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Validity of the PAS-ADD for detecting psychiatric symptoms in adults with learning disability (mental retardation)

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Abstract The Psychiatric Assessment Schedule for Adults with Developmental Disability (PAS-ADD) is a semi-structured interview for use with respondents who have learning disability and for key informants. This report investigates the ability of the instrument to detect symptoms that had been found to exist during routine clinical assessment of the patients. Field trials involved 95 referred patients with learning disability and a key informant for each sample member. Clinical opinions of the referring psychiatrists were sought using a symptom checklist. Referrer checklist symptoms and PAS-ADD data were both factor analysed. Validity testing involved (a) computation of correlations between PAS-ADD factors and checklist data and (b) comparison of PAS-ADD and referrers' diagnoses. Results indicated good validity for the PAS-ADD in relation to psychotic symptoms and depressive symptoms. Anxiety symptom identification was not well validated, probably due to small numbers. Expansive mood identified by the referrers was not detected by the PAS-ADD because there is currently no corresponding section in the interview. Where the PAS-ADD produced a diagnosis (in 58 members of the sample), 44 were in agreement with the referrer. Probability of diagnosis by PAS-ADD increased with the number of relevant active symptoms identified by the referrer. The PAS-ADD has been shown in a previous report to have the sensitivity to detect mental disorders not known to psychiatric services. For psychotic and depressive conditions, our results showed that symptom detection was in good agreement with the information provided by the referring psychiatrists on their patients. The PAS-ADD needs a section on hypomania and further investigation of its detection of anxiety disorders.

Introduction

Within the realms of general psychiatry, much effort has been devoted to the development of structured and semi-structured clinical interviews with operationally defined diagnostic criteria (Spitzer et al. 1978). The development of these instruments has facilitated communication between investigators and has provided a method of employing the same diagnostic criteria across patient samples. The Psychiatric Assessment Schedule for Adults with Developmental Disability (PAS-ADD) is a semi-structured interview designed to extend this approach to the detection of mental disorders in people who have learning disability (Moss et al. 1993). The PAS-ADD produces research diagnoses, and involves present state interviewing of the patient, followed by a similar interview with a key informant. Either interview can detect symptoms and produce diagnoses, so the PAS-ADD can also be used for the assessment of individuals whose linguistic ability does not permit a clinical interview.

The interviewing techniques are designed to mirror routine clinical investigation and thus make the procedure acceptable to both respondents and clinicians. This, it is hoped, will raise the potential for use of the PAS-ADD in clinical, as well as in research applications. The fundamental requirements governing the design of the interview were as follows:
A. Asks patients about presenting symptoms, their duration and historical development
B. Examines mental state
C. Uses informant data and additional information to corroborate history
D. Uses historical information from case notes and other relevant medical records
E. Is standardised and repeatable
F. Allows standardised research diagnoses using ICD 10
G. Is of the simplest possible linguistic structure commensurate with an appropriate degree of sensitivity to, and discrimination between, symptoms.

This paper is concerned with a central aspect of the quality of the PAS-ADD, namely, whether detection of symptoms by the PAS-ADD is valid with respect to the symptoms identified by routine clinical assessment.

Potential sources of invalidity in using a research interview

Moss (1995) has outlined a number of logical steps in producing a research diagnosis via a clinical interview. Step 1 is the production of the classification system (e.g. ICD 10, DSM IV). One of the main purposes of these systems is to summarise and standardise scientific and clinical knowledge about the manifestations of mental disorders, providing careful descriptions of the criteria that must be met for diagnosis. The development of the PAS-ADD has been based on the assumption that the manifestations of mental disorders are basically similar to the general population (Menolascino 1970; Reiss and Benson 1985; Sovner and Hurley 1983). The validity of ICD 10 was thus, for the present purposes, accepted.

Step 2 is the interpretation of diagnostic criteria in symptoms/behaviours or clusters thereof. A further assumption that was made in the development of the PAS-ADD is that the relation between symptoms and criteria as defined by the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) can also be accepted. The development of the SCAN has devoted huge resources to the development of the diagnostic algorithms, and can hence be regarded as the best available objectification of the ICD 10 criteria. The assumptions in relation to steps 1 and 2 are considered in more detail in the Discussion section.

It is with step 3 that the current investigation was concerned – the embodying of symptoms in terms of questions or observational items on the schedule. It is likely that this embodiment – the method of questioning and the form of words used in an interview – will have an impact on apparent prevalence. In this respect, a central test of validity is the extent to which symptoms identified by the PAS-ADD agree with the clinical picture provided by routine clinical assessment. It must be stressed that a present state examination would not be expected to detect every symptom that had been identified through long-term clinical investigation and history. It is highly likely that a patient will not manifest all symptoms in a single interview. However, those symptoms that are detected should relate closely to the clinical picture. In addition, the interview should of course be as symptom-sensitive as possible.

In the general population, present state interviewing can provide useful information because most patients can describe symptoms with sufficient clarity for a psychiatrist to determine their existence with reasonable confidence (assuming the patient has sufficient insight at the time of the interview). Further, a person in the normal IQ range can usually provide information that is clear enough to make reliable ratings of severity and duration. In a previous paper (Moss et al. 1993) we have shown good reliability of coding for a community sample of people with learning disability in relation to symptoms of anxiety and depression, and good sensitivity of case detection. However, since the majority of identified cases were not known to the medical services, we did not have an independent measure of the validity of symptom identification. The current version of the PAS-ADD was field tested on a sample of individuals referred to psychiatric services. We therefore had independent clinical assessments available against which to validate symptom identification by the PAS-ADD interviews.

Overview of the PAS-ADD

The ICD 10 version of the PAS-ADD was derived from version 1 of the SCAN (World Health Organisation 1992). It uses the SCAN’s glossary, in an unmodified form, to provide the clinical definitions for coding. Using the CATEGO program (version 2.1) it can generate ICD 10 diagnoses of psychotic disorders, depression and anxiety disorders. The PAS-ADD includes all SCAN items that are used by this program for calculation of the ICD 10 criteria relating to the disorders that are currently covered by the interview. (The SCAN includes many other items that were not utilised by the CATEGO program version 2.1. However, version 2 of the SCAN uses an even more sophisticated algorithm that includes information on time course and aetiology. In due course, it may be appropriate to update the PAS-ADD in the light of these changes).

Additionally, a screen for autism was included, triggering of this screen leading to a full developmental assessment using the Autism Diagnostic Interview (Rutter et al. 1991). The diagnosis of autism in this sample is discussed in detail elsewhere (Moss et al. 1994).

The SCAN’s approach to diagnosis and the PAS-ADD on which it is based have considerable sophistication. The PAS-ADD has a large number of items, the scores on these items being used to evaluate each of the ICD 10 Diagnostic Criteria for Research (WHO 1993). The SCAN and the PAS-ADD thus have a different approach from other instruments that have been designed for mental health evaluations in people with learning disability. The Psychiatric Interview for Mentally Retarded Adults (PIMRA), for example, bases its diagnosis of schizophrenia on five items. This is considerably fewer than the number of ICD 10 criteria that are specified for F20 schizophrenia, so a considerable amount of interpretation on the part of the interviewer is implied. The PAS-ADD, on the other hand, typically