Archives of Psychiatric Nursing xxx (2016) xxx–xxx

Contents lists available at ScienceDirect

Archives of Psychiatric Nursing

journal homepage: www.elsevier.com/locate/apnu

Contribution of Group Therapeutic Factors to the Outcome of Cognitive–Behavioral Therapy for Patients with Panic Disorder

Andressa Behenck [a,b], Ana Cristina Wesner [a], Débora Finkler [b], Elizeth Heldt [a,b,*]

[a] Graduate Program in Nursing, School of Nursing, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil
[b] Anxiety Disorders Program, Hospital de Clínicas de Porto Alegre, RS, Brazil

A B S T R A C T

Background: Investigating the contribution of therapeutic factors arising from the collective nature or group therapy to treat mental disorders may help therapists maximize the outcome of therapy. Studies about the role of therapeutic factors in cognitive–behavioral group therapy (CBGT) for panic disorder (PD) patients are still scarce.
Objectives: To identify the therapeutic factors rated as the most useful by patients during CBGT. Also, we aimed to investigate the relationship between patient rating of therapeutic factors and specific stages of CBGT.
Design: Non-controlled clinical trial.
Methods: A 12-session CBGT protocol was set up, covering psychoeducation, techniques for anxiety coping, cognitive restructuring, interoceptive and naturalistic exposure, and live exposure to avoidant behavior. PD symptom severity was assessed before and after the CBGT protocol. Yalom's Curative Factors Questionnaire was self-administered at the end of each session to evaluate the 12 therapeutic factors.
Results: The sample consisted of 16 patients, who produced 192 assessments of therapeutic factors. Severity of symptoms improved at the end of CBGT, with a large effect size (>1.0). Different ratings were attributed to therapeutic factors at different phases of CBGT. Seven factors were rated as significantly helpful: altruism, interpersonal learning/input, guidance, identification, family reenactment, self-understanding, and existential factors.
Conclusions: Therapeutic factors are dynamic and interdependent. Therefore, recognizing the impact of these factors during CBGT may potentially contribute to a better understanding of the therapeutic process.

The therapeutic process of therapy groups is complex and arises from the interaction among participants and from the sharing of experiences, both of which promote change (Yalom & Leszcz, 2006). Therapy groups have several characteristic factors that are considered therapeutic because they facilitate the learning of new behaviors and thoughts. Thus, in addition to the specific techniques used by professionals to treat mental disorders, group therapeutic factors may in and of themselves be an instrument of change (Behenck, Gomes, & Heldt, 2016).

GROUP THERAPEUTIC FACTORS

Yalom and Leszcz (2006) have proposed a set of 12 therapeutic factors, all of which are related to the interaction among participants in the therapeutic group: altruism, group cohesiveness, universality, interpersonal learning/input, interpersonal learning/output, guidance, catharsis, identification, family reenactment, self-understanding, instillation of hope, and corrective recapitulation of existential factors. Previous studies with CBGT have shown a positive contribution of therapeutic factors to the outcomes of therapy. For example, it was found that group cohesiveness contributes to the improvement of patients with social phobia (Taube-Schiff, Suvak, Antony, Bieling, & McCabe, 2007). Another study focusing on CBGT for social phobia showed that interpersonal learning-output, guidance, universality, and group cohesiveness played an important role in improvement (Choi & Park, 2006). Conversely, Oie and Browne (2006) did not identify a relationship between group cohesiveness and better response to CBGT in patients with mood and anxiety disorders. In a recent study by our group, we observed that the rating of therapeutic factors by individuals with obsessive–compulsive disorder varied over the course of CBGT. At the end of 12 CBGT sessions, identification and instillation of hope (Behenck et al., 2016) were rated as the most important factors by that group of patients.

Taken together, the findings of these previous studies suggest that specific therapeutic factors may play a different role in distinct disorders and, furthermore, may vary throughout therapy. However, the specific therapeutic factors that are meaningful for PD patients undergoing CBGT have not been studied.

