

A COMMON LANGUAGE FOR DESCRIBING MENTAL DISABILITY USING A MULTI-AXIAL SCHEME BASED ON ICD-10*

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SUMMARY

The tenth revision of the International Classification of Diseases (ICD-10) which was published by the World Health Organization in 1992 (WHO, 1992), provides a common language with which to describe mental disability. The present study reports a trial of an extended multi-axial scheme carried out as part of a workshop programme for mental health teams held in Hong Kong: March - April 1996. In this scheme, mental disorder (Axis I), developmental delay and deviance (Axis II), learning disability (mental retardation) Axis III, physical disorders (Axis IV) and psychosocial factors (Axis V) were described separately. Items from a variety of assessment instruments were used to assess ability and disability. Twenty case vignettes were assessed in this way and proposals are made for the further development of ICD when used in epidemiological studies and as part of clinical audit, resource allocation and service planning.

Keywords: ICD-10, mental disability, multiaxial scheme

INTRODUCTION

As long ago as 1853, Dr. William Farr from London proposed to the International Statistical Congress in Paris that diseases be grouped on the basis of precise clinical description into epidemic, constitutional (general), local (according to anatomical sites), developmental and those that were direct result of violence. This scheme was adopted and revised approximately every ten years and in 1948, following the creation of the United Nations, the World Health Organization took over the responsibility for the sixth revision. The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM III) used a similar alpha-numeric coding system as the ICD, included a detailed description of mental disorders and proposed a multi-axial scheme to include a description of the degree of disability. A multi-axial scheme was developed for child and adolescent disorders by Rutter and colleagues (1982) using ICD-9.*

The need for those working in the field of developmental psychiatry (learning disability) to draw on codes from many of the 21 chapters of ICD, makes it appropriate to develop a fascicle or short guide extracted from the main volume, as well as chapter V which covers mental and behavioural disorders. There is a need to establish the usefulness of this multi-axial scheme and particularly to investigate ways in which impairment, disability and handicap (distinctions first used by WHO working party in 1980) may best be assessed.

The use of ICD-10 Research Diagnostic Criteria to categorize psychiatric and behavioural abnormalities among people with learning disabilities was reported by Clarke & colleagues (1994) from the West Midlands Region of the United Kingdom and recently experience in Hong Kong of the multiaxial field trial of ICD-10 has also been reported (Pang et al, 1995). The present study sets out to extend these developments by field testing a multiaxial scheme for the diagnosis of developmental disability, using ICD-10.

METHODOLOGY

Multidisciplinary workshops for workers in the mental handicap and mental health services in Hong Kong were held at various centres over a period of two weeks during March and April 1996. These covered a variety of topics including service planning, assessment of needs, epidemiological methods, clinical audit, evidence based health care, outcome measures, the rights of people with disabilities and transcultural influences on mental health. Other specific topics included stress and mood disorders, schizophrenia, substance abuse, dual disability and challenging behaviour such as aggression and self injury. Epilepsy, cerebral palsy and sensory impairments were also discussed.

Participants were trained in the use of the multiaxial scheme for ICD-10.

At each workshop case presentations were made by individual clinical teams, the patients being selected from inpatients and outpatients from the Learning Disability Units of the participating centres. These were chosen to reflect

* Report of a workshop held in Hong Kong in 1996

the individual topics discussed in the workshops. The case records of the individuals were scrutinized as part of the assessment.

The participants of the workshop then split into individual teams whose task was to use the ICD-10 multiaxial scheme for classification in the diagnosis of the individual's problems and then to discuss the management of the case, drawing up a care plan and evaluating possible outcome measures.

Among the professionals attending the workshops were psychiatrists, psychologists, nurses, occupational therapists, physiotherapists and other paramedical staff. Each group was chosen to reflect a balance of disciplinary interests. The groups then reported back to the workshop and following

discussion, a consensus was reached on the diagnosis and care plan.

The instruments found to be most useful in assessing disability were the Vineland Social Maturity Scale, the Adaptive Behaviour Scales of the American Association for Mental Retardation (ABS), the Disability Assessment Scale (DAS) and in the case of children, the Denver Developmental Screening Test (DDST).

Reliability was assessed by having at least four groups assessing each case independently.

RESULTS

The codes for each individual case are summarized in Table 1.

Table 1. ICD-10 coding for individual cases.

