



CONSULTATION ON THE CLASSIFICATION
OF HIV INFECTIONS FOR ICD-10

Geneva, 31 October - 2 November 1988



REPORT

1. Introduction

- 1.1 Participants were welcomed by Dr K. Uemura, Director, Division of Epidemiological Surveillance and Health Situation and Trend Assessment who informed the meeting about preparations for the publication and implementation of ICD-10. He noted that the classification of Human immunodeficiency virus [HIV] infections had been one of a number of items left for settlement to a later time because of very rapid developments in the biology and epidemiology of the disease.
- 1.2 Mr R. Israel was appointed as chairman and Dr F. Morrison as rapporteur.
- 1.3.1 A brief summary was provided of the work that had been done on ICD-10 with special mention of the different sections of the classification where HIV infections might appear, as well as the interrelationships between the various sections.
- 1.3.2 In deciding on the classification of any condition or group of conditions it was important to bear in mind the priority of assignment at the chapter level of the ICD. For the benefit of participants, the secretariat explained that chapters were divided into those labelled "special groups" and those related to "body systems". Priority of assignment was given to the "special groups" chapters and within the "special groups" chapters a further priority was given to Pregnancy, childbirth and the puerperium and to Certain conditions originating in the perinatal period. This meant that HIV infection complicating pregnancy or acquired in utero would need to be classified separately from other HIV infections.
- 1.3.3 In addition to the priority of chapters, it was also important to bear in mind that:
- the ICD is used for both mortality and morbidity statistics
 - rules for the single cause coding of mortality are based on the concept of the underlying cause of death
 - in single cause morbidity coding the emphasis is on the main condition treated
 - rules for morbidity and mortality may be different
- 1.4 A background paper prepared by Dr Morrison, at the request of the Surveillance, Forecasting and Impact Assessment Unit of the WHO Global Programme on AIDS, summarized international experience to date in the definition, classification and coding of Acquired Immunodeficiency Syndrome (AIDS) since the first cases were reported in 1981.

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Les opinions exprimées dans les documents par des auteurs cités nommément n'engagent que lesdits auteurs.

1.5 Additional material to assist the discussions was provide by documents detailing preliminary experience with a special United States classification of HIV infections and a slightly modified version of that classification in use in France. A further basis was provided by a proposal submitted by the WHO Collaborating Center for Classification of Diseases for North America for a classification of "Diseases due to infection by human immunodeficiency virus and other retroviruses".

1.6 The United States data were derived from the application of the special HIV infection codes 042-044 and their fourth-digit subcategories. This included estimates of 1987 mortality based on a 10 per cent sample of deaths by age and sex. In addition details were provided for 1987 of the number of hospital discharges from a sample of short-stay hospitals of patients with a diagnosis of HIV infection.

1.7 A presentation was also given of results obtained in France from hospital discharges prepared by 25 dedicated hospitals which see 85 to 90 per cent of AIDS patients. In all, 1114 records were included.

2. Nomenclature

2.1 There was general agreement that there should be no attempt to make a distinction between AIDS and ARC as these were manifestations of a single, underlying spectrum of disease. Also, the terminology "viral immunodeficiency" was not entirely appropriate since some conditions such as progressive multifocal leukoencephalopathy were due to primary infection, while other conditions may be due to direct invasion of tissue.

2.2 In order to distinguish between symptomatic and asymptomatic HIV infection it was agreed that the term "HIV disease" should be used to designate HIV infection with symptoms.

3. Taxonomic approach for ICD-10

3.1.1 The three major aspects of HIV infection which might eventually serve as a basis for classification were:

- infection, yes or no
- immunodeficiency, yes or no
- clinical manifestations, yes or no

3.1.2 On this basis the three groups that were considered were:

- infected individuals without symptoms but with abnormal findings
- infected individuals with symptoms but not sufficient to be called AIDS
- infected individuals with symptoms severe enough to be called AIDS

3.1.3 This scheme was generally accepted as descriptive of the disease categories the codes should describe

3.2.1 A major consideration in deciding the content of the categories was the information that would be available from those countries that coded only to the three-character level.

