**Pain Attitudes and Beliefs Scale (PABS)**

**Description**

The PABS is a self-administered questionnaire designed to assess the strength of two treatment orientations of health care practitioners (HCPs) towards low back pain (LBP). The orientations are labelled: ‘biomedical’, where the HCP believes in a biomechanical model of disease, where disability and pain are consequences of specific tissue pathology and treatment is aimed at treating the pathology; and ‘behavioural’, where the HCP believes in a biopsychosocial model of disease, in which pain does not have to be a sign of tissue damage and can be influenced by social and psychological factors.

The original PABS (20 items: 14 biomedical, 6 behavioural) was developed and tested in samples of Dutch physiotherapists (Ostelo et al 2003. The amended version (19 items: 10 biomedical, 9 behavioural) was developed and tested in Dutch physiotherapists (Houben et al 2005). It has been used in large samples of UK general practitioners (GPs) and physiotherapists (Bishop et al 2008) and has also been adapted for use in studies of neck pain (Vonk et al 2008). Further versions have been developed in samples of German physiotherapists (Laekeman et al 2008 – 14 items: 10 biomedical, 4 behavioural) and GPs in Jersey (Bowey-Morris et al 201 – 17 items: 12 biomedical, 5 behavioural).

**Instructions for completion and scoring:** A respondent indicates on a six-point scale (‘Totally disagree’ = 1 to ‘Totally agree’ = 6) the extent to which they agree or disagree with each statement. Completion takes around 10 minutes. Subscale scores are calculated by a simple summation of the responses to the subscale items. Higher scores on a subscale indicate a stronger treatment orientation. As the PABS is a recently developed tool recommended cut-offs for high or low scores have not yet been reported.

**Clinimetrics:** The biomedical subscale has been shown to be stable and robust with only minor variation in the composition of the items between studies and with typically high internal consistency (Cronbach’s $\alpha$ 0.73 to 0.84). The behavioural subscale has proved to be more problematic. The different versions that have been developed have largely been attempts to improve the structure of the original behavioural subscale. Although internal consistency (Cronbach’s $\alpha$ 0.52 to 0.68) has consistently fallen short of recommended levels (Terwee et al 2007).

There is evidence for content and construct validity (Ostelo et al 2003, Houben et al 2005, Bishop et al 2008), although there is no ‘gold standard’ with which to compare scores on the PABS. There is evidence for satisfactory test-retest reliability for the amended PABS (Bishop 2008) and for the Jersey GP version (Bowey-Morris 2010). Minimum clinically important change is yet to be determined and thus responsiveness of the PABS in detecting change in HCPs treatment orientations is not yet known.

**Commentary**

LBP is common, resulting in high numbers of consultations with HCPs. Despite a multitude of guidelines for the management of patients presenting with LBP, best-evidence recommendations are often not translated into clinical practice. HCP attitudes and beliefs are associated with the adoption of guideline recommendations. Implementation research has described a range of factors that can act as obstacles and facilitators to the translation of best practice recommendations into clinical practice and one such factor is the attitudes and beliefs that the individual HCP holds. In order to investigate the role of attitudes and beliefs in the adoption of best practice, robust measurement tools are essential. Initially this is likely to be in the context of research studies but use in educational and clinical settings will inevitably follow in due course.

The biomedical subscale of the PABS has been shown to have good clinimetric properties and the composition of items has shown a high degree of consistency when tested in a variety of HCP populations. Users of the PABS should be aware of the varied composition of the behavioural scale in the different reported versions that have been developed in attempts to improve the internal consistency of this subscale. Further work on the behavioural scale is required to achieve similar stability to the biomedical subscale.

The PABS is currently the most thoroughly tested tool available for the measurement of attitudes and beliefs of HCPs towards spinal pain, although gaps undoubtedly still exist in clinimetric testing. As the tool undergoes further testing and development the content and structure of the tool may well be refined, but this is a promising tool for this recently expanding area of research interest.

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**References**


