Dialectical Behavior Therapy: A Portuguese Pilot Program

Teresa Sousa-Ferreira
Centro Hospitalar Tâmega e Sousa, Penafiel, Portugal

Tânia Moreira, Lucília Meireles, Maria do Céu Ferreira, Mónica Cardoso,
Márcia Mendes, Sérgio Ferreira, João Paulo Silva
Centro Hospitalar Tâmega e Sousa, Penafiel, Portugal

Introduction: Borderline personality disorder (BPD) is a severe mental disorder mainly characterized by affective instability, impulsivity and self-harm. Dialectical behavior therapy (DBT) is one of the most commonly used treatment models for BPD. Objective: To analyze the impact of the DBT modified pilot program in what concerns to psychopathology, self-concept and problem solving skills in BPD patients in an outpatient setting in a Portuguese National Health Service Hospital. Method: A pioneer project in Portugal of the use of a treatment program exclusively based on DBT in a hospital setting for patients with BPD was developed. Psychological assessment scales were administered, including the Structured Clinical Interview for Axis II Disorders (SCIDII), Symptom check list (SCL-90), Problem Solving Inventory (PSI) and Self-Concept Inventory (SCI). Of ten patients six completed the treatment. The outcomes were evaluated through the use of Statistical Package for the Social Sciences by T-test and correlational analysis. Results: There was a decrease in levels of psychopathology, as well as an increase in the values of the problem-solving skills and self-concept at the end of the treatment. The results obtained were statistically significant. The correlational analysis demonstrated a negative correlation between the factor Active attitude of non-interference in daily life by occurrences, with the dimensions of Anxiety Hostility, Interpersonal Sensitivity and Somatization. Discussion/Conclusion: The obtained data are the preliminary results of an ongoing study. The main limitations of this study were the small sample size and the absence of follow up assessment. Overall, the results suggest that the modified program had a positive impact in decreasing the psychopathological and psychosomatic symptoms of patients with BPD, and it led to an improvement of everyday problem-solving strategies as well as self-concept. Therefore, the present program could be viewed as an alternative therapy for outpatients with BPD in an hospital setting and can also be seen as the result of the first step towards a better investment in BPD study and specialized treatment in Portugal.
Keywords: borderline personality disorder (BPD), dialectical behavior therapy (DBT), psychopathological symptoms, problem solving skills, self-concept

Introduction

Borderline personality disorder (BPD) is a severe mental disorder mainly characterized by affective instability, impulsivity and self-harm (Beck et al., 2016). BPD is also characterized as having a unstable self-image or sense of self (American Psychiatric Association, 2013). On the domains of self-image is the construct of self-esteem, which is usually low in BPD patients (James, 1890; Kanter, 2001). According to Bungert and colleagues (Bungert et al., 2015) rejection sensitivity is an important component in BPD and seems to be related with low self-esteem and BPD symptom severity.

Self-esteem is described as “how you evaluate yourself” and is considered part the construct named self-concept “your ideas about yourself” and this last one part of what is known by identity “who you are” (Baumeister, 1999). Thus, self-concept can be defined as a cognitive schema, an organized knowledge structure that contains traits, values and episodic and semantic memories about the self, and that controls the processing of self-relevant information (Greenwald & Pratkanis, 1984).

It is estimated that 11% of psychiatric outpatients meet the criteria for this disorder, which is associated with many severe impairments like higher rates of psychiatric comorbidity and increased risk of suicide attempts, difficulties in finding and maintaining satisfying relationships and employment, as well as high rates of mental health utilization (Beck et al., 2016; Gunderson, 1984; Wilks, Korslund, Harned, & Linehan, 2016; Clarkin, Widiger, Frances, Hurt, & Gilmore, 1983). One of the reasons may have to do with their tendency of raising preoccupation in the professionais due to their frequent complainings and somatic symptoms (Sansone & Sansone, 2004). Some studies even point out that somatic pathology may actually mask an underlying BPD, and that the behavior of acting out was synchronized with exacerbations of physical illness (Bernstein, 1988; Hull, Okie, Gibbons, & Carpenter, 1992).

Therefore, an early detection and an effective treatment of BPD is essential to prevent its individual, psychosocial, and economic consequences (Beck et al., 2016).

Psychotherapy is regarded as the first-line treatment for people with BPD (Stoffers et al., 2012). Although drugs are sometimes used to decrease emotional and interpersonal distress in these patients, there is no drug approved for BPD treatment (Combs & Oshman, 2016).

