BODY DYSMORPHIC DISORDER: A COGNITIVE BEHAVIOURAL MODEL AND PILOT RANDOMISED CONTROLLED TRIAL

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Summary—A cognitive behavioural model of body image is presented with specific reference to body dysmorphic disorder (BDD). We make specific hypotheses from the model for testing BDD patients in comparison with: (i) patients with “real” disfigurements who seek cosmetic surgery; (ii) subjects with “real” disfigurements who are emotionally well adjusted; and (iii) healthy controls without any defect. There have been no randomised controlled trials of treatment for BDD and therefore the model has clear implications for the development of cognitive behavioural therapy. This was evaluated in a pilot controlled trial. Nineteen patients were randomly allocated to either cognitive behaviour therapy or a waiting list control group over 12 weeks. There were no significant pre-post differences on any of the measures in the waiting list group. There were significant changes in the treated group on specific measures of BDD and depressed mood. Cognitive behaviour therapy should be further evaluated in a larger controlled trial in comparison with another psychological treatment such as interpersonal therapy and pharmacotherapy.

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INTRODUCTION

Body image has been defined as “the picture we have in our minds of the size, shape and form of our bodies; and to our feelings concerning these characteristics and our constituent body parts” (Slade, 1994). Body image is thus viewed as having two main components, a perceptual component and an attitudinal component. Slade (1994) has argued that eating disorder patients have a loose mental representation of their body image such that when confronted by enthusiastic researchers and clinicians, they err on the side of caution and over-estimate their body size. He cites evidence that over-estimation of body size in eating disorders is not primarily a perceptual phenomenon, but highly influenced by cognitive, affective and other variables such as history of weight fluctuation and cultural norms. Body dysmorphic disorder (BDD) is another disturbance of body image which consists of a preoccupation with an “imagined” defect in appearance (American Psychiatric Association, 1994), and is similarly influenced by biological, cognitive, affective, behavioural and cultural variables. The term “dysmorphophobia” is more commonly used in Europe and is now subsumed in ICD10 under the diagnoses of hypochondriacal disorder (World Health Organization, 1992).

There are no biopsychosocial models for the development and maintenance of BDD. We believe that any model of BDD needs to be integrated with other body image disorders to account for why one individual may be emotionally well adjusted to severe burns or a large port wine stain on their face, whilst another patient with a small hump on his nose is emotionally disturbed and can psychologically benefit from cosmetic surgery. We were interested therefore in constructing a cognitive behavioural model of body image with particular emphasis on BDD which would guide a pilot controlled trial of treatment. Previous theories and treatment manuals of body image have tended to focus on patients with eating disorders or Ss who are preoccupied with their weight and shape (Slade, 1994; Thompson, 1990). In this paper, we set out certain hypotheses which should be tested in future studies with BDD Ss in comparison with patients with other body image disorders, before describing a pilot study which examines the overall efficacy of a cognitive...
behavioural approach. The particular groups of body image disorders that seem relevant to our discussion are:

1. Patients with delusional disorder somatic type (DDST) in addition to BDD (referred to by some authors as “BDD psychotic sub-type”; McElroy, Phillips, Keck, Hudson & Pope, 1993).
2. Patients with “real” disfigurements who are emotionally distressed and likely to benefit from cosmetic surgery.
3. Subjects with “real” disfigurements who do not seek cosmetic surgery or for whom surgery cannot offer any help and are emotionally well adjusted. We may also learn much from the attitudes and behaviours of such individuals for helping patients with BDD.
4. Healthy controls who do not have any disfigurement.

Cognitive behavioural theories utilize a three systems analysis as a way of conceptualising clinical phenomena (Lang, 1970). The following analysis therefore considers the cognitive, affective and behavioural components of BDD.

Cognitive

The cognitive components are divided into perception and attitudes.

Perception of body image. A plastic surgeon, Harris (1981), has proposed the term “aestheticality” to describe sensitivity of aesthetic perception in the sense that musicality denotes quality of musical appreciation. He argues that this variation in sensitivity of aesthetic proportions determines why an individual may be severely disturbed by a small defect and seek cosmetic surgery. One hypothesis therefore might be that BDD patients are like patients with “real” disfigurements who seek cosmetic surgery (and presumably cosmetic surgeons and some artists) who have a higher degree of aestheticality than most of the population. The hypothesis is difficult to test until there is an objective measure of “aestheticality”. We shall return to this concept later but first we examine an alternative explanation that relates to a person’s heightened perception of his or her body image.

Selective attention is an important factor in the maintenance of several emotional disorders (Wells & Matthews, 1994). For example, self-focused attention will increase a S’s awareness of internal bodily sensations (Scheier, Carver & Matthews, 1983). One example is panic disorder in which patients are more accurate when they estimate their heart rate than normal controls (Ehlers & Breuer, 1992). A heightened awareness of bodily sensations does not necessarily increase the accuracy of appraisals concerning the cause of the sensations and a patient with panic attacks who has a heightened perception of his heart is likely to misinterpret the sensations as evidence of heart disease (Gibbons & Gaeddert, 1984).

A central hypothesis to be tested is therefore that BDD patients are selectively attending to their perceived defect and that this is a maintaining factor in their disorder. The hypothesis predicts that BDD patients should be extremely discerning and more accurate about their appearance than healthy controls. The only indirect evidence for this so far is by Jerome (1980) who studied a group of 19 patients on a waiting list for cosmetic rhinoplasty and 15 healthy controls. All the patients had an initial screening by a cosmetic surgeon, but were not considered to require urgent attention and were placed on a waiting list.

Jerome found that the patients were more accurate than healthy controls in estimating the size of their nose and spent more time looking at their feature in mirrors. The patients were rated by the clinician on a disfigurement scale of between 1 (“perfect feature”) and 9 (“very marked imperfection”). The range of observer ratings were from 2 (“almost perfect feature”) to 8 (“marked imperfection”) with a lot of variation within and between raters. No formal psychiatric diagnoses were recorded and it is therefore not known what proportion of Ss might have received a diagnosis of BDD. If the findings are generalised to BDD patients, then BDD patients should have a heightened and more accurate representation of those parts of their body regarded as defective. This heightened perception is likely to have a negative influence over any aesthetic judgement or beliefs about their body image in the same way that a heightened perception of the heart rate has a negative influence on its meaning in panic disorder.

The difference in perception between BDD patients and patients (without BDD) who undergo cosmetic surgery is not known. We hypothesise that BDD patients have a greater selective attention