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Hospital Anxiety and Depression Scale

SIR: Chaturvedi (Journal, August 1991, 159, 298) claims that in his clinical study the Hospital Anxiety and Depression Scale (HAD Scale) could 'hardly discriminate' between anxiety and depression, and recommends that the two subscales be combined into a single score. Chaturvedi does not state whether he was using the HAD Scale in English in his Indian subjects, or a translated version; nor whether he evaluated the linguistic, conceptual or scale equivalence (Marsella, 1987) of the HAD Scale in the Indian setting.

With colleagues in Lahore (Pakistan), I have considerable experience with the HAD Scale both in English and in our Urdu version (Mumford et al., 1991a). The Urdu version is to be preferred unless the subject is very fluent in English: people generally express their emotional state better in their mothertongue. In one study, medical out-patients in Lahore completed the HAD Scale in Urdu, and DSM-III-R diagnoses were made independently at interview (Mumford et al, 1991b). Among 14 patients with depressive disorders, the mean HAD Scale anxiety score was 12.9 and HAD Scale depression score was 9.4; among 17 patients with anxiety and panic disorders the scores were 11.2 and 6.9; and among 23 patients with no psychiatric diagnosis they were 6.8 and 4.9 respectively.

These results are consistent with Chaturvedi's findings, but not with his conclusions. The HAD Scale depression (anhedonia) subscores were highest in the depressed patients, the most important clinical group to screen for; after excluding these patients, the HAD Scale anxiety subscores then successfully identified the anxiety and panic disorders. (High levels of anxiety among patients with depressive disorders is a common clinical finding.) In the whole sample, the HAD Scale anxiety items consistently correlated more highly with the anxiety subscore than they did with the depression subscore; and vice versa with the HAD Scale depression items.

Admittedly, the two subscales of the HAD Scale are not similarly calibrated and may require different cut-off scores for maximum screening efficiency. The fact that the authors have given two cut-off points (for possible and probable clinical significance) underlines the arbitrariness of any threshold when traits are continuously distributed in a population. However using the 10/11 cut-off on both the anxiety and the depression subscales, we found that the HAD Scale identified patients with DSM-III-R disorders in Lahore medical clinics with a sensitivity of 83% and specificity of 78%.

The HAD Scale does not discriminate perfectly between anxiety and depression partly because it only taps the *subjective* component of the mood disorders. The HAD Scale was designed as a brief screening instrument for medical patients with concurrent physical illness. It is not a comprehensive inventory of anxiety or depressive symptoms and signs; it should not be used alone to make a clinical diagnosis, but only to indicate the *probability* of a psychiatric disorder being present. In my view, the HAD Scale fulfils this function satisfactorily both in Britain and in Pakistan.

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Neuroleptic Malignant Syndrome

SIR: We read with interest White & Robins' reply to our letter (*Journal*, June 1991, **158**, 858-859), Dalkin & Kennedy's views on catatonia and neuroleptic malignant syndrome (NMS) (*Journal*, June 1991, **158**, 859) and Otani et al's "Is the predisposition to neuroleptic malignant syndrome genetically transmitted?" (*Journal*, June 1991, **158**, 850-853).

Dr Otani's cases illustrate the diagnostic dilemma that Drs White & Robins expressed about catatonia and NMS. In the three cases of a mother and her two daughters who were diagnosed to have NMS, the mother had an episode while not on neuroleptics and