- 3.2.2 In those countries that do multiple condition coding and analysis, the general information in subcategories at the fourth-character level would mean no loss of information as these countries could identify the specific disease or complication either by means of a supplementary code or by use of a fifth-character.
- 3.3 The proposal from the North American Center included HIV infection with malignant neoplasm at the fourth-character level. As a result of concerns expressed by cancer epidemiologists that information on the presence of the neoplasm would be lost when coding or tabulation was only done at the three-character level, it was decided that a separate three-character category for HIV disease with malignant neoplasms was required. A number of subcategories relating to malignant lymphoid, haematopoietic and lymphoreticular neoplasms were also agreed but participants with access to relevant data sets were asked to investigate whether these were appropriate or whether there were other sites that might be identified at the fourth-character level. Results of these studies should reach the secretariat by 16 December 1988.
- 3.4 Following an in-depth discussion of the clinical and taxonomic issues, a subcommittee was designated to develop detailed proposals for consideration by the full group. After discussion and amendment of the subcommittee's suggestions the Consultation proposed that five three-character categories should be created in the chapter of Selected infectious and parasitic diseases as follows:
- Human immunodeficiency virus [HIV] disease with infectious and parasitic diseases
 - Human immunodeficiency virus [HIV] disease with malignant neoplasms
 - Human immunodeficiency virus [HIV] disease with certain other specified diseases
 - Human immunodeficiency virus [HIV] disease with other conditions
 - Human immunodeficiency virus [HIV] disease, unspecified
- 3.5.1 Given the basic taxonomic principles of the ICD it was also necessary to provide a classification for HIV infection complicating pregnancy and HIV infection acquired perinatally.
- 3.5.2 For HIV infection complicating pregnancy it was felt that a single additional fourth-character subcategory at 096 (Maternal infections and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium) would be sufficient.
- 3.5.3 As it was not known, at least initially, whether newborn infants who acquired HIV infection in utero or at birth would be infected, become diseased or remain healthy, it was recommended that all seropositive cases should be included in the chapter on perinatal conditions. Two three-character categories were therefore proposed, one for HIV seropositivity in infant or newborn and one for HIV disease acquired perinatally.
- 3.5.4 The draft proposal for the ICD-10 chapter of Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified included a category for Abnormal immunological findings of serum. It was recommended that a fourth-character subcategory should be included for Laboratory evidence of HIV antibody without diagnosis.

- 3.5.5 The Consultation endorsed the subcommittee recommendation that a three-character category should be created in the chapter of Factors influencing health status and contact with health services (the Z code) for the classification of asymptomatic HIV positive individuals.
- 3.5.6 In order to provide for all possible reasons for encounter with health services in relation to HIV infection the Consultation finally recommended that provision should be made at the fourth-character level in the relevant sections of the Z code for special screening examinations, contact with HIV infection, counselling, and family history of HIV infection.
- 3.6 The full classification as proposed by the Consultation, including fourth-character subcategories, is shown as an annex to the present report.
4. Mode of transmission
- 4.1 In submitting its recommendations to the secretariat for communication to the Heads of WHO Collaborating Centres for Classification of Diseases at their next meeting in February 1989, the Consultation requested that consideration be given by the Centre Heads to the possibility of including a supplementary character at the proposed categories B20-B24 to identify mode of transmission.

HUMAN IMMUNODEFICIENCY VIRUS [HIV] DISEASES (B20-B24)

Excludes: acquired perinatally (P)
complicating pregnancy, childbirth and puerperium (O)

- B20 Human immunodeficiency virus [HIV] disease with infectious and parasitic diseases
Excludes: acute HIV infection syndrome (B23.1)
- B20.0 HIV disease with mycobacterial infections
HIV disease with tuberculosis
- B20.1 HIV disease with other bacterial infections
- B20.2 HIV disease with herpes viral [herpes simplex] infections
- B20.3 HIV disease with candidiasis
- B20.4 HIV disease with cryptococcosis
- B20.5 HIV disease with toxoplasmosis
- B20.6 HIV disease with Pneumocystis carinii pneumonia
- B20.7 HIV disease with multiple infections
- B20.8 HIV disease with other specified infections and parasitic diseases
- B20.9 HIV disease with unspecified infection
- B21 Human immunodeficiency virus [HIV] disease with malignant neoplasms
- B21.0 HIV disease with Kaposi's sarcoma
- B21.1 HIV disease with Burkitt's lymphoma
- B21.2 HIV disease with other Non-Hodgkin's lymphoma
- B21.3 HIV disease with other malignant neoplasms of lymphoid, haematopoietic and lymphoreticular tissue
- B21.7 HIV disease with multiple malignant neoplasms
- B21.8 HIV disease with other malignant neoplasms
- B21.9 HIV disease with unspecified malignant neoplasm
- B22 Human immunodeficiency virus [HIV] disease with certain other specified diseases
- B22.0 HIV disease with encephalopathy
HIV dementia
- B22.1 HIV disease with lymphoid interstitial pneumonitis
- B22.2 HIV disease with wasting syndrome [slim disease]

