

## **Chapter 6**

### **General Discussion**

## General discussion

A disturbance in body image has long been recognised in the eating disorder anorexia nervosa and has more recently been discussed in relation to bulimia nervosa. However, the findings from studies which examined the nature and significance of this disturbance in these patients have been severely limited. Many studies have measured whether patients with eating disorders overestimate their size more than normal young women, but few have measured desired size and dissatisfaction with body size. This is an important omission since such dissatisfaction is possibly a more significant index of psychopathological disturbance than perceived body size *per se* (as was discussed in Chapter 1). Also, there has been little investigation into disturbances in body size perception in bulimia nervosa, and the few reports were all were unsatisfactory in a number of respects. There has been no systematic evaluation of the significance of body size perception, in terms of its relationship with other clinical features, response to treatment and outcome from the eating disorder. Although several studies have investigated factors related to body size overestimation in anorexia nervosa, there has been almost no research into the significance of body size dissatisfaction; and no study has examined satisfactorily whether similar factors may be related to disturbances in body size perception among patients with eating disorders and women in the community. This is surprising in view of the considerable overlap between the estimations made by patients with eating disorders and controls, suggesting that common factors may be associated with disturbances in body size perception among patients and non-patients. Finally, few studies have drawn a clear distinction between body size perception and concern with shape as aspects of body image. Making this distinction is essential for reaching an understanding of the nature and significance of body image disturbance. There has been virtually no research into concern with shape, either among patients with eating disorders or among women in the community.

A series of studies was conducted which aimed to overcome the problems and limitations associated with the published studies on body image. The nature and significance of body image disturbance was investigated further by examining body size perception and concern with shape among patients with eating disorders and women in the community.

The dearth of research into concern with shape was at least partly because there was no adequate measure of this aspect of the psychopathology of eating disorders. Therefore, the Body Shape Questionnaire (BSQ) was developed specifically to assess concern with shape. This sensitive measure consists of 34 self-report items which were empirically derived and which are endorsed on a frequency scale. The questionnaire showed a high degree of internal consistency, and concurrent and discriminant validity. It was designed not as a screening instrument for the detection of eating disorders, but rather as an interval measure of an important aspect of the specific psychopathology of such disorders, which could not previously be assessed systematically.

### *Concern with shape among women in the community*

The BSQ was used to examine the significance of concern with shape in a large group of women in the community. Many were found to show some concern with their shape, but the level of such concern was usually mild compared with that experienced by most patients with bulimia nervosa. Among women in the community a relatively high level of concern with shape was found to arise at a young age and was associated with a disturbed weight history, dieting and disturbed eating attitudes and behaviour. In view of the associations between a young age, disturbed eating behaviour and a high level of concern with shape, it is possible that a high level of such concern at a young age may predict future problems with eating. It would be interesting to identify young girls who show a high level of concern with their shape and observe whether they later develop problems with eating. Should this prove the case, it would be important to attempt to identify factors which predict the development of this concern, thereby suggesting ways of averting its development.

Among women in the community, an important finding was the association between concern with shape and depressed mood, although such concern was unrelated to a poor general mental state. Minor changes in mood accompanying phase of the menstrual cycle were not found to be associated with changes in concern with shape; but among women for whom concern with shape was found to be labile, changes in concern with shape were associated with concurrent changes in mood. This finding suggests that concern with shape and mood are closely linked, and that a disturbance in one of these factors may exacerbate a disturbance in the other. Although the association does not indicate a causal relationship, it is consistent with ideas in Beck's cognitive model of depression, as was discussed in Chapter 1. Beck (1973) suggested that, among women, depressed mood often leads to concern with fatness and perceiving oneself as fat.

