

Well-Being Therapy of Generalized Anxiety Disorder

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Key Words

Generalized anxiety disorder · Well-being therapy · Cognitive behavioral therapy · Depression · Well-being

Abstract

Background: There is increasing awareness that the goal of treatment in generalized anxiety disorder (GAD) should not simply be a response, but restoration of normal function. The aim of this study was to apply a novel psychotherapeutic approach for increasing the level of remission in GAD. **Methods:** Twenty patients with DSM-IV GAD devoid of comorbid conditions were randomly assigned to 8 sessions of cognitive behavioral therapy (CBT) or the sequential administration of 4 sessions of CBT followed by other 4 sessions of well-being therapy (WBT). Assessment methods included the Anxiety and Depression Scales of Paykel's Clinical Interview for Depression, Ryff's Psychological Well-being Scales and Kellner's Symptom Questionnaire. A one-year follow-up was undertaken. **Results:** Significant advantages of the CBT-WBT sequential combination over CBT only were observed with both observer and self-rated methods after treatment. Such gains were maintained at follow-up. **Conclusions:** These preliminary results suggest the feasibility and clinical advantages of adding WBT to the

treatment of GAD. They lend support to a sequential use of treatment components for achieving a more sustained recovery.

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Generalized anxiety disorder (GAD) is a common disorder which follows a chronic course with low rates of remission [1]. Both pharmacological and psychotherapeutic strategies have been found to be effective in controlled trials [2]. Cognitive behavioral therapy (CBT) has been associated with considerable short-term and long-term improvements [3]. There is increasing awareness, however, that the goal of treatment in GAD should not simply be a response, but resolution of symptoms and restoration of normal function [2].

Ryff and Singer [4] note that, historically, mental health research is dramatically weighted on the side of psychological dysfunction and that health is equated with the absence of illness, rather than the presence of wellness. They suggest that the absence of well-being creates conditions of vulnerability to possible future adversities and that the route of recovery lies not exclusively in alleviating the negative, but in engendering the positive. A specific psychotherapeutic strategy for enhancing well-being – well-being therapy (WBT) – has been devel-

oped [5] and tested in controlled trials, both alone [6] and in addition to CBT [7, 8]. It is based on Ryff's multidimensional model of psychological well-being, encompassing six dimensions: autonomy, environmental mastery, purpose in life, positive relations and self-acceptance [9]. The goal of this short-term therapy is improving the patients' levels of psychological well-being according to these dimensions, using cognitive behavioral techniques [5].

Remitted patients with anxiety disorders have been found to display significantly less psychological well-being compared with healthy controls [10, 11]. The aim of this study was to compare 8 sessions of standard CBT with the sequential use of 4 sessions of CBT followed by other 4 sessions of WBT.

Method

Twenty consecutive outpatients satisfying the criteria described below, who had been referred to the Affective Disorders Program of the University of Bologna, were enrolled in the study and provided written informed consent after the procedures had been fully explained. The patients' diagnoses were established by the consensus of two psychiatrists (G.A.F. and C. Rafanelli) independently using the Schedule for Affective Disorders and Schizophrenia [12]. Subjects had to meet the following criteria: (1) a current DSM-IV diagnosis of GAD; (2) no comorbid psychiatric or medical condition; (3) no history of active drug or alcohol abuse or of dependence or personality disorder according to the DSM-IV criteria; (4) no history of bipolar illness or antecedent dysthymia or major depressive disorder according to the DSM-IV criteria.

A clinical psychologist (C. Ruini) administered the Anxiety and Depression Scales of the Clinical Interview for Depression (CID) [13]. The CID Anxiety Scale consists of 4 items rated on a 7-point scale (range 4–28). The CID Depression Scale includes 10 items (range 10–70). She also administered two self-rating inventories, the Psychological Well-being Scales (PWB) [9] and the Symptom Questionnaire (SQ) [14]. These assessment tools were selected on the basis of their sensitivity (the ability to discriminate between different groups of patients and to reflect changes in experiments in therapeutics) [10, 15]. Further, they had undergone extensive validation with Italian populations [6, 7, 10, 11, 16–18].