- B23 Human immunodeficiency virus [HIV] disease with other conditions
- B23.0 Acute HIV infection syndrome
- B23.1 HIV disease with (persistent) generalized lymphadenopathy
- B23.2 HIV disease with haematological and immunological abnormalities NEC
- B23.8 HIV disease with other specified conditions
- B24 Human immunodeficiency virus [HIV] disease, unspecified
Acquired immunodeficiency syndrome [AIDS] NOS
AIDS-related complex [ARC] NOS
- O96 Maternal infectious and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium
- O96.5 Human immunodeficiency virus [HIV] infection1
- P35 Human immunodeficiency virus [HIV] seropositivity in infant or newborn
- P35.0 Indeterminate HIV infection status
HIV antibody positive
- P35.1 Asymptomatic HIV infection
Excludes: indeterminate infection status (P35.0)
- P36 Human immunodeficiency virus [HIV] disease, acquired perinatally
Excludes: asymptomatic HIV infection (P35.1)
- P36.0 HIV disease with infectious and parasitic diseases
- P36.1 HIV disease with malignant neoplasms
- P36.2 HIV disease with central nervous system complications
- P36.3 HIV disease with haematological and immunological abnormalities NEC
- P36.4 HIV disease with lymphoid interstitial pneumonitis
- P36.5 HIV disease with failure to thrive
Slim disease
Wasting syndrome
- P36.7 HIV disease with multiple conditions
- P36.8 HIV disease with other specified conditions
- P36.9 HIV disease, unspecified
Paediatric:
. acquired immunodeficiency syndrome [AIDS] NOS
. AIDS-related complex [ARC] NOS
Perinatal AIDS NOS

- R75 Abnormal immunological findings of serum
- R75.0 Laboratory evidence of human immunodeficiency virus [HIV] antibody
- Z11 Special screening examination for infectious and parasitic diseases
- Z11.4 Human immunodeficiency virus [HIV]
 Conditions in B20-B24
- Z20 Contact with or exposure to communicable diseases
- Z20.7 Human immunodeficiency virus [HIV]
 Conditions in B20-B24
- Z21 Asymptomatic human immunodeficiency virus [HIV] seropositive status
- Includes: HIV positive NOS
- Excludes: acquired perinatally (P35.1)
 complicating pregnancy, childbirth and puerperium (O96.5)
 contact with or exposure to HIV (Z20.7)
 HIV disease (B20-B24)
 initial laboratory evidence (R)
- Z71 Persons encountering health services for other counselling and medical advice
- Z71.7 Human immunodeficiency virus [HIV] counselling
- Z83 Family history of other specific disorders
- Z83.7 Human immunodeficiency virus [HIV] infection

List of participants

- Dr F. Boulay, Direction des Hôpitaux, Ministère des Affaires sociales,
1 Place de Fontenoy, 75700 Paris Cédex 07, France
- Dr J. Buehler, Surveillance Branch, AIDS Program,
Centers for Disease Control, Atlanta, GA 30333, USA
- Mr R.A. Israel, Head of WHO Collaborating Center for the Classification of
Diseases for North America, National Center for Health Statistics,
3700 East-West Highway, Hyattsville, MD 20782, USA
- Dr R. Laurenti, Head, WHO Center for Classification of Diseases in Portuguese,
Faculdade de Saude Publica/Universidade de Sao Paulo, C. Postal 8099,
Av. Dr Arnaldo, 715, 01255, Sao Paulo, SP, Brazil
- Dr P. Maguin, Chef du Centre de l'OMS, U-164, INSERM,
44 chemin de Ronde, F-78110 Le Vésinet, France
- Dr F. Morrison, Chief, Statistical Services Unit,
Infectious Diseases Branch, California Department of Health Services,
2151 Berkeley Way, Berkeley, CA 94704, USA
- Mrs C. Percy, Expert on Classification and Nomenclature of Neoplasms,
National Cancer Institute, Executive Plaza North, Room 343 J, Bethesda,
Maryland 20892, USA
- Ms E. Taylor, Nosology Reference Center, Statistics Canada,
Ottawa, Canada

Secretariat

- Dr J.-C. Alary, Chief, Unit of Development of Epidemiological and Health
Statistical Services, World Health Organization, Geneva, Switzerland
- Dr G. Brämer, Medical Officer, Unit of Development of Epidemiological and Health
Statistical Services, World Health Organization, Geneva, Switzerland
- Dr J. Chin, Chief, Unit of Surveillance, Forecasting and Impact Assessment,
Global Programme on AIDS, World Health Organization, Geneva
- Dr V. Koroltchouk, Cancer Unit, World Health Organization, Geneva, Switzerland
- Mr A. L'Hours, Technical Officer, Unit of Development of Epidemiological and
Health Statistical Services, World Health Organization, Geneva, Switzerland
- Dr G. S. Muir, Deputy Director, International Agency for Research on
Cancer (IARC), 150 Cours Albert-Thomas, F-69372 Lyon Cédex 2, France

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