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Viewpoints
How Effective Is Family Therapy for the Treatment of Anorexia Nervosa?

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Guidelines for the treatment of patients with eating disorders have recently been published in many countries (e.g. Wilson & Shafran, 2005). These guidelines should be based on scientific evidence, hopefully, evidence from randomised controlled trials, the gold standard of medical research. Such clinical trials are 'indispensable ordeals' for testing the validity of therapeutic hypothesis (Frederickson, 1980). Once guidelines have been published, clinicians may take for granted that the interventions that have been recommended have a firm scientific basis and that they therefore do not need to consult the original data that supports the recommendations.

Recently published guidelines states that: 'Of the three recommendations that are a priority for implementation in anorexia nervosa, the strongest is that children and adolescents should be offered family interventions' (Wilson & Shafran, 2005). However, to cite a recent review: 'Surprisingly little systematic research on the efficacy of family therapy for eating disorders exists despite its common clinical use' (Lock & le Grange, 2005). Here we review that research, considering only evidence obtained in randomised controlled trials.

In an often cited study on the effect of family therapy and individual therapy on anorexic patients, Russell, Szmukler, Dare, and Eisler (1987) reported that the overall outcome was poor in 54 participants. However, they did report an improvement in mildly affected individuals (mean age = 16.6 years and mean duration of illness = 1.2 years), but they noted that treatment was not effective for either adults or adolescents who had the disorder for a prolonged period of time. Thus, in this study there was a subgroup of only 10 young mildly ill patients who improved with family therapy compared to 11 patients who received individualised therapy. In a 5-year follow-up of these results, Eisler, Dare, Russell, Szmukler, le Grange, and Dodge (1997) found that the outcome had improved in all participants, regardless of treatment, and they concluded that: 'Much of the improvements found at a 5-year follow-up can be attributed to the natural outcome of the illness'. In other word, neither family therapy nor individual therapy had much of an effect on the long-term outcome of this disorder.

In second study by this group, Eisler, Dare, Hodes, Russell, Dodge, and le Grange (2000) treated even younger patients who were even less ill. These patients were on average 15.5 years old and they had been ill for less than a year. Only 15 of 40 of these mildly affected patients achieved what they described as their good outcome. Specifically, at the termination of treatment, patients with a 'good' outcome achieved only 87% of normal weight, only 44% of the postpubertal girls were menstruating, they had no change on the Psychosexual Scale and they showed only modest gains in self-esteem and obsessional thoughts. To illustrate their difficulty in treating seriously ill patients, 8 of 11 patients who had any previous treatment had a poor outcome. Moreover, the longer their patients had been ill, or the more emaciated they were, the less likely they were to improve. It is also quite striking that the improvements in the anorexic symptoms among all their patients were accompanied by a significant increase in the bulimic symptoms, raising the

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possibility that any improvements in the anorexic symptoms were bought at the expense of increased bulimic symptoms.

In another study, Geist, Heinmaa, Stephens, Davis, and Katzman (2000) reported a small improvement in average body weight of mildly ill patients, but these family therapists were not able to change the abnormal psychological profile of these anorexics. Robin, Siegel, Koepke, Moye, and Tice (1994) and Robin and et al. (1999) reported an increase in the BMI of anorexic patients following family therapy, but they also reported that serious psychological issues remained at the termination of their therapy. It seems evident that their patients were not in remission in these studies. To quote Robin et al. (1999): 'Even with comprehensive, multidisciplinary interventions such as those evaluated in this study, not all adolescents with anorexia nervosa will improve. Twenty per cent to 30% of the patients did not reach their target weights, and 40% to 50% did not reach the 50th percentile of BMI by 1-year follow-up'.