The PWB is a self-rating, 84-item inventory that covers 6 areas of well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance. Subjects respond with a 6-point format ranging from 'strongly disagree' to 'strongly agree'. Responses to negatively formulated items are reversed in the final scoring procedure, so that high scores indicate high self-rating on the dimension assessed. Each scale score may range from 14 to 84.

The SQ is a 92-item self-rating scale that yields 4 scales of distress (anxiety, depression, somatization and hostility-irritability) and 4 scales of well-being (relaxation, contentment, physical well-being and friendliness). Each symptom scale score may range from 0 to 17, each well-being scale score from 0 to 6.

The 20 patients were then randomly assigned to one of two treatment groups: (1) 4 sessions of CBT followed by 4 sessions of WBT; (2) 8 sessions of CBT only. In both cases, treatment consisted of 8 40-min sessions once every other week. The same psychiatrist (G.A.F.) was involved in both treatment groups. CBT was conducted as described by Beck and Emery [19]. The psychiatrist used strategies and techniques described to help anxious patients correct their distorted view and maladaptive beliefs. Whenever appropriate, exposure strategies were planned with the patient [20]. Relaxation exercises were not used.

In WBT, patients were asked to report only the episodes of well-being in a diary. Automatic thoughts leading to premature interruption of well-being were identified and specific impairments – according to Ryff's model [9] – were the focus of attention [5]. Further, mastery and pleasure tasks as well as exposure to feared situations were encouraged.

Ten patients were assigned to each treatment group. The patients assigned to CBT only had a mean age of 40.0 (SD = 12.5) years. There were 4 males and 6 females. Seven were married. Seven patients belonged to the middle-upper social class and 3 to the working class [21]. Eight patients had completed at least 13 years of education. Seven patients were taking benzodiazepines in low doses at the beginning of the study (3 lorazepam 2–3 mg/day, 3 bromazepam 4.5 mg/day and 1 alprazolam 0.75 mg/day). Whenever possible these dosages were tapered during treatment, and drugs were discontinued in 2 patients. The mean duration of illness was 28.7 (SD = 19.2) months.

The 10 patients assigned to CBT- WBT had a mean age of 43.7 (SD = 11.3) years. There were 3 males and 7 females. Six patients were married, 7 belonged to the middle-upper social class and 8 had at least 13 years of education. Seven patients were taking benzodiazepines in low doses (2 lorazepam 3 mg/day, 2 prazepam 20–30 mg/day, 1 bromazepam 3 mg/day, 1 oxazepam 45 mg/day, 1 alprazolam 1.5 mg/day). Also in this case, these doses were tapered whenever possible: they were successfully discontinued in 3 patients and decreased in other 2. The mean duration of illness was 29.5 (SD = 18.2) months.

Treatment integrity was checked by taping 8 randomly selected sessions, 4 involving CBT and 4 WBT sessions. Two independent assessors were asked to identify the type of therapy that was performed (CBT or WBT). Both assessors correctly identified all sessions.

The subjects were reassessed with the CID, the SQ and PWB after treatment (8 sessions) by the same clinical psychologist who had performed the previous evaluations and who was blind to the treatment assignment. The psychologist, always blind to the treatment assignment, assessed the patients after a one-year follow-up using the CID only. During the follow-up, no further treatment or psychotherapy sessions took place.

Since data departed from normal distribution, a nonparametric method, the permutation test, adapted by Pesarin [22], was used to evaluate differences between groups. This test is the nonparametric counterpart of two-tailed Student's *t* test, and parametric analysis of variance and covariance. The method is based on a conditional simulation or resampling procedure. It is a consistent estimate of the permutation distribution of the test statistic, calculating an exact *p* value. Hence, the *p* value itself represents the main nonparametric statistic to be considered. Degrees of freedom do not affect the calculation process and are therefore omitted.

