"STRESS CONTROL" LARGE GROUP THERAPY FOR GENERALIZED ANXIETY DISORDER: TWO YEAR FOLLOW-UP

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Abstract. While treatments for Generalized Anxiety Disorder have considerably improved recently, they remain less effective than similar treatments for other anxiety disorders. This paper reports on a comparative outcome study of a large group didactic therapy specifically designed to teach patients to "become their own therapists" in an attempt to counter the relapse problems commonly associated with this condition. The data suggest that improvements noted at six month follow-up are maintained at two years. Suggestions are forwarded to explain the lack of differential responding found among different therapy approaches.

Keywords: Group therapy, GAD, cognitive-behavioural, follow-up.

Introduction

Although there has been a welcome increase in the number of well controlled outcome studies of Generalized Anxiety Disorder (GAD) (e.g., Borkovec & Costello, 1993; Barlow, Rapee, & Brown, 1992; Butler, Fennel, Robson, & Gelder, 1991; Durham et al., 1994), results remain, in comparison to other anxiety disorders, relatively disappointing. As Borkovec and Costello (1993) note, clinically significant change has not been large, patients generally remaining clearly anxious following treatment. Butler et al. (1991) note that 42% and 79% of cognitive therapy and behaviour therapy patients, respectively, received additional treatment for anxiety within two years of discharge. In addition, as is common in comparative outcome studies, most studies do not produce evidence of a differential response to different directive therapeutic interventions, while credible placebo approaches (White, Keenan, & Brooks, 1992; Borkovec & Mathews, 1988) are also associated with significant improvement. Relapse rates are notoriously high with this population. Wells (1995) suggests that sustained successful outcome is more likely if the patient is able successfully to generate replacement meta-knowledge rather than simply learning to control worry, while Beck and Clark (1997) suggest that the main task in the treatment of anxiety is the deactivation of the primal threat mode and the development of more reflective, constructive information processing at the secondary elaboration stage. These interesting theoretical views have yet to be tested

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empirically, although Wells presents a hopeful single treatment case study based on his theory.

Most studies suggest that post-therapy gains are maintained at a six month follow-up point (e.g., Blowers, Cobb, & Mathews, 1987; Borkovec & Whisman, 1996). Several studies have now looked at longer follow-up points; Borkovec and Costello (1993) produce evidence of clear maintenance of gains in cognitive-behavioural and applied relaxation treatments at 12 month follow-up. Power, Jerrom, Simpson, Mitchell and Swanson (1989) reported on the number of (drug-free at start of treatment) patients who were prescribed psychotropic medication and/or were given further psychological treatment in the year following treatment; 30%, 70% and 55% of cognitive therapy, diazepam and pill placebo patients respectively required further help. Of 44 patients completing treatment, Barlow et al. (1992) show high endstate functioning (using a composite measure) in 4 of the 19 patients interviewed at 24 month follow-up. The suggestion is clearly that existing therapies, which often produce only moderate improvement at post-therapy, remain relatively weak in terms of their ability to retain post-therapy gains at follow-up beyond six months.

Apart from the further distress felt by patients, relapse poses problems for busy clinicians with patients returning for "top-up" treatment. It is, therefore, of considerable importance to develop approaches capable of producing long-lasting positive change, particularly at follow-up periods in excess of the usual six months reported in outcome studies with this population suffering from a condition that could be considered in trait terms (Rapee, 1991a).

As a way of improving therapeutic gains and increasing the number of GAD patients seen, a large group didactic cognitive-behavioural approach was devised. "Stress Control" is a six session "evening class" for anxiety management specifically designed to deal with the large number of GAD patients referred to a clinical psychology primary care service. The course employs a strongly didactic approach and aims to educate patients about the nature of anxiety and teach a range of methods for controlling it. A detailed booklet accompanies the course. Patients are explicitly told not to discuss personal problems on the course and it is designed as a complete therapy i.e., no follow-up individual or group work is offered.

Previous reports

Following successful pilot work (White & Keenan, 1990), a controlled comparative trial was carried out involving four versions of the basic (cognitive-behavioural) course. Each version was accompanied by its own booklet written in a manner consistent with the theoretical approach. Independent raters easily differentiated the conditions (see White et al., 1992). On average, about 20–24 patients took part in each course.