Dialectical behavior therapy (DBT) is one of the most commonly used treatment models for BPD (Barnicot, Gonzalez, McCabe, & Priebe, 2016). DBT is a well-structured treatment that includes a balance between acceptance and validation with strategies oriented towards change, integrated within a cognitive-behavioral framework. DBT focuses on increasing patients’ commitment to treatment goals, reducing dysfunctional behavior, developing new coping strategies by encouraging the use of those strategies in everyday life, and structuring the environment so that adaptive behaviors are reinforced (Dijk, 2012). Although the effects of dialectical behavior skills training have been demonstrated, there is limited research on the specific mechanisms of change in DBT (Kramer et al., 2016).

The Outpatient Treatment Program for BPD based on DBT (in Portuguese: Programa Terapêutico Ambulatório para Perturbação de Personalidade Borderline baseado na Terapia Comportamental Dialética), PT-AMBADIL®, is an adaptation of the DBT Program of Professor Marsha Linehan (Linehan, 1993a; 1993b;
2014). It was created in early 2015, at the Department of Psychiatry and Mental Health of the Padre Américo Hospital (Tamega e Sousa Hospital Center), in Portugal.

It is a pioneer project in Portugal and in the Portuguese National Health Service, and there is no official record, taking into account the available databases, of the use of a treatment program exclusively based on DBT in a hospital setting, for patients with BPD.

This Program aims to promote a treatment structure geared towards patients diagnosed with BPD, who are being monitored in the Department. It has been developed to function in an outpatient setting, for patients with this disorder and with difficulties in terms of emotional regulation and interpersonal relationships, poor coping skills, and with difficulties dealing with frustration, but without severe suicide risk.

The team consists of a Psychiatrist, a Psychiatry Resident and two psychologists with training and expertise in DBT.

The treatment program has a duration of 12 months and comprises the following components: (1) individual sessions; (2) skills group training; (3) telephone coaching; (4) interviews with family members; and (5) team consultation meetings.

The skills group training takes place on a fortnightly basis over a period of 12 months, with a duration of 150 minutes and the purpose of learning behavioral strategies from the four basic areas of DBT (mindfulness, interpersonal effectiveness, emotional regulation and distress tolerance). These group sessions are led by two members of the therapeutic team.

Individual sessions have a monthly frequency and have a duration of 60 minutes over a period of 12 months, where treatment goals are worked on according to the hierarchy reiterated in the original therapy (Linehan, 1993a; 1993b; 2014). Since they are conducted by the Psychiatry Resident, individual sessions also serve to perform pharmacological adjustments when necessary.

Meetings of the therapeutic team are used to discuss cases, adjust treatment plans and manage the burn-out of the therapists. Ideally, all team members are in attendance, taking place at least once a month.

Interviews with family members have a monthly frequency, over a period of 12 months, with the purpose of evaluating treatment feedback and teaching some behavioral strategies to facilitate the management of situations in the family context.

Telephone coaching is an aspect of the treatment to be used in crisis situations, a concept that varies according to the patient and should be agreed upon between therapist-patient. It serves as coaching for the application of behavioral strategies in a specific situation, which cannot wait until the next appointment at the service. There is a specific phone number for the patients to call for this purpose, available from 8:00 a.m. to 10:00 p.m., and it is a member of the therapeutic team who answers the telephone.

This study aims to analyze the impact of the DBT modified pilot program in an outpatient setting in a Portuguese National Health Service Hospital, with regards to the following fields:

(1) problem-solving skills;
(2) psychopathological and psychosomatic symptoms; and
(3) self-concept.

**Method**

The population under study consisted of patients diagnosed with BPD, currently attending psychiatric consultations in the Tâmega e Sousa Hospital Center (Padre Américo Unit and São Gonçalo Unit).
The sample consisted of patients diagnosed with BPD referred to this treatment program by their Assistant Psychiatrists.

Patients with any of the following exclusion criteria were not included: patients with cognitive deterioration, intellectual disability, and psychotic disorders or with a diagnosis of bipolar disorder. Patients who did not score for BPD, after applying the Structured Clinical Interview for Axis II Disorders (SCID-II) (First, Gibbon, Spitzer, Williams, & Benjamin, 1997; Pinto-Gouveia, Rijo, Matos, Castilho, & Salvador, 2011) were also excluded.

The study design was longitudinal, prospective and of clinical intervention.

Only the patients included in the study were administered the following psychological assessment scales.

**Symptom Check List (SCL-90)**

It consists of 90 items, each describing a specific psychopathological or psychosomatic alteration (depression, phobic anxiety, anxiety, hostility, obsession/compulsion, paranoia, psychoticism, interpersonal sensitivity, and somatization). It aims to assess the intensity of suffering in the 8 to 15 days prior to the administration of the scale, as well as obtain the psychopathological and psychosomatic alterations of the patient (Derogatis, 1994).

