Impact of Event Scale-Revised

Description

The Impact of Event Scale-Revised (IES-R) is a self-report measure of current subjective distress in response to a specific traumatic event (Weiss and Marmar 1997). The 22-item scale is comprised of 3 subscales representative of the major symptom clusters of post-traumatic stress: intrusion, avoidance, and hyperarousal (American Psychiatric Association 1994). The intrusion subscale includes 8 items related to intrusive thoughts, nightmares, intrusive feelings, and imagery associated with the traumatic event. The avoidance subscale includes 8 items related to avoidance of feelings, situations, and ideas. The hyperarousal subscale includes 6 items related to difficulty concentrating, anger and irritability, psychophysiological arousal upon exposure to reminders and hypervigilance.

The IES-R is a revised version of the Impact of Event Scale (Horowitz 1979) and was developed as the original version did not include a hyperarousal subscale. IES-R responses were also modified so the client was requested to report on the degree of distress rather than the frequency of the symptoms.

Instructions to the client and scoring: The IES-R takes approximately 10 minutes to complete and score with no special training required to administer the questionnaire. The client is asked to report the degree of distress experienced for each item in the past 7 days. The 5 points on the scale are: 0 (not at all), 1 (a little bit), 2 (moderately), 3 (quite a bit), 4 (extremely). The sum of the means of each subscale instead of raw sums is recommended (Weiss and Marmar 1997). Thus, the scores for each subscale range from 0 to 4 and the maximum overall score possible is 12. There are no specific cut-off scores for the IES-R although higher scores are representative of greater distress. Increased overall scores on all subscales may indicate the need for further evaluation.

Reliability, validity and sensitivity to change: Test-retest reliability (r = –0.89 to 0.94) and internal consistency (Chronbach’s α) for each subscale (intrusion = 0.87 to 0.94, avoidance = 0.84 to 0.97, hyperarousal = 0.79 to 0.91) are acceptable (Creamer et al 2003). IES-R scale scores have also been found to have moderate to strong correlations with one another (r = 0.52 to 0.87) (Beck et al 2008). Correlations have been found to be high between those of the IES-R and the original IES for the intrusion (r = 0.86) and avoidance (r = 0.66) subscales which supports the concurrent validity of both measures (Beck et al 2008).

The indications for using the IES-R remain largely similar to those of the original IES. The IES has been recommended for use as a measure of subjective distress in clinical guidelines such as the NSW Government Guidelines for the Management of Acute Whiplash). Similar to the IES, the IES-R is a valid measure of post-traumatic stress symptoms and is useful to monitor symptoms as well as to track progress with interventions. When compared to the original version, the key strength of the IES-R is that it correlates better with DSM-IV criteria for PTSD through the inclusion of the hyperarousal subscale (American Psychiatric Association 1994).

Physiotherapists are commonly involved in the care of individuals following a traumatic event such as a motor vehicle accident. In this area, it has been recommended that all three symptom clusters be considered (Buitenhuis et al 2006). Further, there is evidence suggesting a relationship between increased hyperarousal symptoms with persistent pain and disability in chronic whiplash (Sterling et al 2003). There has been some evidence to suggest the IES-R can discriminate between individuals with and without post-traumatic stress disorder (PTSD) (Beck et al 2008). However, there is insufficient evidence to support the IES-R as a diagnostic tool as well as conflicting evidence regarding its use as a screening tool for PTSD (Creamer et al 2003, Beck et al 2008). As with the original IES, a diagnosis of PTSD cannot be made on the IES-R alone and alternative measures should be considered if this condition is suspected (Weiss and Marmar 1997, Beck et al 2008).

Unfortunately, the IES-R does not have established cut-off points to suggest grounds for psychological referral as does the IES (scores of 26 or more out of a possible 75). There has been several cut-off values suggested for a probable diagnosis of PTSD ranging from 22 to 24 in individuals with substance use disorders (Rash et al 2008) to 33 from a possible 88 in Vietnam veterans (Creamer et al 2003). However, these cut-off values have been based on specific population groups and also relate to the raw sum of scores. As both measures were intended to provide an indication of a general level of distress related to an event and not to diagnose PTSD, cut-off points seem inappropriate. It would seem unlikely the decision to provide psychological referral would be based on the IES-R or IES alone and rather the IES-R is a tool which may aid the clinical reasoning process.


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References


Website
http://www.maa.nsw.gov.au
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 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 in-patients (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), confuse 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 homogenous 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 FAQ section on their web page, along with an overview and link to download the questionnaire.

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References


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