Using the Anxiety Disorder Interview Schedule – Revised, (DiNardo et al., 1985), the author, who is experienced in using this tool, assessed patients referred to a clinical psychology primary care service. Individuals meeting DSM-III-R criteria for GAD were randomly assigned to one of five conditions: Cognitive therapy – CT (31 patients); Behavioural therapy – BT (31); Cognitive-behavioural therapy – CBT (26); Placebo – "Subconscious Retraining" – SCR (10); or waiting list – WL (11). Patients in all treatment conditions rated their therapies as highly credible and sensible. Main acceptance

criteria were a primary diagnosis of GAD (DSM-III-R); no previous contact with the clinical psychology department or previous experience of cognitive-behavioural treatment; no concurrent psychological or psychiatric help; patients agreed to maintain levels of psychotropic medication; anxiety level rated at least 5 on a 12 point scale; and age between 18–65.

There were few drop-outs and negligible missing data. Results at post-therapy showed that all treatment conditions showed highly significant within-group change and all were significantly improved compared to the waiting list. There were no significant differences between treatment groups. At six month follow-up, CT, BT, and CBT conditions continued to improve while SCR patients maintained post-therapy gains. While a trend appeared to favour the cognitive and behavioural conditions, there was little to differentiate the therapies. While similar outcome can be achieved through different pathways, an analysis of process measures suggests that non-specific factors were of importance in explaining the similarity of results between conditions (White, Brooks, & Keenan, 1995; White, 1993, 1995).

This study looks at two year follow-up of the patients reported above. It involves, as far as we are aware, the largest group of GAD patients systematically measured at this point.

Method

Procedure

A more detailed description of the original design and treatment is reported in White et al. (1992, 1995).

Treatment conditions

Cognitive therapy (CT). This therapy was derived from the procedures of Beck and Meichenbaum. It involved the identification and monitoring of automatic thoughts, rational reappraisal of these and of dysfunctional attitudes. Cognitive approaches to the treatment of panic derived from Clark, Salkovskis and Chalkley (1985) were included. No relaxation or behavioural techniques were involved.

Behaviour therapy. This involved progressive relaxation, functional analysis, targeting and graded exposure. Behavioural Relaxation Training (Schilling & Poppen, 1983) and behavioural treatment of panic (respiratory control) derived from Clark et al., 1985.

Cognitive-behaviour therapy (CBT). This course involved an amalgam of the techniques described above. As the same amount of time was allocated to CBT as to the other conditions, the amount of time spent on the range of CBT techniques was, of necessity, much less than was available in CT or BT.

Subconscious Retraining (SCR). This approach, devised by the author and based on a technique – Subconscious Reconditioning – described by Lent, Crimmings and Russell (1981), suggested that there was an important role for the subconscious in the production and maintenance of anxiety. It was explained that anxiety could be reduced

by aiming specialized and generalized "subliminal anti-anxiety messages" at the subconscious mind. These messages were supposedly embedded in both white noise and music, to which patients listened passively during each therapy session and daily homework assignments using supplied audio tapes. In fact, no subliminal messages appeared on the six tapes given to each patient. A detailed description of this treatment can be found in White (1993).

Subjects

Ninety-eight patients (excluding WL) completed treatment and completed follow-up measures, by post, six months after discharge – 31 in both CT and BT, 26 in CBT and 10 in SCR. All were contacted, by post, two years following discharge and asked to complete and return enclosed questionnaires. A relatively small selection of the measures used in the study were sent in the hope of improving response (see below). A second mail shot occurred two weeks after if no response was obtained; 20 (65%), 18 (58%), 18 (69%) and 7 (70%) patients in CT, BT, CBT and SCR responded. Of this number, 2, 1, 3 and 1 patients respectively had received additional treatment (all with the author). These patients were excluded from analysis leaving 18 (58%), 17 (55%), 15 (58%) and 6 (60%) patients in each condition.

Measures

The following measures were completed: Trait scale of the State Trait Anxiety Scale (STAI; Spielberger, Gorsuch, & Lushene, 1970); Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Anxiety rating ("Generally how anxious have you been over the last week?") (1–12 scale) and the Coping Responses Questionnaire (Billings & Moos, 1980). The CRQ divides into cognitive coping, behavioural coping and avoidance coping subscales. On the cognitive and behavioural scales, a higher score represents improved coping while the reverse is true for the avoidance scale. Patients were also asked to rate how well the treatment had worked for them (1–12 scale). Information on additional treatment and use of psychotropic medication was gathered.