**Problem-Solving Inventory (PSI)**

This instrument seeks to assess the coping strategies individuals normally use to cope with problems in their daily lives. It contains 40 items and evaluates the following factors: (1) request for help; (2) confrontation and active problem solving; (3) passive abandonment of the situation; (4) internal/external control of problems; (5) strategies for emotional control; (6) active attitude of non-interference in daily life by occurrences; (7) internalized/externalized aggressiveness; (8) self-responsibility and fear of consequences; and (9) facing problems and planning strategies (Vaz-Serra, 1987).

**Self-Concept Inventory (SCI)**

SCI is a one-dimensional Likert-type scale built to measure the emotional and social aspects of self-concept. This instrument seeks to measure the habitual way of being of the individual and not the state in which it is temporarily. Respondents should opt for one of 5 alternatives of a Likert scale ranging from “I do not agree” to “I strongly agree”. The total score can vary between 20 and 100, and the higher the final result, the better the respondent’s self-concept (Vaz-Serra, 1986). It presents 20 items and evaluates the following factors:

1. Social acceptance/rejection;
2. Self-efficacy;
3. Psychological maturity; and
4. Impulsivity/activity.

In order to assess the impact of this treatment program, the psychological assessment scales were once again applied after the 12 months of treatment with PT-AMBADIL®.

For data analysis, the computer program for statistical treatment of data IBM® SPSS® Statistics 21 was used. Data are presented in terms of descriptive and analytic statistics. It was used the T-test student and correlation analysis. A significance level of 0.05 was used.

Statistical analysis was conducted by a member of the research team involved in this study, but who did not participate directly in the treatment program, nor had knowledge of the participants or their subjective evolution.
Results

Six patients, diagnosed with BPD, completed the proposed treatment, with a drop-out rate of 40% (10 patients started the treatment, three abandoned it, and one dropped out due to work reasons).

Through the analysis of Table 1, it is possible to observe statistically significant differences in the scales evaluated. There was a decrease in levels of psychopathology, evaluated by the SCL-90. It was also observed an increase in the values of the problem solving skills and self-concept at the end of the treatment.

Table 1
Comparison of Initial and Final Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Initial M ± SD</th>
<th>Final M ± SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI</td>
<td>61.67 ± 10.95</td>
<td>107.33 ± 12.44</td>
<td>13.80</td>
<td>0.000</td>
</tr>
<tr>
<td>SCL90</td>
<td>180.33 ± 81.21</td>
<td>137.33 ± 48.08</td>
<td>5.44</td>
<td>0.003</td>
</tr>
<tr>
<td>SCI</td>
<td>48.83 ± 12.72</td>
<td>73.00 ± 7.40</td>
<td>9.41</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Notes. SCL90—Symptom Checklist 90; PSI—Problem Solving Inventory; SCI—Self-Concept Inventory.

Through correlational analysis, statistically significant results were obtained in terms of the SCL-90 and PSI scales (scales filled at the end of the treatment), wherein the decrease in values associated with psychopathy was positively correlated with the increase in values of the problem-solving inventory ($r = +0.832$, $p < 0.040$).

The correlational analysis demonstrated a negative correlation between the factor Active attitude of non-interference in daily life by occurrences, with the dimensions of Anxiety ($r = -0.832$, $p < 0.005$), Hostility ($r = -0.946$, $p < 0.001$), Interpersonal Sensitivity ($r = -0.826$, $p < 0.005$) and Somatization ($r = -0.938$, $p < 0.001$) (Table 2).

