Appraisal Clinimetrics

## **General Health Questionnaire – 28 (GHQ-28)**

## **Description**

The GHQ-28 was developed by Goldberg in 1978 (Goldberg 1978) and has since been translated into 38 languages. Developed as a screening tool to detect those likely to have or to be at risk of developing psychiatric disorders, the GHQ-28 is a 28-item measure of emotional distress in medical settings. Through factor analysis, the GHQ-28 has been divided into four subscales. These are: somatic symptoms (items 1–7); anxiety/insomnia (items 8–14); social dysfunction (items 15–21), and severe depression (items 22–28) (Goldberg 1978). It takes less than 5 minutes to complete. The GHQ-28 must be purchased and is available at the following website: https://shop.psych.acer.edu.au/acer-shop/product/

Instructions to client and scoring: Examples of some of the items in use include 'Have you found everything getting on top of you?', 'Have you been getting scared or panicy for no good reason?', and 'Have you been getting edgy and bad tempered?' Each item is accompanied by four possible responses: Not at all, No more than usual, Rather more than usual, and Much more than usual. There are different methods to score the GHQ-28. It can be scored from 0 to 3 for each response with a total possible score on the ranging

from 0 to 84. Using this method, a total score of 23/24 is the threshold for the presence of distress. Alternatively the GHQ-28 can be scored with a binary method where *Not at all*, and *No more than usual* score 0, and *Rather more than usual* and *Much more than usual* score 1. Using this method any score above 4 indicates the presence of distress or 'caseness'.

Reliability and validity: Numerous studies have investigated reliability and validity of the GHQ-28 in various clinical populations. Test-retest reliability has been reported to be high (0.78 to 0 0.9) (Robinson and Price 1982) and interrater and intrarater reliability have both been shown to be excellent (Cronbach's α 0.9–0.95) (Failde and Ramos 2000). High internal consistency has also been reported (Failde and Ramos 2000). The GHQ-28 correlates well with the Hospital Depression and Anxiety Scale (HADS) (Sakakibara et al. 2009) and other measures of depression (Robinson and Price 1982).

The GHQ-28 was developed to be a screening tool and for this reason responsiveness in terms of Minimal Detectable Change (MDC) and Minimally Clinically Important Difference (MCID) have not been established.

## Commentary

Physiotherapists are becoming more aware of the need to screen for psychological and psychiatric co-morbidity in patients under their care. This may be to adapt or modify the physiotherapy approach to management or to institute referral to appropriate mental health care providers.

The GHQ-28 is one of the most widely used and validated questionnaires to screen for emotional distress and possible psychiatric morbidity. It has been tested in numerous populations including people with stroke (Robinson and Price 1982), spinal cord injury (Sakakibara et al 2009), heart disease (Failde and Ramos 2000), and various musculoskeletal conditions including whiplash associated disorders (Sterling et al 2003) and occupational low back pain (Feyer et al 2000) amongst others. Thus for clinicians there is a wealth of data with which to relate patient outcomes.

It assesses the client's current state and asks if that differs from his or her usual state. It is therefore sensitive to short-term distress or psychiatric disorders but not to longstanding attributes of the client.

There are some disadvantages to use of the GHQ-28 in physiotherapy practice. First, the questionnaire is not freely available and must be purchased. Second, there is the

potential for confusion over the different scoring methods, and this has implications for interpretation of scores derived from the questionnaire. There may also be some concern over the severe depression subscale which includes some confronting questions for the patient to answer. Other tools such as the HADS may be less confronting for physiotherapy use.

Despite these limitations, the GHQ-28 remains one of the most robust screening tools available to assess psychological well-being and detect possible psychiatric morbidity.

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## References

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Robinson R, Price T (1982) Stroke 13: 635.

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Sterling M et al (2003) Pain 106: 481.