Cognitive–Behavioral Group Therapy for Panic Disorder

PD is a common disease that presents a chronic course. This disorder is characterized by sudden anxiety attacks that involve feelings of fear and intense discomfort (tachycardia, feeling of choking, dizziness, and

Conflict of interest: The authors report no conflicts of interest.

* Corresponding Author: Elizeth Heldt, Ph.D., School of Nursing/UFRGS, São Manoel, 963–Porto Alegre, RS, Brazil, 90620-110.
E-mail addresses: eliz.h@globo.com, eheldt@hcpa.edu.br (E. Heldt).

http://dx.doi.org/10.1016/j.apnu.2016.09.001
0883-9417/

fear of dying, going crazy, or losing control). Within minutes, this abrupt surge of fear and discomfort reaches peak intensity. Panic attacks are usually followed by anticipatory anxiety (fear of suffering a new attack and/or persistent concern about the consequences of symptoms) and phobic avoidance (avoidance of places or situations associated with a previous panic attack) (American Psychiatric Association, 2014).

Cognitive–behavioral therapy (CBT) is an effective first-choice treatment for PD. CBT is a relatively brief intervention (around 12 to 20 sessions) that relies on psychoeducation, cognitive restructuring, and modification of maladaptive behaviors (Manfro, Heldt, Cordioli, & Otto, 2008). Studies have shown a positive response to CBGT, with large effect size for overall symptom improvement in patients with PD (Heldt et al., 2006; Wesner, Gomes, Detzel, Guimarães, & Heldt, 2015). However, group therapeutic factors were not evaluated in these studies. The relevance of investigating the usefulness of therapeutic factors that are intrinsic to group therapy in the treatment of mental disorders arises from the possibility of guiding therapists to work out effective strategies to improve therapeutic responses (Cox, Vinogradov, & Yalom, 2012).

Knowledge regarding the role of therapeutic factors is useful for nurses specializing in mental health, who must rely on evidence-based approaches and interventions to deal with different mental disorders (Hein & Scharer, 2015). However, as seen in a recent review, little research is available on the use of cognitive–behavioral strategies by nurses (Carvalho & Moncaio, 2010).

Considering this scenario, the present study aimed to identify the therapeutic factors that emerge as useful according to patient perception during cognitive–behavioral group therapy (CBGT) sessions for panic disorder (PD). Also, we aimed to investigate the relationship between patient rating of therapeutic factors and specific stages of CBGT.

METHODS

We carried out an uncontrolled clinical trial of a 12-session CBGT intervention for PD. The study was approved by the Research Ethics Committee of Hospital de Clínicas de Porto Alegre (HCPA; no. CAAE: 20224513.1.0000.5327) and all participants signed an informed consent form prior to the start of CBGT.

Participants

Patients attending the Anxiety Disorders Program (PROTAN) at HCPA were consecutively invited to join the study between August 2013 and July 2014. Inclusion criteria were age between 18 and 65 years, diagnosis of PD with or without comorbid agoraphobia (American Psychiatric Association, 2014), being literate, no use of medication or in stable use to treat PD for at least four months prior to the study. Patients with psychotic symptoms, at risk of suicide, or presenting severe depression (defined as Beck Depression Inventory scores ≥30) were excluded. Of 29 patients evaluated for the study, nine did not meet inclusion criteria. Of the 20 patients initially enrolled in CBGT, four dropped out (two were unable to accommodate the schedule and two quit).

Intervention

Twelve weekly 90-min sessions of CBGT were carried out using psychoeducation, coping techniques for anxiety, cognitive restructuring, interoceptive and naturalistic exposure, and live exposure to avoided situations (Heldt, Cordioli, Knijnik, & Manfro, 2008). The groups were coordinated by two nurses (therapist and co-therapist) who are experts in mental health and who had previous experience with CBGT.

