DSM-III-R and ICD-10 diagnoses of schizophrenia had higher predictive validity than that of ICD-9 and CATEGO S+ diagnoses


Objective
To test the predictive validity of 4 definitions of schizophrenia using 4 diagnostic classifications: Diagnostic and Statistical Manual of Mental Disorders, 3rd edition, revised (DSM-III-R); tenth and ninth revisions of the International Classification of Diseases (ICD-10 and ICD-9); and a restrictive CATEGO S+.

Main results
DSM-III-R and ICD-10 diagnoses of schizophrenia had high predictive validity for symptoms and disability and for 13 year outcome; both provided stable diagnoses. DSM-III-R proved to be considerably less sensitive than ICD-10. An ICD-9 diagnosis of schizophrenia was less discriminating, especially for symptoms, and a CATEGO S+ definition had no predictive validity. The addition of the 6 month duration criteria improved the predictive validity of ICD-10 and ICD-9 and, to a lesser degree, the predictive validity of CATEGO S+. Removing the duration criteria from DSM-III-R reduced the predictive validity, particularly for symptomatic outcome.

Main outcome measures
The ability of the 4 definitions to predict 13 year outcome using the Global Assessment of Functioning scales.

Conclusions
Diagnostic and Statistical Manual of Mental Disorders, 3rd edition, revised (DSM-III-R) and tenth revision of the International Classification of Diseases (ICD-10) diagnoses of schizophrenia had high predictive validity and were superior to ICD-9 and CATEGO S+ diagnoses. ICD-10 had superior sensitivity to DSM-III-R.

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Commentary
As yet, no clinical or pathological gold standard exists for the diagnosis of schizophrenia, and the validity of diagnostic classification rests to some extent on its ability to predict outcome. Research over 25 years has shown that Schneider’s “first-rank” symptoms are not exclusive to schizophrenia and their presence during an acute illness does not predict a stable diagnosis over time.1 Classifications have evolved minimum duration criteria and now include negative symptoms, such as flat affect and lack of speech, as well as the positive symptoms of hallucinations and delusions. Studies like this are important in testing the resulting predictive validity. Strengths of the study by Mason et al include a complete and representative inception cohort, a high follow up rate, and good inter-rater reliability for diagnosis and follow up assessments. Diagnosis was blinded to outcome status. The authors acknowledge a modest sample size and concede that their findings may not be generalisable outside the setting of a single community-based service.

The findings confirm that CATEGO S+, which is based on first-rank symptoms, has poor predictive validity, and that ICD-10 is better than ICD-9. The addition of the DSM-III-R criterion of 6 month duration improves the prediction of poor long term outcome; however, it is more restrictive and seems to miss a substantial proportion of patients in the early phase who prove to have schizophrenia in the longer term.

DSM-IV, the latest US classification, specifies virtually the same symptoms as ICD-10 for the same 1 month period but retains the overall requirement for a 6 month duration, which can include less specific prodromal symptoms.2 This study suggests that ICD-10 should be preferred for studies needing high sensitivity as well as specificity for the diagnosis of schizophrenia in the acute phase, such as studies of incidence. It also suggests that dropping the 6 month duration criterion should be considered for a future “DSM-V.”

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