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## Grade Scores of the Montgomery–Åsberg Depression and the Clinical Anxiety Scales

Two recent observer rating scales for mood disorder are the Montgomery–Åsberg Depression Rating Scale, MADRS (Montgomery & Åsberg, 1979) and the Clinical Anxiety Scale, CAS (Snaith *et al*, 1982). These two scales have been developed from item analysis of longer instruments, and have the considerable advantage of brevity and therefore ease of administration. Unlike many scales, a further advantage is that both incorporate clear instruction about the allotment of grade scores on the individual items and both the scales avoid a major emphasis on somatic symptomatology, thus recommending their use in the assessment of mood disorder in the setting of physical illness. Whereas many rating scales have poor specificity for the disorder they are designed to assess, e.g. an anxiety scale containing a large proportion of items referring to symptoms of depressed mood and vice versa, inspection of the items comprising the MADRS and the CAS shows that there is little overlap (one of the ten items of the MADRS does refer to psychic anxiety, but this reflects the fact that anxiety is a frequent accompaniment of depressive states); despite this small overlap, the two scales have been shown to tap essentially different dimensions of mood disturbance (Snaith & Taylor, 1985a).

A major drawback to the practical use of both the MADRS and the CAS is that, neither in the original

publications nor subsequently, have score ranges indicating different grades of severity of the mood disorder been presented. The present study has been conducted to rectify this deficit.

### Method

The study to establish score ranges indicating different levels of severity of the mood disorders was carried out in a psychiatric department; this was necessary, since although the ranges of scores are intended as a guide to other clinicians, it is important to establish these on the basis of the requirement for treatment as usually recommended by psychiatrists. Thus, the 'recovered/absent' grade indicates no need for treatment, the 'moderate' grade a probable need for treatment, and the 'severe' grade an undoubted need for treatment of the mood disorder. Therefore, the data were collected from patients who were in-patients or out-patients at the adult psychiatric unit of St James's University Hospital. The data for the MADRS were based on ratings of patients whose diagnosis was depressive illness (Major Depressive Episode by the criteria of DSM III) and patients at all levels of severity were included, from very severely ill requiring urgent treatment, to the fully recovered. However, no patients were included who suffered from concurrent severe physical illness, schizophrenia, or organic disorder. About half were males and half females, and the age-range was 20 to 70 years. The data for the CAS were based on ratings of patients whose diagnosis was anxiety neurosis (both General Anxiety

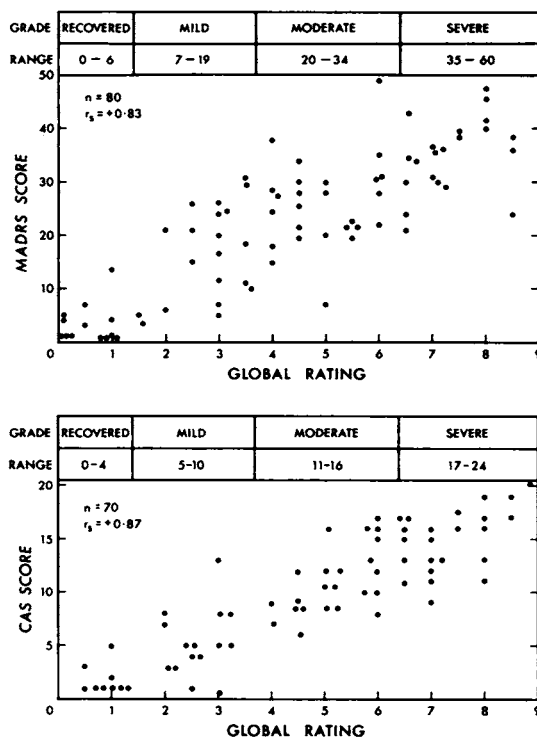


FIG. Score ranges in the severity grades of the MADRS and CAS.

Disorder and Panic Disorder by criteria of DSM III). Females accounted for about 60% of the sample, and the age-range was 18 to 60 years. Again, the full range of severity was included in the sample, including those patients who had recovered.

