Appraisal Clinimetrics

The Depression Anxiety Stress Scale (DASS)

Description

The DASS is a 42-item self-administered questionnaire designed to measure the magnitude of three negative emotional states: depression, anxiety, and stress. The DASS-Depression focuses on reports of low mood, motivation, and self-esteem, DASS-anxiety on physiological arousal, perceived panic, and fear, and DASS-stress on tension and irritability.

Instructions to client and scoring: A respondent indicates on a 4-point scale the extent to which each of 42 statements applied over the past week. A printed overlay is used to obtain total scores for each subscale. Higher scores on each subscale indicate increasing severity of depression, anxiety, or stress. Completion takes 10 to 20 minutes. A shorter, 21-item version of the DASS (DASS-21), which takes 5 to 10 minutes to complete, is also available. Subscale scores from the shorter questionnaire are converted to the DASS normative data by multiplying the total scores by 2.

Individual patient scores on the DASS subscales can be interpreted by converting them to z-scores and comparing to the normative values contained within the DASS manual. A z-score 0.5 is considered to be within the normal range, a z-score of 0.5 to 1.0 is mild, 1.0 to 2.0 is moderate, 2.0 to

3.0 is considered severe, and z-scores ®3 are considered to be extremely severe depression/anxiety/stress. Although it has been suggested that a composite measure of negative mood can be obtained by taking a mean of the 3 subscales, interpretation of this score is problematic as normative data or cut-off scores are not currently available.

Clinimetrics: Internal consistency for each of the subscales of the 42-item and the 21-item versions of the questionnaire are typically high (eg Cronbach's α of 0.96 to 0.97 for DASS-Depression, 0.84 to 0.92 for DASS-Anxiety, and 0.90 to 0.95 for DASS-Stress (Lovibond 1995, Brown et al 1997, Antony et al 1998, Clara 2001, Page 2007). There is good evidence that the scales are stable over time (Brown et al 1997) and responsive to treatment directed at mood problems (Ng 2007). Evidence has been found for construct (Lovibond 1995) and convergent (Crawford and Henry 2003) validity for the anxiety and depression subscales of both the long and short versions of the DASS. The clinimetric properties of the questionnaire have been examined in general and clinical populations Including chronic pain (Taylor 2005), post myocardial infarction (Lovibond 1995), psychiatric inpatients (Ng 2007) and out-patients (Lovibond 1995).

Commentary

Patients who present for physiotherapy care may also have low or disturbed mood, particularly clinically relevant symptoms of depression and anxiety. Co-morbid mood disturbance is likely to influence patients' symptoms (including reporting of symptoms), complicate management, and slow recovery from the primary presenting condition. Accurate evaluation of mood is therefore an essential element of a comprehensive physiotherapy assessment. The application of a valid questionnaire is likely to assist with evaluating mood disturbance and will reduce the likelihood of the clinician failing to recognise these problems (Haggman 2004).

A variety of questionnaires assess mood disturbance but many contain somatic items (eg sleep problems, loss of appetite), which are likely to reflect the patient's presenting condition rather than any mood disturbance. The DASS was developed with somatic items excluded to address this problem specifically. It is therefore likely to provide clinicians with an accurate assessment of their patient's symptoms of depression, anxiety and stress.

The DASS has excellent clinimetric properties and few limitations, however clinicians should be aware that certain patient groups (eg children, the developmentally delayed, or those who are taking certain medications) may have difficulty understanding the questionnaire items or responding to them in an unbiased manner. For non-English speaking patients over 25 translations of the DASS are available.

Finally, we caution against using the DASS scores to independently diagnose discrete mood disorders such as depression. The DASS is not intended to replace a complete psychological assessment. It is important to remember that DASS severity ratings are based on mean population scores

obtained from large, relatively heterogenous samples. On this basis, an individual severity rating reflects how far scores are positioned from these population means; the further away the score is from the population mean, the more severe the symptoms. If DASS scores suggest that a patient has significant symptoms of depression, anxiety, or stress, then referral to a qualified colleague with experience in managing mood disturbance is required.

For more information on the DASS the developers have provided a comprehensive FA section on their web page, along with an overview and link to download the questionnaire.

Luke Parkitny, James McAuley

Neuroscience Research Australia (NeuRA), Randwick, Australia

References

Antony MM et al (1998) Psychol Assess 10: 176-181.

Brown TA, et al (1997) Behav Res Ther 35: 79-89.

Clara I et al (2001) J Psychopathol Behav Asses 23: 61-67.

Crawford JR, Henry JD (2003) Brit J Clin Psych 42: 111-131.

Haggman S et al (2004) Phys Ther 84: 1157-1166.

Lovibond PF, Lovibond SH (1995) Manual for the Depression Anxiety Stress Scales 2nd ed. Sydney, Psychology Foundation.

Ng F et al (2007) Acta Neuropsychiatr 19: 304-310.

Page AC, et al (2007) Brit J Clin Psych 46: 283-297.

Taylor et al (2005) Clin J Pain 21: 91-100.

Website

www2.psy.unsw.edu.au/groups/dass