### *Body size perception in women in the community*

Turning to the other aspect of body image, body size perception, a series of studies was conducted to examine whether factors which have been reported to be related to disturbances in body size perception in patients with eating disorders, may be associated with similar disturbances in non-patients. Among young women in the community, body size overestimation and body size dissatisfaction were found to be related to depressed mood and a high level of concern with shape; and these relationships were found to be stronger among women who were highly concerned with their shape. An hypothesis was outlined, which suggested that negative self-appraisal, as a symptom of depressed mood, may lead to disturbances in body size perception, particularly among women who place great importance on body shape. As a rigorous test of this hypothesis, a mood induction study was conducted in the laboratory to determine whether depressed mood may exacerbate disturbances in body size perception. Small but significant changes in mood were induced in a sample of normal young women, and body size perception was measured before and after a change in mood. The hypothesis was partly supported: compared with a control group, body size overestimation and body size dissatisfaction increased more

following the induction of low mood. Furthermore, these changes in body size perception tended to be greater among women who were concerned with their shape than among women who showed little concern. Again, these findings were consistent with the ideas in Beck's cognitive model of depression discussed above. The results from the mood induction study support the hypothesis that negative self-appraisal may exacerbate body size overestimation and body size dissatisfaction, particularly among women who are highly concerned with their shape. Thus, the findings from the studies of body size perception in women in the community suggest that depressed mood and a high level of concern with shape, which characterise patients with eating disorders and which have been reported to be associated with disturbances in body size perception among these patients, may give rise to similar disturbances among women in the community. Such findings would appear partly to explain why disturbances in body size perception are common among patients with eating disorders but are also found among women in the community.

The observed relationship between depressed mood and disturbances in body size perception suggests that a study of body size perception in women with high levels of naturally occurring depression would be worthwhile. The findings from the series of studies presented above suggest that among women who place a high value on a slim body shape, the onset of depression would exacerbate both disturbances in body size perception and concerns with body shape; and that treatment which successfully alleviated the depression would also alleviate these disturbances in body image.

#### *Concern with shape in bulimia nervosa*

In view of the inadequate nature of the published research into body image disturbance in bulimia nervosa, such a disturbance was evaluated in a series of patients suffering from this disorder. Most were found to show a high level of concern with their shape; and a particularly high level of such concern was associated with a number of indices which characterise the disorder. The relationships between concern with shape and other clinical features of bulimia nervosa were associations only, and did not indicate a causal relationship. Nevertheless, it is possible to speculate about the implications of these findings. The associations observed between concern with shape, dieting, vomiting and laxative abuse suggest that the high level of concern with shape typically shown by these patients may encourage this maladaptive behaviour in order to reduce the concern with fatness. The disturbed eating behaviour may in turn encourage gross overeating<sup>1</sup> for two reasons. First, the reduction in anxiety about fatness which follows vomiting (Rosen and Leitenberg, 1982) may disinhibit dietary restraint and lead to overeating. Second, there is evidence to suggest that dietary restraint may precipitate overeating (Herman and Mack, 1975). Gross overeating will in turn intensify concern with shape, and thus a maladaptive

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<sup>1</sup> Although frequency of bulimic episodes was not found to be significantly associated with concern with shape among patients with bulimia nervosa, since all experienced bulimic episodes and the great majority showed a high level of concern with shape, there may have been insufficient variability on these two factors for them to be related.

cycle is established. An adaptation of a model proposed by Fairburn and his colleagues (Fairburn et al,1986a) illustrates these relationships (Figure 6.1). The reduction in concern with shape which accompanied the improvement in disturbed eating behaviour among those patients treated for the eating disorder suggests that improvement in one area of disturbance may facilitate improvement in other areas.

Similar to women in the community, among the patients with bulimia nervosa, in addition to disturbed eating attitudes and behaviour, a high level of concern with shape was also found to be related to depressed mood; and with general self-depreciatory feelings. Furthermore, change in concern with shape during treatment for the eating disorder was highly associated with a concurrent change in mood. As above, these findings are consistent with Beck's (1973) suggestion that depressed mood may exacerbate concern with shape and feelings of fatness.

