnormal cerebellar tests (e.g., inability to tap the index finger ≥ 20 times in 5 seconds).
<i>Oral candidiasis</i>	may be diagnosed by the macroscopic appearance on oropharyngeal mucosa of characteristic removable white patches or plaques on an erythematous base.
<i>Hairy leukoplakia</i>	non-removable white plaques on the tongue.
<i>Diarrhea</i>	two or more loose or liquid stools per day, constantly or intermittently, for one month or longer.
<i>Cachexia or weight loss</i>	clinical emaciation, or weight loss greater than 10% of normal weight for the patient (when the patient's normal weight is unknown, the average weight of the population of same sex and height as the patient may be utilized for the calculation).
<i>Hematologic abnormalities</i>	anemia is defined as hematocrit <30% in males and <25% in females or hemoglobin <11g/dl in males and <10g/dl in females; absolute lymphopenia <1,000/ul (mm <sup>3</sup> ); thrombocytopenia <100,000/ul (mm <sup>3</sup> ). Only 1 condition satisfied (textual form) and only 2 points given (scoring system) for any one or more of these hematologic abnormalities.

more easy-to-diagnose clinical manifestations associated with the advanced stages of HIV infection (Table 1). The manifestations are grouped in three ranks (A, B, and C) in order of decreasing relative weight. Conditions in group A are each assigned six points, in group B three points, and in group C two points. Adult patients 13 years of age or older are classified as having AIDS if they are HIV-positive and have six or more points, or if they happen to meet the more stringent criteria of the existing standard definition of AIDS in adults<sup>(4)</sup>.

## Discussion

PAHO initiated its AIDS case epidemiological surveillance system in 1983. Compliance with the revised case definition (WHO/CDC, 1987) is promoted within the Region of the Americas to report an AIDS case to PAHO. The consultation in Caracas, Venezuela provided an opportunity to develop an auxiliary definition more appropriate for reporting of AIDS cases in Latin America and the Caribbean. This auxiliary definition is intended to reflect the diversity of clinical findings and technical resources in Latin America and the Caribbean and will be useful in settings where the WHO/CDC AIDS case definition cannot be applied<sup>(4)</sup> to report AIDS cases.

Following this meeting, PAHO informed all Member Countries of the draft definition and solicited comments on its suitability and compatibility with their national health care patterns as well as suggestions for improvement. As for example, it was suggested that lymphadenopathy  $\geq 1\text{cm}$   $\geq 2$  non-inguinal sites  $\geq 1$  month be added to group C, and that persistent cough or any form of pneumonia (except TB) be substituted for interstitial infiltrates and persistent cough. The Ministry of Health of

Brazil and CDC have also suggested revisions to the point system and have developed a protocol for clinical validation of this new definition.

In conclusion, knowing the importance of improving the quality of AIDS case reporting, further studies that will evaluate and validate the auxiliary definition proposed by the Working Group in Caracas, Venezuela are needed. PAHO will facilitate technical cooperation for such validation studies and the collection of other relevant information to establish an operational auxiliary AIDS case definition.

## References

- <sup>(1)</sup> Centers for Disease Control. Update on acquired immune deficiency syndrome (AIDS)—United States. *MMWR* 31:507-514, 1982.
- <sup>(2)</sup> World Health Organization. Acquired immunodeficiency syndrome (AIDS), WHO/CDC case definition for AIDS. *WER* 61(10): 69-72, 1986.
- <sup>(3)</sup> World Health Organization. Provisional WHO clinical case definition for AIDS. *WER* 61(10) 72-73, 1986.
- <sup>(4)</sup> World Health Organization. Acquired immunodeficiency syndrome (AIDS), 1987 revision of CDC/WHO case definition for AIDS. *WER* 63(1/2) 1-7, 1988.
- <sup>(5)</sup> Schechter, MT, Craib, KJP, Think, NL, et al. Progression to AIDS and predictors of AIDS in seroprevalent and seroincident cohorts of homosexual men. *AIDS* 3:347-353, 1989.
- <sup>(6)</sup> Pérez, MA, Ismael, C, Quinhões, EP, et al. Theory and method to develop a revised case definition of AIDS from empirical clinical data. In: *Abstracts, V International Conference on AIDS, Montréal, Canada, 4-9 June 1989*. Abstract no. WGP 14, p. 1012, 1989.