The initial sessions of CBGT focused on cognitive understanding of fear and learning of techniques to deal with anxiety (muscle relaxation and diaphragmatic breathing). Subsequent sessions focused on automatic thoughts and explored the identification and evaluation of evidence against or in favor of catastrophic interpretations. Interoceptive exposure was carried out during the intermediate phase of treatment, simulating physical symptoms. At the end of the protocol, live exposure to avoided situations was gradually introduced. The final sessions addressed management of relapse, which may occur after the end of treatment (Heldt et al., 2008).

Instruments

Patients were individually assessed before the start of the intervention. A 50-min interview was conducted by nurses specializing in mental health and by a psychologist to collect sociodemographic data. The Mini International Neuropsychiatric Interview (MINI) (Amorim, 2000) was used in order to confirm the diagnosis of PD and to investigate the presence of comorbidities.

In addition, four symptom assessment instruments were applied before and after the completion of the 12 CBGT sessions. PD severity and treatment response were assessed using the Panic Disorder Severity Scale (PDSS) (Shear et al., 1997), a 7-item instrument that takes into consideration the intensity and frequency of panic attacks, degree of anticipatory anxiety and anxiety sensitivity, level of phobic avoidance, and social and professional impairment. The PDSS is especially sensitive to diagnose PD in patients presenting agoraphobia (99%) (Levitan et al., 2012). In the present study, PDSS scores were evaluated as a continuous variable.

The Hamilton Scale for Anxiety (HAM-A) uses 14 items to determine the intensity of anxiety, ranging from absent (0) to maximum intensity (4) (Hamilton, 1959). This scale has been translated to Brazilian Portuguese and is widely used in studies evaluating anxiety symptoms (Ito & Ramos, 1998). The Beck Depression Inventory (BDI) is a self-report instrument with a validated version in Brazilian Portuguese (Gorenstein & Andrade, 1996). The BDI aims at identifying and quantifying mild, moderate, and severe depression. Both instruments have shown good psychometric properties, with Cronbach's alpha ranging from 0.82 to 0.92 for HAM-A (Shear et al., 2001) and 0.79 to 0.91 for BDI (Gorenstein & Andrade, 1996).

The Clinical Global Impressions (CGI) scale is used to determine the global severity of disease (Guy, Hergueta, Baker, & Dunbar, 1998), with scores ranging from 1 (normal, not ill) to 7 (extremely ill). GCI is a well-established research-rating tool applicable to all psychiatric disorders (Heldt et al., 2006; Wesner et al., 2015).

At the end of each of the 12 CGBT sessions, patients answered the Brazilian Portuguese (Yalom & Leszcz, 2006) version of the Yalom's Curative Factors Questionnaire, a self-report instrument including 60 questions through which patients evaluate therapeutic factors. The following therapeutic factors were rated: instillation of hope, universality, imparting information/guidance, altruism, corrective recapitulation of the primary family group (family reenactment), interpersonal learning/output, identification, interpersonal learning/input, group cohesiveness, catharsis, existential factors, and self-understanding. For each therapeutic factor, five items are rated with a 1 to 7-point scale, yielding a minimum score of 5 and a maximum score of 35 points (most positive rating). The questionnaire has good internal consistency, with Cronbach's alpha =0.98 (Behenck et al., 2016).

Data Analysis

The Statistical Package for the Social Sciences (SPSS) v. 20.0 was used. The level of significance was $\alpha = 0.05$ with 95% confidence interval (95% CI). Continuous variables were expressed as mean ± standard deviation (SD) or standard error (SE). Categorical variables were expressed as absolute and relative frequency (percentage).

Student's t test for paired samples was used to determine the response to CBGT, with effect size (ES) measured through Cohen's d. Evaluation of therapeutic factors in each session was performed using generalized estimating equations (GEE).

Please cite this article as: Behenck, A., et al., Contribution of Group Therapeutic Factors to the Outcome of Cognitive–Behavioral Therapy for Patients with Panic Disorder, *Archives of Psychiatric Nursing* (2016), http://dx.doi.org/10.1016/j.apnu.2016.09.001