Table 1. Changes in the CID scales in patients with GAD treated with CBT or a CBT-WBT combination

	CBT (n = 8)			CBT-WBT (n = 8)			p value	
	before therapy	after therapy	follow-up	before therapy	after therapy	follow-up	after therapy ¹	follow-up ¹
CID anxiety	15.3 ± 1.7	10.4 ± 1.7	10.3 ± 1.8	16.4 ± 1.5	7.6 ± 1.2	6.5 ± 1.9	0.007	0.298
CID depression	16.1 ± 1.9	11.9 ± 1.6	11.6 ± 1.7	19.3 ± 3.5	11.0 ± 1.5	10.8 ± 1.8	0.1333	0.567

Values for CBT and CBT-WBT are expressed as mean ± SD.

¹ Analysis of covariance.

Table 2. Changes in self-rating scales in patients with GAD treated with CBT or a CBT-WBT combination

Scales	CBT (n = 8)		CBT-WBT (n = 8)		p value ¹
	before therapy	after therapy	before therapy	after therapy	
Autonomy (PWB)	43.6 ± 12.2	47.5 ± 13.5	45.4 ± 10.2	62.6 ± 11.7	0.002
Environmental mastery (PWB)	43.0 ± 7.3	48.5 ± 8.6	31.6 ± 7.2	59.6 ± 8.6	0.015
Personal growth (PWB)	49.0 ± 7.0	54.8 ± 5.1	41.4 ± 6.5	66.0 ± 8.4	0.005
Positive relations (PWB)	57.0 ± 11.7	56.6 ± 8.8	49.9 ± 4.5	63.9 ± 8.1	0.004
Purpose in life (PWB)	46.8 ± 4.5	49.6 ± 6.0	43.0 ± 5.5	61.1 ± 8.5	0.006
Self-acceptance (PWB)	35.1 ± 7.4	46.3 ± 12.6	28.3 ± 4.2	61.6 ± 8.3	0.007
Anxiety (SQ)	9.4 ± 2.4	4.0 ± 3.1	8.9 ± 3.0	0.9 ± 0.6	0.010
Depression (SQ)	6.1 ± 3.4	2.3 ± 4.1	9.0 ± 2.6	0.9 ± 1.5	0.125
Somatization (SQ)	7.6 ± 4.9	3.8 ± 2.4	6.9 ± 5.1	2.4 ± 1.4	0.166
Hostility (SQ)	4.5 ± 3.3	2.1 ± 4.1	3.3 ± 1.6	0.3 ± 0.7	0.497
Relaxation (SQ)	5.1 ± 0.6	4.3 ± 0.9	5.5 ± 0.5	3.3 ± 1.8	0.158
Contentment (SQ)	5.3 ± 1.4	4.0 ± 1.9	5.8 ± 0.7	3.1 ± 1.9	0.400
Physical well-being (SQ)	5.3 ± 1.4	4.6 ± 1.2	5.9 ± 0.4	4.3 ± 1.2	0.297
Friendliness (SQ)	2.6 ± 2.0	1.6 ± 1.2	1.9 ± 1.6	1.1 ± 1.3	0.614

Values for CBT and CBT-WBT are expressed as mean ± SD.

¹ Analysis of covariance.

The method can be used to evaluate not only single dependent variables, but also a multivariate combination of dependent variables, such as the 8 scales within the SQ instrument, or the 6 PWB scales. Results are expressed as means ± SD.

Results

Two patients in each treatment group dropped out before the end of therapy (1 patient after 2 sessions and another after 3 sessions in the CBT group and 1 patient after 1 session and another after 2 sessions of CBT in the

CBT-WBT group). Dropouts occurred therefore only in the early part of treatment, when cognitive behavior therapy was performed.

Table 1 displays the changes in CID scores. When the CID Anxiety and Depression scores at the second assessment (after CBT or WBT) of the groups were compared, with the initial measurements as covariates, there was a significant effect of WBT on anxiety ($p = 0.007$). When the CID scores at the follow-up assessment were compared, using the posttreatment measurements as covariates, there were no significant differences.

Table 2 displays the changes in self-rating scales. When the PWB scores after treatment were compared, using the initial measurements as covariates, there was a significantly higher degree of improvement in all PWB scales. By analysis of covariance, there was a significant advantage of the CBT-WBT combination only as to the SQ anxiety subscale (table 2).