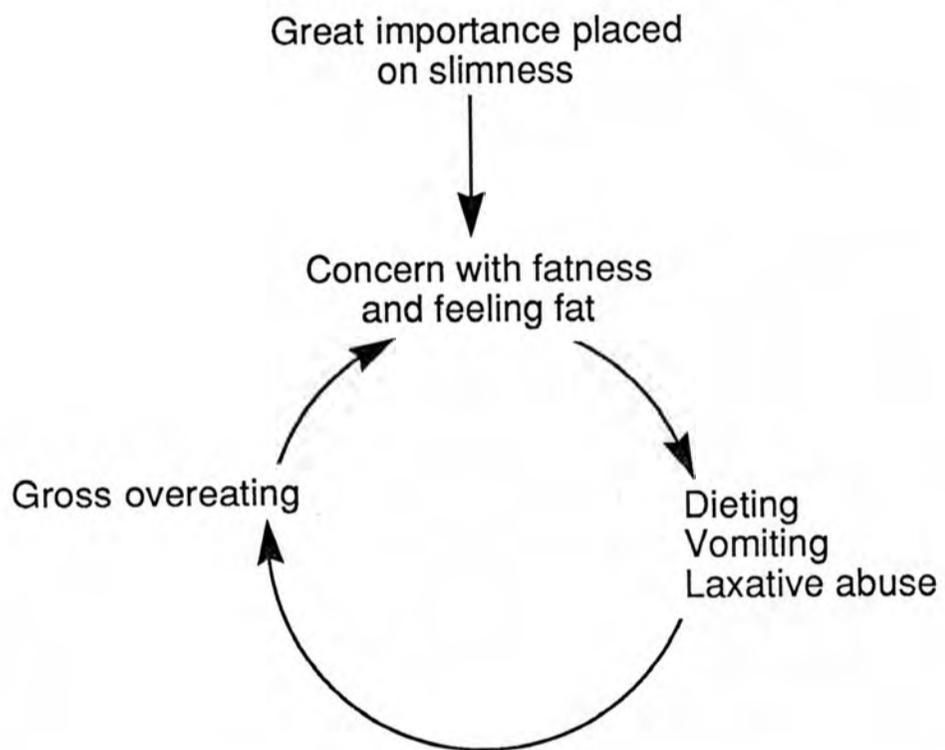
It is important to examine whether the relationship between changes in mood and concern with shape found among patients with bulimia nervosa and women in the community obtains among patients with anorexia nervosa. Two intensive case studies were conducted to investigate the relationship between body image and mood among patients suffering from this disorder (see Appendix 30). Despite very different outcomes from anorexia nervosa in terms of concern with shape, mood and disturbed eating attitudes and behaviour, for both patients an association was found between changes in concern with shape and mood.

#### *Body size perception in bulimia nervosa*

Although there have been several published reports on body size overestimation in patients with bulimic disorders, these are all methodologically unsatisfactory in a number of respects (as was reviewed in Section 2 of Chapter 5). Therefore, a series of patients with bulimia nervosa was compared on body size perception with a large group of normal young women. The patients were found to overestimate their size significantly more than the controls, and, despite being similar to the controls in terms of actual size, they wished to be much thinner and were markedly more dissatisfied with their body size. Thus, the patients were characterised by a high level of disturbance on all three perceptual indices. Examining the significance of these disturbances, body size overestimation and body size dissatisfaction were found to be associated with a high level of psychopathological disturbance. Of particular note, these included feelings of self-deprecation and a high level of concern with shape. Thus, for these patients the two components of body image were significantly related. Among patients treated for the eating disorder, disturbances on all three measures of body size perception (ie. perceived size, desired size and body size dissatisfaction) were found to decrease significantly during treatment; and for desired size and body size dissatisfaction these improvements were associated with an improvement in general clinical state including a decrease in concern with shape and an improvement in mood. Concurrent changes on these factors suggests that the inter-relationships between them may be important in the maintenance of these areas of disturbance.