Results

Due to the small number in SCR, no statistical analyses were carried out on this group although mean scores are presented. All analyses, therefore, relate to CT, BT and CBT conditions only. Between group comparisons were analysed using repeated measure ANCOVAs with treatment group as the grouping factor and baseline score as the covariate (Frison & Pocock, 1992). Within group changes were investigated using dependent *t*-tests. Due to the number of tests performed, the alpha level was set at .01.

Comparison between responders and non-responders

Independent *t*-tests, comparing those who replied at two years and those who did not, were carried out on baseline A: Trait and BDI scores. No differences emerged.

Repeated measure ANCOVAs on these measures at six month post-therapy again show no significant interaction. It is possible that this may be due to the relatively small sample size of the non-responders.

Within group change

Means and standard deviations are shown in Table 1 along with the results of *t*-tests (pre-therapy – two year FU; post-therapy – two-year FU). Generally, the results produce evidence of maintenance of the progress made at six month follow-up. The reasonably high ratings of positive expectation at pre-therapy were maintained at two year follow-up in terms of how well that expectation translated into ratings of how well the treatment actually worked for patients. The one exception is the CRQ: Avoidance results where treatment groups relapse to pre-therapy functioning. The significance of this result is not clear. Although extreme caution must be applied to the results of the few SCR patients, it does appear that this placebo therapy may be able to produce long lasting improvements.

Between group change

Results of repeated measures analyses of covariance (using the pre-treatment scores as the covariate) produced only one significant result – BT patients had a significantly higher rating of treatment improvement than CT patients [F(2, 46) = 3.68, p = .03].

With the single exception noted above, these results are in accordance with earlier papers i.e., the absence of significant differences in functioning between identifiably different versions of the large group "Stress Control". In order to test whether the exclusion of patients who had re-entered therapy biases the results, additional analyses using STAI: A-Trait, BDI and Anxiety were conducted including these patients (2 in CT, 1 in BT, and 3 in CBT) using their baseline scores to estimate two year follow-up scores. The same statistical results emerged suggesting that the analyses are not artificially inflating the effectiveness of the intervention.

Clinical significance of change

In order to assess clinically significant change, Jacobson and Truax's (1991) least arbitrary criterion where "the level of functioning subsequent to therapy places that client closer to the mean of the normal population than it does to the level of the dysfunctional population" (p. 13) was chosen where the dysfunctional population mean was taken as the baseline mean. As normative data are readily available for A-Trait and BDI, these two scales were chosen. Individuals achieved clinically significant change when they met criteria on both the scales. Results at two year follow-up and six month follow-up are, for CT, 12 of the total sample of 18 (66%) and 18/31 (66%); BT, 12/17 (70%) and 17/31 (65%); CBT 9/15 (60%) and 15/26 (53%) and for SCR 5/6 (83%) 4/6 (66%).

Table 1. Means and standard deviations for measures at pre- and post-therapy, six month and two year follow-up along with t-tests (pre-2 year FU; post-2 year FU). Alpha level .01

