W. Edwin Fann: A History of The Tennessee Neuropsychiatric Institute

Thomas A. Ban's comment

CODE System – Historical Development

Preamble

Development of the Composite Diagnostic Evaluation System began in the Clinical Division of the TNI began in 1982 and its early development was linked to the early clinical development of reboxetine. The paper, *CODE System – Historical Development* was written and presented at a meeting of the International CODE Collegium in the mid-1990s By the early years of the new millennium, it was recognized that expectations from the CODE System expressed in this paper were not fulfilled.

Thomas A. Ban
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CODE SYSTEM
Historical Development

Introduction

The CODE, or Composite Diagnostic Evaluation System is one of the recent contributions to the polydiagnostic approach in psychiatry. It consists of a set of diagnostic instruments (CODE' s) each dealing with a different diagnostic category of illness which, by specially devised computerized algorithms can simultaneously assign a diagnosis to a patient from several diagnostic systems.

Description

To achieve its objective, each CODE within the system is comprised of a set of symptoms (codes) which can provide diagnoses in all component diagnostic systems; a semi-structured interview suitable for the elicitation of all the symptoms in terms of "present" or "absent"; and a set of diagnostic decision trees which organize the symptoms into distinct psychiatric illnesses in the component diagnostic systems.

The CODE systems differs from other polydiagnostic evaluations by the inclusion of all diagnostic formulations relevant to the conceptual development of each diagnostic category; by the provision of readily accessible information relevant to the diagnostic process from the lowest to the highest level of decision making; and by the construction of decision trees with consideration of the theory that each classification in psychiatry represents a polythetic taxonomy. Another important distinguishing feature of the CODE system is that by its Composite Diagnostic Classification it provides a bridge between current classifications and possible future nosologies.

Table I

Polydiagnostic Approach

1. Employment of severa1 diagnostic formulations simultaneously in the description of one and the same psychiatric population.

2. Methodology of psychiatric nosology introduced with the hope that it will lead to more distinct diagnostic end-points for research than the end-points given by diagnostic classifications currently in use.

Table II

CODE SYSTEM

One of the most recent refinements
of

the polydiagnostic approach

Elementary Units	encode all information necessary for obtaining diagnoses in all component classifications
Semi-Structured Interview	elicitation of information necessary for deciding whether each of the manifestations is "present" or "absent"
Decision Trees	simultaneously assigns diagnosis from several diagnostic systems

Table III

CODE SYSTEM

vs

Other Polydiagnostic Evaluations

1. Inclusion of all diagnostic formu1ations relevant to conceptual development of each diagnostic category

2. Provision of readily accessib1e information relevant to diagnostic process from lowest to highest leve1 of decision making

3. Construction of decision trees with consideration that each classification represents a polythetic taxonomy

4. Bridge between current classifications and future nosologies

Development

Development of the CODE system began in the mid 1980s with an exclusively research orientation. The creation of CODE-DD, the first CODE within the system, was intimately linked to a multinational clinical investigation with a potential new antidepressant drug. It was hoped that by providing multiple diagnostic end-points within the same population the CODE system will assist in shifting emphasis in clinical investigations from therapeutic efficacy to the identification of the treatment responsive population.

By the end of the 1980s the exclusive research orientation was replaced by a rapidly growing interest in employing the CODE systems in psychiatric education. It was hoped that by providing understanding about the development of diagnostic concepts the CODE system will focus psychiatric education on diagnosis and treatment in the tradition of Galen. Intimately linked to the second stage is the development of CODE-HD, CODE-SD and CODE-AD, i.e., the development of composite diagnostic evaluations for hyperthymic, schizophrenic and anxiety disorders.

Finally during the third and most recent stage there is a rapidly growing interest in employing the CODE system in psychiatric practice. By the organization of a multinational network of diagnostic and treatment centers which employ the different CODE's, it is hoped that the CODE system will facilitate the implementation of the same standards in the practice of psychiatry around the world. The network could become instrumental also in the generation of the necessary feedback for national agencies responsible for the organization of psychiatric service and multinational corporations engaged in the development of new psychotropic drugs.

Conclusions

Introduction of the "psychopharmacological method" rendered the study of the biologic substrate of mental illness accessible for medical research; development of "psychotropic drugs" opened the path to practice psychiatry as a medical discipline; advances in "computer technology" provided a capability for the analyses of information relevant to the diagnosis and treatment of mental illness on an unprecedented scale; and progress in "communication

technology" has made it possible to implement the same standards in the provision of psychiatric care around the world. It is hoped that the CODE system will facilitate the utilization of these new developments in psychiatric practice, education and research.

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