Figure 6.1

A model of the maintenance of disturbed eating behaviour



Thus, among patients with bulimia nervosa, concern with shape and disturbances in body size perception were found to be related to behavioural disturbance and psychological distress, and change on these factors was associated with a change in general clinical state. The relationships found between disturbances in body size perception, concern with shape and outcome from the eating disorder suggest that recovery in terms of disturbed eating behaviour may be promoted by treating the body image disturbance. Very little has been reported on the treatment of such disturbance. Indeed, only one study reported therapy aimed specifically at modifying body image (Wooley and Kearney-Cooke, 1986). However, the findings from this study are difficult to interpret for methodological reasons (discussed in Section 3 of Chapter 5). Twenty-five years ago Bruch (1962) suggested that *a realistic body image is a precondition to recovery* from anorexia nervosa; and Fairburn and his colleagues (Fairburn et al, 1986a) recently suggested that a change in maladaptive beliefs about shape may be necessary for a full and lasting recovery from an eating disorder. In view of these suggestions it is surprising that so little attention has been devoted to the treatment of body image in eating disorders. In the study reported above, body image disturbance in bulimia nervosa was found to be meaningfully related to other central features of the psychopathology; and this suggests that improvement in the body image disturbance may have beneficial effects on other symptoms. Garfinkel and Garner (1982b), in discussing body image disturbance in anorexia nervosa, conclude that it is difficult to treat; and they advise that, instead of trying to correct disturbances in body size perception and reduce feelings of fatness, therapy should aim at teaching patients ways of coping with these disturbances by re-interpreting maladaptive concerns with shape and distorted perception. Given that there has been so little research in this area, this seems a rather pessimistic conclusion, and the treatment of body image disturbance merits further exploration. Possible ways of treating body image disturbance include exposure to body shape, such as by encouraging a patient to use communal changing rooms with mirrors, and swimming pools; confronting a patient with her perceived image and her veridical image during therapy; and helping a patient devise cognitive strategies for coping with maladaptive attitudes towards her shape and distorted perception of her body size, similar to those discussed by Garfinkel and Garner (1982b) - for example, by encouraging the patient to rely on objective measures of her body size rather than subjective perception. To date, none of these therapeutic strategies has been investigated systematically.

The study of body image disturbance in bulimia nervosa raises further questions about the nature and significance of a similar disturbance in anorexia nervosa. Although there has been considerable research into body size overestimation in anorexia nervosa as mentioned above, very little has been reported on body size dissatisfaction among these patients; and there has been no satisfactory research into concern with shape. In view of similarities in the psychopathology of bulimia nervosa and anorexia nervosa, it would be informative to compare the level of concern with shape shown by patients with the bulimic and restricting subtypes of anorexia nervosa. The relationship between concern with shape and weight needs to be investigated among patients with

anorexia nervosa. Since a low weight was found to be associated with a low level of concern with shape among patients with bulimia nervosa and women in the community, it would appear relevant to examine the level of such concern experienced by severely underweight patients with anorexia nervosa over the course of weight restoration. Preliminary results from the two single case studies reported in Appendix 30 suggest that weight restoration may exacerbate concern with shape and disturbances in body size perception among some patients. Clearly, further research is required on a large sample of patients with anorexia nervosa to address this question.

### *Conclusion*

The series of studies reported in this thesis attempt to address the limitations of the research into the nature and significance of body image disturbance highlighted at the beginning of this Discussion. In particular, the assessments of disturbances in body size perception and concern with shape in patients with bulimia nervosa were refined; and the significance of similar disturbances as they arise among non-patient women was investigated. An important association between body image disturbance and depressed mood consistently emerged among patients with eating disorders and women in the community. The findings from the series of studies reported have important implications for the understanding of body image disturbance in the eating disorders, as well as possible implications for treatment.