Health anxiety levels in chronic pain clinic attenders

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Abstract

Objective: An application of the cognitive–behavioural model of health anxiety (hypochondriasis) to chronic pain depends on the extent to which high levels of health anxiety occur in chronic pain, which has yet to be established. **Methods:** The occurrence of health anxiety in consecutively recruited chronic pain patients (n=161) and nonclinical controls with (n=34) and without pain (n=70) was investigated using a questionnaire measure of health anxiety. **Results:** Conservative figures estimated a frequency of 36.7% for hypochondriasis and 51.1% of severe and disabling health anxiety in the chronic pain sample. **Conclusion:** The current finding that high levels of health anxiety are indeed very common in chronic pain indicates the potential value of an application of the cognitive–behavioural health anxiety model to at least the subgroup of highly health-anxious chronic pain patients.

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Introduction

Over the past two decades, cognitive theories have been successfully applied to the understanding and treatment of anxiety disorders including severe health anxiety and hypochondriasis [1–3]. The extreme form of health anxiety ("hypochondriasis") was considered for many years to be an untreatable condition [4]. More recently, cognitive–behavioural models of health anxiety have proven successful in providing effective treatment for this type of anxiety disorder [5].

Pain researchers have already started to consider the importance of anxiety from a cognitive perspective. In the fear of movement/(re)injury model [6,7], which is based on the fear-avoidance model of exaggerated pain perception [8], it is proposed that persistent pain is maintained by a vicious circle of interacting cognitive, behavioural, physical, and emotional factors with a specific focus on catastrophizing and avoidance behaviour. This model has received some empirical support in the pain literature [7]. Following from a series of experimental studies, a second model was developed, the cognitive–affective model of the interruptive function of chronic pain [9]. In this model, chronic pain is redefined as a chronic interruption of current attentional engagement.

The adaptation of the health anxiety model to chronic pain is a new development and it is not yet clear whether the cognitive–behavioural approach, as applied to nonpain health anxiety, could be successfully adapted to pain patients in whom health anxiety is prominent; however, the early indications are promising [4,10,11]. In the cognitive–behavioural theory of severe and persistent health anxiety [1–3], the key maintaining factors are identified as the catastrophic misinterpretation of health-relevant information. These are, in fact, defining features. According to the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*) *IV* [12], the information that patients are concerned about cannot be pain, as, in such instances, the diagnosis would be idiopathic pain disorder. This is to suggest that *DSM* is not a good way of defining these issues in relation to chronic pain. *DSM-IV* represents current thinking concerning the psychiatric taxonomy of somatoform disorders,

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and this thinking is severely flawed not only in terms of chronic pain but also in terms of hypochondriasis, which is better characterized as the upper end of a dimension of health anxiety [3].

It seems plausible that, because of our personal learning histories and evolutionary heritage, pain of all bodily sensations should be particularly likely to attract catastrophic interpretations of physical illness and disease [10]. Catastrophizing, anxiety, and safety-seeking behaviours as responses to pain sensations are probably both psychologically and biologically prepared [13]. Thus, from a cognitive–behavioural perspective, the tendency to make catastrophic misinterpretations of pain sensations is a strong candidate as an important maintaining factor in chronic pain in at least the subgroup where high levels of health anxiety are present. The prevalence of health anxiety in chronic pain is currently not known. If health anxiety is uncommon in chronic pain, the adapted theory would be of little value, or of value for only a few people. The present study is a preliminary examination of this question.

To further illuminate the potential relevance of a health anxiety model applied to chronic pain, some empirical evidence from the literature is reported below, which also highlights the problematic diagnostic guidelines of *DSM-IV* with respect to health anxiety/hypochondriasis and idiopathic pain disorder. The notion that health anxiety may be related to chronic pain is not new. In two older studies, a large proportion of patients with chronic peptic ulcer was convinced that their doctor had misdiagnosed their illness and that they were actually suffering from cancer [14]. Another study found that patients with intractable pain were more convinced that disease was present and less able to accept medical reassurance from a doctor than control pain patients attending rheumatology, radiotherapy, pulmonary, and physiotherapy clinics [15]. Chronic low back pain patients were reported to believe that their pain was caused by a physical condition [16], despite the fact that, until today, in the majority of these patients, no matching pathophysiology is detected [16,17]. In a different study, gynaecological patients with abdominal pelvic pain syndrome as compared with gynaecological controls were significantly more fearful of having a serious disease, believed that this may have been missed by their doctors, and would not believe their doctors when told that they had no physical illness [9]. Finally, a recent study found that only 33% of chronic pain patients suffering from musculoskeletal symptoms accurately identified and agreed with the clinical diagnosis for the cause of their pain, whereas 47% were unsure of their diagnosis and 20% disagreed with it [18], with disagreement being linked to highest levels of pain and affective distress.

The beliefs measured in these studies were held by chronic pain patients, but are also part of the current *DSM-IV* definition of hypochondriasis, which is characterized by either the fear of having–or the belief that one already has–a serious medical condition despite medical reassurance. According to diagnostic rules of *DSM-IV*, because these patients were suffering from pain, they would have to be diagnosed with idiopathic pain disorder rather than hypochondriasis, which may pose some problems in relation to treatment.

The current study intended to measure the extent of health anxiety occurring in chronic pain patients, as an accurate estimate of the prevalence of health anxiety/hypochondriasis in chronic pain patients might indicate the percentage of patients likely to benefit from cognitive–behavioural treatment derived from a chronic pain model based on current successful theories of health anxiety. Previous measurements used in hypochondriasis have included the Illness Behaviour Questionnaire [19], the Illness Attitude Scale [20], the Minnesota Multiphasic Personality Inventory [21], and the Health Anxiety Questionnaire [22]. There is a range of problems with each of these measures. One of the most problematic issues relating to their use in medical settings is that they do not differentiate well between people with physical illness and people suffering from hypochondriasis [23].

The Health Anxiety Inventory developed by Salkovskis et al. [23] was used in the current study. It is a measure of clinical and nonclinical health anxiety developed in accordance with the current cognitive–behavioural model of health anxiety/hypochondriasis proposed by the same research group [2]. Both the short and long forms of the questionnaire have been found to be valid and reliable, and the questionnaire was reported to be sensitive to treatment effects if referenced 'over the last week'. In addition, discriminant function analysis showed that a cut-off point of 18 or higher in the short form reliably and exclusively identified people fulfilling *DSM-IV* diagnostic criteria for hypochondriasis, whereas people scoring 15–17 were a mixture of both hypochondriacal patients and people who are very health anxious but just missed criteria for the clinical diagnosis. People scoring 15–17 were still three standard deviations above the norms for nonclinical controls.

A previous pilot study conducted by the author and other members of the group examined the occurrence of high health anxiety/hypochondriasis in a chronic pain patient sample attending the Pain Relief Unit in Churchill Hospital, Oxford. The Shortened Health Anxiety Inventory (SHAI; [23]) was given as part of a larger questionnaire package. Participants were requested to complete the package in a single session, taking about 2 h. A total of 167 chronic pain patients returned the questionnaires using free-post envelopes. Results indicated that 17% of the patients were at or above the cut-off point for people diagnosed with hypochondriasis (cut-off point 18), and 36% of the patients were at least three standard deviations above the mean of nonclinical volunteers (cut-off point 15). This study had two major problems. First, due to the fact that the questionnaire was very long, the sample was highly self-selected, with an uptake rate of only one in three of all