Interpretation of self-rated data is hindered by the considerable number of scales. However, the nonparametric combination method for dependent permutation test allows to consider the two instruments by a global viewpoint. When the scores of the PWB and SQ at the second assessment of the two groups were compared, using the initial measurements as covariates, a significant effect of WBT was found for the PWB ($p = 0.002$), but not for the SQ.

Discussion

The study has obvious limitations due to its preliminary nature. First, it involved a small number of patients. Second, treatment was provided by only one psychiatrist with extensive experience in anxiety disorders and CBT. The results might have been different with multiple, less experienced therapists.

Nonetheless, the study provides new, important clinical insights regarding the treatment of GAD and the technical development of psychotherapeutic strategies.

The sequential use of CBT (the initial 4 sessions) and WBT (the following 4 sessions) yielded a significantly higher improvement in observer-rated anxiety, compared with CBT only. Both groups of patients maintained their gains at follow-up.

A number of issues may provide explanation for the findings.

WBT is based on self-monitoring of episodes of well-being by patients in a diary, including reasons (thoughts or beliefs) leading to the interruption of well-being. This may lead to a more comprehensive identification of automatic thoughts than that entailed by the customary monitoring of episodes of distress in cognitive therapy [19], and thus may result in a more effective cognitive restructuring. The technique is aimed at changing beliefs and attitudes detrimental to well-being, stimulating personal growth, and reinforcing well-being-promoting behavior [5]. All dimensions of psychological well-being significantly increased in the CBT-WBT combination. It is thus conceivable that changes in well-being may affect the balance of positive and negative affects which character-

izes anxiety disorders [10, 11], as was the case in a previous investigation on remitted patients with anxiety disorders [6]. For instance, an improvement in the perceived perception of managing everyday affairs (environmental mastery) may result in a decrease in pessimistic cognitive distortions related to role functioning. Not surprisingly, procedures to increase self-confidence and reduce demoralization were included in the anxiety management procedures developed for treating GAD [23]. Interpersonal difficulties were reported as a substantial residual problem after CBT [24]. Emphasis on positive relationships with others and self-acceptance in WBT may improve patients' failure to understand the give and take of human relationships (with ensuing rigidity and unwillingness to make compromises). In the same vein, overcoming the sense of stagnation (personal growth) and providing a sense of direction (purpose in life) may stimulate self-help and exposure. However, the changes in the PWB scales upon WBT should be interpreted with caution, since the two share the same conceptual framework [9] and some learning might have occurred.

Complex, multi-component packages encompassing self-monitoring of anxiety, relaxation training, cognitive therapy, improvement of coping skills and exposure have been developed for the psychotherapy of GAD [3, 23]. Not unlike other areas of application of cognitive behavioral strategies [25], research has failed to substantiate the superiority of single components [26]. Different ingredients, however, have been added simultaneously. The results of the present and other investigations [6–8] lend support to the sequential administration of treatment components [27], i.e. cognitive restructuring and exposure in a first phase and WBT at a subsequent stage. This is in line with indications for the need of a more pervasive recovery [2] and addressing interpersonal issues [24] after symptom improvement. There are thus similarities between the sequential use of psychotherapeutic strategies in the present investigation and the sequential use of pharmacotherapy and psychotherapy to improve recovery in mood disorders [7, 27].

These similarities are further increased when the characteristics of our patient population are considered.

Our sample consisted of patients with GAD who did not present comorbidity. Another form of sequential model (psychotherapy following pharmacotherapy) may have particular applicability when GAD occurs in the setting of other comorbid conditions, such as mood disorders.

The addition of WBT to the CBT package needs to be confirmed by other studies with larger samples of pa-

tients. These data can be viewed only as preliminary. However, the findings are in keeping with the complexity of the balance of positive and negative affects in health and disease [4, 10], the emerging models of positive mental health [28], and the clinical needs of sustained recovery in patients with mood and anxiety disorders [29–31].

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