No.	Age	Sex	Axis I	Axis II	Axis III	Axis IV	Axis V	
1	22	M	F 43.21	F 82	F 71	G 81, O 09	Z 59, Z 63	Cerebral palsy, Adjustment disorder
2	19	M	F 43.2, F 61	F 81	F 71.1	None	Z 55, Z 61-62	Challenging behaviour, Troublesome personality
3	21	M	F 43.24	F 81.0	None	H 60-95	Z 55-61	Deaf, Adjustment disorder
4	29	F	F 98.41, F 91.3	F 83	F 73.1	H 00-95, O 00	Z 62-63	Deaf, blind, self-injurious behaviour
5	12	F	F 98.41	F 83	F 72.1	O 00	Z 61-63	Self injury, de Lange Syndrome
6	10	M	F 92.8	F 83	F 70	None	Z 61-63	Refugee, mixed conduct and emotional disorder
7	19	M	F 98.41	F 83	F 72.1	A 00, H 00-59	Z 55-56	Self-injury, Rubella embryopathy
8	15	M	F 90	F 83	F 72.1	A 00, H 00-95	Z 65	Microcephaly, self injury, deaf, blind
9	19	M	F 90	F 84	F 72.1	A 00, G 00	Z 55-60	Pervasive developmental disorder
10	42	F	F 50.2	F 84	F 71.1	None	Z 55-62	Pervasive developmental disorder, Bulimia nervosa
11	49	M	F 20.5	None	None	None	Z 56-59	Residual schizophrenia
12	20	M	F 93	F 83	F 72.1	R 00	Z 55-56, Z 65	Unsocialized conduct disorder
13	19	M	F 90, F 98	F 84	F 72.1	G 40	Z 55-64	Pica, self injury, Pervasive developmental disorder, epilepsy
14	55	F	F 90	F 84	F 71.1	A 00, G 40	Z 55-61	Meningitis, epilepsy, Pervasive developmental disorder
15	32	F	F 60.3	F 83	F 71.1	None	Z 63-64	Unstable immature personality
16	41	F	F 61.1	F 84	F 70.1	G 40	Z 55-56, Z 61-63	Epilepsy, Asperger's syndrome
17	19	M	F 05	F 83	F 70	G 40	Z 55-56, Z 61-63	Organic psychosis, Neuroleptic Malignant syndrome
18	43	F	F 40.01	F 81.0	F 70	None	Z 55-56, Z 61-63	Agoraphobia, Learning Disability
19	13	M	F 90.0	F 81.0	None	None	Z 55	Attention deficit disorder
20	42	M	F 95.2	F 83	F 71	None	Z 55-56, Z 61-62	Tourette Syndrome

Axis I: Psychiatric Disorder

Axis II: Disorders of Psychological Development

Axis III: Mental Retardation (Learning Disability)

Axis IV: Organic causes of Mental Retardation & associated physical impairments and Disabilities

Axis V: Abnormal Psychosocial factors

DISCUSSION

In clinical audit, service planning and establishing outcome measures, as part of evidence based health care, precise clinical description of mental disability is required. For this purpose, a system of classification and assessment of the severity of disability and the quality of life of the individual needs to be established. The mere use of diagnostic labels is inadequate.

It was found in the workshops that the multi-axial scheme using ICD-10 could be used by teams comprising different disciplines whose members had varying degrees of training and experiences. Difficulties arose in describing psychiatric disorders in people with impairment in language function and communication and in describing developmental disorders, but this could be overcome by careful attention to the case history and, in particular, to assessment of early development. Agreement was reached by consensus in each individual case, independent diagnoses being made by two to four multidisciplinary teams.

No ideal measure exists for assessing the severity of disability but it was confirmed that using selected items from the Vineland Social Maturity Scale, Denver Developmental Screening Test and the Disability Assessment Scale, agreement could usually be reached on the level of functional ability.

Inclusion in the fascicle of measures of hearing and visual impairment and of extracts from the section of ICD-10 concerning epilepsy and cerebral palsy are necessary. There is also a need to carry out further epidemiological studies to ascertain how much detail and which codes should be included from other chapters of ICD-10.

In all cases, it was found that psychosocial factors were frequent, multiple and of the utmost importance. These may best be categorized into those influencing development such as family, education or psychosocial adversity like bereavement, family illness or institutionalization which might be implicated in the current mental disorder. Finally, more precise measures are required concerning the individual quality of life and severity of disability and it is recommended that a global measure of disability similar to that used in DSM IV be incorporated on a separated axis in this multiaxial scheme.

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