The ratings were conducted by the authors, who had undergone preliminary joint experience of the use of the rating scales and achieved consistency of ratings. Thereafter, two (in some cases one) raters made the global severity rating, and two other raters carried out the CAS or the MADRS at a separate session, but within 24 hours and in complete ignorance of the global assessment rating. The final rating was taken as the mean. The global assessment scale for depression was an 11-point (0-10) scale, but as noted in the earlier study (Kearns *et al*, 1982), the ultimate grade of severity is never used, since this indicates a severity of depressive illness characterised by such gross psychomotor disturbance (stupor) or loss of insight as would make the patient inaccessible to the use of rating scales of this type. The global assessment scale for anxiety was a ten-point (0-9) scale, in which it was possible, although rare, to be rated at the ultimate grade. The ratings were made on the basis of interviews lasting at least 30 minutes, in which the overall severity was assessed, not just at the moment of the interview, but over the past few days.

## Results

Non-parametric statistical tests are used in the presentation of the data.

Overall grades of severity were defined by successive combinations of global rating scores so that approximately equal intervals were allotted to the four grades (a slightly smaller interval was used for the 'recovered/absent' grade on the depression scale, since it should be recognised that even very mild depressive disorder is worthy of consideration for treatment in clinical assessment). The figure presents the scattergrams for the CAS and the MADRS with the proposed score ranges. These ranges were established on median scores between successive grades. The differences between grade scores were significant (by median tests) between all grades of both scales; the levels of statistical significance were at least at the one in twenty level, usually much higher, indicating that the scale scores distinguish satisfactorily between these grades.

## Discussion

The score ranges established here may be used with confidence in future research and clinical practice. The two scales are brief enough to be used in tandem, thus providing measures of the severity of both mood disorders, with considerable advantages in assessment.

There is now an increasing awareness of mood disorder complicating physical illness and of the need for its detection and adequate treatment (Nabarro, 1984; Lloyd, 1985) and the establishment of a study section by The Royal College of Psychiatrists shows that psychiatrists are becoming increasingly aware of their contribution outside the confines of psychiatric departments and hospitals. Snaith (1981) has commented that observer scales, i.e. scales administered at examination by a research worker or clinician, are usefully supplemented by information from the patients' self-assessments. In this case, the Hospital Anxiety And Depression (HAD) Scale (Zigmond & Snaith, 1983) may be recommended, since it was specifically designed for use in general hospital non-psychiatric departments, and so far as possible, symptomatology likely to be influenced by concurrent physical illness, such as anorexia and pain, have been excluded. The HAD sub-scales have received validation against both the MADRS and the CAS (Snaith & Taylor, 1985a). For investigators who are particularly interested in the relationship of irritability of mood to depression and anxiety, the self-assessment scale known as the Irritability-Depression-Anxiety (IDA) Scale is recommended; information on its further validation is given in the survey of the relationship of irritability to other disordered physical and mental states (Snaith & Taylor, 1985b).

A future development may include a more thorough examination of the characteristics of CAS and the MADRS in the setting of physical illness, which may lead to further refinements in the detection and assessment of mood disorder in the setting of physical illness.

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## Gilles de la Tourette's Syndrome in Down's Syndrome – A Case Report

Gilles de la Tourette's syndrome (GTS) is characterised by recurrent, involuntary motor and phonic tics that vary in intensity and begin between the ages of two and 15 years (American Psychiatric Association, 1980). The following case report documents its occurrence and treatment in an individual with Down's syndrome.

### Case Report

The patient, a female, is 26 years-old and the youngest of three siblings. She was born to a 40 year-old mother and

45 year-old father, after an uneventful, full-term pregnancy, labour, and delivery. Her birth weight was 3.2 kgs. No neonatal complications were noted in the original hospital documents. There is no family history of relevant disabilities, including tics or other movement disorders.

Recognised to have Down's syndrome (DS) at birth, she was immediately institutionalised. Subsequent karyotyping (lymphocyte culture) revealed regular trisomy 21. The only developmental history available is that she walked at five years. At age 11, she was transferred to her current residence – a large rural institution for the developmentally handicapped. At that time, formal psychometric assessment showed profound mental retardation, with an