

Conforming to the international classification of diseases: A critique on health information reporting system in Ethiopia

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Abstract: Even though updating the health information system of a nation and conforming to international standards is essential for health development, it appears that very little attention is being paid to brace up the gap between the international disease taxonomy and that of Ethiopia. With the intention of appraising the existing local state of affairs with regard to the adoption of a national nosology of diseases, a review of current classification methods of diseases in Ethiopia was done and was compared with recent international developments. The World Health Organization (WHO) that took over the responsibility of revisions of the International Classification of Diseases (ICD) in 1946 with the 6th edition has recently come up with the 10th edition which is adopted world wide. Ethiopia is one of the users of the ICD system but, in disparity with the current changes, it still employs the intermediate list of ICD-6 that was supposed to be compatible with the then developing countries' health manpower. The conditions that dictated the use of WHO's intermediate list of causes of morbidity and mortality in the 1950's are no longer compelling. Our review has made us realise that the persistent use of the outdated classification makes our health information system different from the rest of the world. Putting ICD-10, the latest revision, in place, is highly recommended. [*Ethiop. J. Health Dev.* 1999;13(3): 281-283]

Historical background

One of the methods of relaying health information is through a standard and uniform collection of data on morbidity, mortality, and other conditions using the accepted set of classified lists (1). Through such lists, the varied disease phenomena could be clustered into a well-defined set of categories. The need to use is international classification to report diseases materialised only a century or so ago (2).

Careful description of clinical phenomena that lies at the heart of clinical medicine helped to delineate the distinct syndromes in the earliest developments of medical sciences. Those recognised symptoms and syndromes were the basis for the first classification systems until they were more or less replaced

by anatomical and then by etiological classification. Although etiological classification is the best way to classify diseases for well-recognised reasons, syndrome and anatomical disease classifications are still in use due to the incomplete comprehension of causes of diseases.

The initial driving force behind the development of a classification system was the need for collecting statistical information on causes of death. If we go back to the 17th century where we find the inception of more practical and uniform grouping of disease phenomena, John Graunt was the

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first to start the statistical study of disease in under-six children with the intention of tabulating the causes of death (2). A subsequent attempt to classify diseases was made by Francois Bossier de Lacroix and William Farr (2). The facilitation of nosological uniformity began receiving international backing, as it would naturally deserve, in the 19th century. Of much interest would be the introduction of the ICD system and especially the 6th revision that was produced by the WHO in 1948 (2) extending its list to include non-fatal conditions which evidently implied the inclusion of other categories like mental illnesses. The 7th revision of the ICD was made in 1955, while the 8th and 9th revisions took place in 1965 and 1975, respectively. The latest revision, i.e., ICD-10, was released in 1992 (3). It is composed of 10 alphanumeric groups (4), one or more alphabets representing every chapter. Each alphabet stands for a similar group of diseases, disorders or conditions while two digits follow the alphabet. The next two digits after the dot designate subdivisions. For instance, the ICD-10 designates the letter 'F' for mental and behavioural disorders. 'F20' would represent the severe mental illness, schizophrenia. To add a specifier would require additional codes. Thus a paranoid type of schizophrenia with continuous course would be coded as 'F20.00'(3). It should also be noted that the ICD has varying details for different users.

There are other methods of classification for local use. Among these the American Psychiatric association has a well developed one called Diagnostic and Statistical Manual of Mental Disorders (DSM). This manual first appeared in 1952, shortly after WHO's ICD-6. The last edition, DSM-IV (7), came into use in 1994. It is multi-axial and has been adopted by many countries.

National nosological model

In order to assess the national classification system and health reporting system, we visited statistics departments at various levels ranging from health stations to the Ministry of Health, talked with a number of concerned and responsible officials, and collected all necessary materials and information. We reviewed relevant literature and sufficiently browsed the archives at Amanuel Hospital. We assessed various ICD version codes and collected reporting formats from various health institutions to find out which version is in use currently in Ethiopia. This showed us that Ethiopia uses the intermediate list of ICD-6 while the rest of the world uses 9th or 10th revisions. The WHO intermediate list of 150 entities for tabulation of morbidity and mortality, the 'A' list, was probably adopted by the Ministry of Health during 1948-1950 (8). This list was originally a modification of ICD-6 and was provided for developing countries that needed a classification system for documentation and uniform reporting but apparently lacked enough skilled manpower at that time. Ethiopia was obligated to use the list, which is still uses, because of the then existing low manpower level. In 1970, for example, there were 352 doctors in Ethiopia and only 16(17%) were nationals (9). Currently, however, the marked development in the global health information status makes the use of the old intermediate list for any reason non-compelling. Moreover, the manpower level at present is much higher than it was then.

At Amanuel Psychiatric Hospital it was agreed three years ago to use the DSM-IV classification which has over 400 entities. Similar models are also used in other psychiatric units in the country. However, the current Ethiopian official statistical format provides only six codes, including a code for healthy people. The origin of these six codes (7) for psychiatric disorders in this country seems obscure. According to the existing records of Amanuel Hospital (8), the first report was made by an expatriate psychiatrist in 1956. The list was made of 'A' code with two digits for each, and where necessary, for a lump of disorders grouped in a class.

Almost all personnel in charge of health information units at all levels of health institutions are not trained in medical statistics.

Invocation for a more accommodative Model

Despite some degree of inconvenience and inflexibility, classification of diseases has several advantages (2). Primarily it facilitates the deduction of general principles. Secondly, it promotes the collection of clinical information, communication, and research. Thirdly, it is a basic tool for health policy and planning. Finally, it helps as a useful educational tool and may further serve in the evaluation of medical care, hospital indexing, and medical audit systems.

Despite the consensus to use the DSM-IV classification system in the psychiatric domain, the national health statistics reporting system's requirement to still use the intermediate list of ICD-6 impedes practitioners from taking advantage of the more informative DSM-IV or ICD-10. The six codes of the national list are far too short to record and report the vast majority of cases we encounter in clinical practice and we have been forced to pigeonhole the diverse class of disorders into broad and ambiguous clusters. We believe the current pigeonholing is incorrect, leads to faulty information gathering, and is a handicap in communicating with colleagues in the rest of the world.

Our search has led us to appreciate the inconveniences the existing system must have caused to other medical fields as well. We believe that it is timely to seek for ways of revising the old list of morbidity. The low skilled manpower level which obligated the use of the old 150 intermediate list cannot be a sufficient reason presently.

Based on our observation, we suggest that the constricted reporting of psychiatric morbidity has to expand and conform to ICD-10 while taking every precaution in the national adaptation. Similar experiences pointed out that adjusting the ICD might result in significant changes and cause reversal of instructions in the manuals, thus mystifying exchange of comparable data among countries (10). Other sister disciplines should follow suit. We also suggest that the Ministry of Health should organise a workshop on this critical issue. The Ministry of Health should also attempt to solicit ideas from different disciplines and concerned offices, like the WHO representative here. A system should be designed for effective and flexible reporting. Due attention should be paid to familiarise undergraduate and postgraduate students on updated classification issues. Finally we propose that an arrangement should be made to constantly upgrade the medical knowledge of statisticians and those working in health statistics departments.

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