More recently, Lock, Agras, Bryson, and Kraemer (2005) compared short-term and longer-term courses of family therapy and reported improvements in both groups on outcome measures of anorexia. The mean age was 15.2 years for both groups at the start of treatment, but some patients were only 12 years old. The mean BMI at the start of treatment was 17.0 and 17.3 for the two groups. For a 12-year-old girl 17.0 is a normal BMI (Roland-Cachera et al., 1982) and since the patients in this study had been ill for less than 1 year, these patients were not seriously ill anorexics. The authors also did not include the 16 of 80 patients (20%) who did not complete the treatment and who should have been considered to be treatment failures. They found that although the BMI of the patients increased, only 67% attained a BMI of 20, that is a normal BMI for 16-year-old girls (Roland-Cachera et al., 1982). However, after we subtract the 20% who dropped out of the study, we are left with fewer than half of their patients who improved substantially. Lock, Couturier, and Agras (2006) recently reported the long-term outcome of these interventions. The results, however, are difficult to interpret because 67% of the patients had received psychological treatment during the period between the family therapy and the follow-up assessment, 53% had received medications and 15% had been hospitalised. Thus, while the patients may have been in partial remission from anorexia, their condition seems to have worsened in other respects. For example, at the time of admission, 14% received medication (Lock et al., 2005), but this number had increased to 35% at the time of follow-up (Lock et al., 2006). To describe the condition of the patients who had been treated with family therapy, Lock et al. (2006) wrote: 'even for those who do remit . . . a substantial proportion have long-standing psychiatric disorders other than AN that will likely complicate their long-term prognosis in terms of overall mental health'.

In all of the above studies, the effect of family therapy was compared with that of another treatment. As pointed out by Robin et al. (1999), this situation makes it difficult to precisely determine the effect of the treatment: 'the absence of a no-treatment or attention-placebo control group makes it difficult to rule out the possibility that the positive changes were due to nonspecific factors in the therapeutic situation'. While it is generally considered difficult to use an untreated control group for ethical reasons, the fact remains that this situation makes conclusions about effects difficult. This problem emerges clearly upon re-examination of the data reported by Russell et al. (1987). Recall that these authors reported that outcome was significantly better in 10 young patients treated with family therapy than in 11 patients treated with individual therapy. However, in the absence of an untreated control group, we cannot be sure of the precise effect of either treatment. There are three possibilities: patients can improve, remain unaffected or get worse. While they presented no evidence that the patients improved from treatment with individual therapy, the possibility that the patients became worse with this treatment is supported by the follow-up results reported by Eisler et al. (1997). Thus, while the 11 patients first treated with individual therapy for 1 year had a poor outcome, they improved during the 5-year follow-up period as did the 10 patients treated with family therapy. Indeed, the difference in outcome at that point was small. Let us assume that treatment with individual therapy makes anorexic patients worse, and that one additional patient had improved from an intermediate to a good outcome during the five-year follow-up period. On these assumptions, the difference between the two groups would be statistically insignificant.

While our hypothesis that treatment with individual therapy makes anorexic patients worse is speculative, it is used here to exemplify the fact that unless the effect of a treatment is known, comparisons using such a treatment for control purposes is of limited usefulness. If the effect of a treatment for a disease is unknown, as is the case for most treatments for eating disorders (Ben-Tovim et al., 2001), randomised controlled trials should use a minimal

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intervention group, preferably an untreated group, as a comparison (Pocock, 1998).

It is often considered to be an ethical dilemma to use untreated control groups in clinical trials. However, this ethical problem is apparently the same as that which arises when one intervention turns out to be superior to another in any randomised comparison. The solution to the problem is to apply the stop rules that are conventionally used in clinical trials (Pocock, 1998).

While we can only hope for an appropriately controlled trial to evaluate the effects of family therapy, the data thus far published indicate that this approach may only be of some help for very mildly affected individuals, if it has any long-term effect at all. The recognition of these conclusions would be a welcome addition to the next set of guidelines of the treatment of eating disorders.

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Response
How Enthusiastic Should We Be About Family-Based Treatment for Adolescent Anorexia Nervosa?

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Family-based treatment (FBT) for adolescent anorexia nervosa (AN) is commonly used in clinical practice despite neither systematic research nor overwhelming evidence in its support. FBT is utilised frequently perhaps because there are few, if any, credible treatment alternatives. This is not to imply that there are no other potentially helpful treatments for adolescent AN, but rather that research has not thoroughly tested the

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