	CT (n = 18)	BT $(n = 17)$	CBT $(n = 15)$	SCR(n=6)
STAI: A-Trait	**	**	**	
Pre	58.7 (8.8)	57.9 (10.4)	52.8 (12.5)	57.3 (11.3)
Post	47.4 (10.7)	51.2 (10.4)	48.6 (12.5)	45.8 (16)
6 m FU	44 (12.4)	42.4 (11.8)	42.7 (9.9)	38.8 (9.6)
2 yr FU	46.3 (12.8)	42.8 (11.7)	41.8 (10.8)	40.3 (11.9)
BDI	**	**	*	
Pre	17.6 (8.9)	18.7 (8.9)	15.3 (9.9)	22.2 (10.8)
Post	9.6 (6.6)	10.5 (6.5)	9.3 (7.4)	13 (11.8)
6 m FU	8.3 (7.5)	6.5 (4.5)	6.3 (6.6)	8.5 (7.3)
2 yr FU	8.8 (9.9)	8.3 (7)	7.9 (6.9)	8.2 (6.5)
CRQ: Cognitive	*	*	*	
Pre	8.3 (4.3)	10.5 (5.5)	10.5 (5.9)	13.3 (2.3)
Post	11.6 (5.1)	11.5 (5.2)	10.9 (5.2)	12.7 (3.3)
6 m FU	13.2 (4.9)	14.4 (5)	14.2 (6.1)	14.5 (3.7)
2 yr FU	11 (3.8)	13.9 (5.2)	13.9 (4.9)	15.5 (3)
CRQ: Behaviour	NS	*	NS	
Pre	7.8 (5.1)	8.3 (4.5)	9.6 (4.8)	8 1.7)
Post	9.9 (5.1)	8.2 (4.2)	10.4 (5.5)	8.2 (3.8)
6 m FU	9.6 (5.7)	11.3 (3.8)	11.9 (6.3)	7.8 (2.8)
2 yr FU	9.6 (4.5)	12.1 (4.4)	11.7 (5.4)	9.3 (3.3)
CRQ: Avoidance	***	NS	NS	
Pre	9.9 (3.8)	8.2 (2.9)	9.5 (3.8)	5.3 (1.7)
Post	7.2 (3.4)	6.5 (3.6)	7.3 (3.3)	5.3 (2.7)
6 m FU	7.3 (2.8)	5.2 (2.4)	6.3 (2.5)	4.8 (2.6)
2 yr FU	10.3 (3.5)	9.2 (4.2)	8.2 (3.8)	7.3 (3.9)
Anxiety (1–12)	**	**	**	
Pre	8.1 (2.4)	7 (1.8)	6.6 (2)	8.8 (2.3)
Post	4.7 (1.7)	5.3 (2.5)	4.7 (1.8)	4.8 (1.8)
6 m FU	5.1 (1.8)	4.6 (1.6)	3.7 (1.9)	5.3 (2.2)
2 yr FU	5 (2.7)	4.1 (2.5)	3.9 (2.2)	4.2 (1.3)
Expectation (1–12)	NS	NS	NS	
Pre	8.7 (1.7)	8.8 (2.6)	8.5 (1.4)	9.7 (1.9)
Post	8.3 (2.2)	8.6 (1.7)	8.6 (2.5)	9.2 (2.8)
6 m FU	7.8 (2.6)	9.3 (2)	9.1 (2.7)	7.5 (1.2)
2 yr FU	7.1 (3.1)	9.8 (1.9)	8.1 (2.4)	7.3 (1.5)

Pre-2 yr FU *p > .01; **p > .001. Post-2 yr FU ***p > .01.

No statistical analyses carried out on SCR.

Discussion

These results suggest that large group didactic therapy appears to be a useful approach in the treatment of GAD. Results from a series of reports on this sample indicate that the approach is seen as a credible and sensible treatment, engenders a reasonably high level of positive expectation, produces an acceptably low attrition rate and is a costeffective approach that can be easily used in busy NHS settings. Results at posttherapy, 6 and 24 month follow-up fail to demonstrate differential responding between the various versions of the group therapy, although independent raters were able to distinguish easily between the content of each approach by analysing audio tapes of the sessions. This lack of differential responding points to a need to investigate and identify the active ingredients operating across conditions. It seems plausible to suggest that non-specific factors are of particular importance in accounting for these results. It may be that the important factors in treatment involve offering the patient a personally relevant, easily understood account of why they feel the way they do and offering a straight-forward therapy consistent with this account. If so, this model assumes that any number of theoretically and therapeutically incompatible approaches may yield similar results, although whether these non-specific effects also account for individual or even small group therapy results is open to question. This assumption is one that clinicians may take comfort from and suggests that in addition to continuing research work focusing on the development of specific approaches e.g., cognitive therapy, we should also attempt to define exactly what the important non-specific factors are and how we can maximize their impact. Although extreme caution has to be applied to the SCR results at two year follow-up, further work is warranted here as the approach is clearly not inert. Treating a large number of patients in a relatively short period of time is an economic use of scarce clinical time. The improvement on a range of objective and subjective measures – as large as that found in controlled individual trials (see White et al., 1992) – suggests a good compromise between quality of service and quantity of patients treated. The strongly didactic nature of the therapy emphasizes the need for individuals to take responsibility for their own treatment-"to turn them into their own therapist". Results suggest that this goal is achieved.

The above must be regarded as tentative given the small sample, the small number of measures used at two year follow-up (particularly the lack of a measure of worry, the main feature of GAD) and the lack of a face-to-face interview, which was beyond the scope of this study. Given that many studies of GAD indicate an onset as far back as the individual can remember (Rapee, 1991b), the results of this study provide encouragement that GAD is a disorder that can be modified in the long term by psychological treatment, although, as with other studies, it shows that patients remain relatively anxious. The need remains to advance our knowledge of the factors maintaining the condition and of the approaches to further improve existing therapies.

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