Table 2
Correlation Between the PSI and SCL-90

<table>
<thead>
<tr>
<th>PSI</th>
<th>SCL-90</th>
<th>Request for help</th>
<th>Confrontation and active problem solving</th>
<th>Passive abandonment of the situation</th>
<th>Internal/External control of problems</th>
<th>Strategies for emotional control</th>
<th>Active attitude of non-interference in daily life by occurrences</th>
<th>Internalized/Externalized Aggressive ness</th>
<th>Self-responsibility and fear of consequences</th>
<th>Facing problems and planning strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>-0.381</td>
<td>0.031</td>
<td>0.331</td>
<td>0.698</td>
<td>0.406</td>
<td>-0.769</td>
<td>0.323</td>
<td>0.042</td>
<td>-0.420</td>
<td></td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>-0.595</td>
<td>0.066</td>
<td>0.016</td>
<td>0.299</td>
<td>0.185</td>
<td>-0.780</td>
<td>0.198</td>
<td>-0.325</td>
<td>-0.612</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>-0.258</td>
<td>0.005</td>
<td>0.354</td>
<td>0.691</td>
<td>0.406</td>
<td>-0.832$^*$</td>
<td>0.374</td>
<td>-0.153</td>
<td>-0.563</td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td>-0.186</td>
<td>-0.455</td>
<td>0.398</td>
<td>0.625</td>
<td>0.662</td>
<td>-0.946$^{**}$</td>
<td>0.584</td>
<td>-0.187</td>
<td>-0.152</td>
<td></td>
</tr>
<tr>
<td>Obsession/compulsion</td>
<td>-0.323</td>
<td>-0.188</td>
<td>0.402</td>
<td>0.731</td>
<td>0.615</td>
<td>-0.688</td>
<td>0.400</td>
<td>0.290</td>
<td>-0.008</td>
<td></td>
</tr>
<tr>
<td>Paranoia</td>
<td>0.296</td>
<td>0.210</td>
<td>0.724</td>
<td>0.802</td>
<td>0.061</td>
<td>-0.552</td>
<td>0.033</td>
<td>-0.058</td>
<td>-0.573</td>
<td></td>
</tr>
<tr>
<td>Psychoticism</td>
<td>-0.109</td>
<td>0.208</td>
<td>0.605</td>
<td>0.648</td>
<td>0.011</td>
<td>-0.578</td>
<td>-0.159</td>
<td>0.100</td>
<td>-0.370</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td>0.014</td>
<td>-0.750</td>
<td>0.401</td>
<td>0.287</td>
<td>0.503</td>
<td>-0.826$^*$</td>
<td>0.440</td>
<td>-0.347</td>
<td>0.204</td>
<td></td>
</tr>
<tr>
<td>Somatization</td>
<td>-0.120</td>
<td>-0.321</td>
<td>0.310</td>
<td>0.582</td>
<td>0.569</td>
<td>-0.938$^{**}$</td>
<td>0.611</td>
<td>-0.405</td>
<td>-0.459</td>
<td></td>
</tr>
</tbody>
</table>

Notes. $^*$ $p < 0.001$, $^*$ $p < 0.005$.

Discussion

The obtained data are the preliminary results of an ongoing study.
The investigation suggests a decrease of psychopathology and an increase in problem-solving skills in the patients who completed the treatment. It was also found that an improvement of psychopathological/psychosomatic symptoms was positively correlated with the developed problem-solving skills. Furthermore, the results suggest that the adoption of an active attitude of non-interference in daily life by occurrences is associated with a decrease in levels of anxiety, hostility, interpersonal sensitivity and somatization.

An increased level on the self-concept was also shown by the present study at the end of the program. Those results are aligned with previous ones from other studies that pointed out an significant enhancement in self-concept clarity of the patients that completed the treatment (DBT) compared with those on the waiting list, especially in what concerns to some facets of the self-concept like self-esteem self-regard, social skills and social confidence (Roepke, 2011).

The main limitations of this study are the small sample size and the absence of follow up assessment. The drop-out rate of 40% may be related to the characteristics of the pathology, to difficulties in the recruitment of patients and, consequently, to the need to work with motivation levels that are lower than desired. The drop-out rate may also be associated with the fact that there is a spacing of one month between individual sessions, which may lead to sub-optimal monitoring. However, this option was related to the human resources and infrastructures available, as well as the contingency of schedules. DBT dropout rates have ranged from 17% to 39% in research studies (Koons et al., 2001; Linehan et al., 1991; Linehan et al., 2006; Linehan et al., 2002; McMain et al., 2009; Verheul et al., 2003). It has been suggested that there are some variables that can predict dropout such as: younger age, higher level of baseline distress and higher level of baseline non-acceptance of emotional responses (Linehan, 1993; Linehan et al., 1991; Linehan et al., 2006). In 2016, Landes and colleagues provided an outpatient DBT program with BPD patients that consisted of weekly individual psychotherapy, weekly DBT skills group, phone consultation, and therapist consultation team. This treatment lasted for one year and they obtained a dropout rate of 51.8%.

It is worth noting that patients who exhibited more motivation and commitment throughout the program, with better subjective results (better feedback regarding the treatment by the patients themselves and their family members), were those who achieved better objective results, measured by the psychological assessment scales. In fact, Soler et al. (2008) examined a three-month group DBT treatment and suggested that the lack motivation for change was the only predictor of dropout.

Overall, our data provide preliminary evidence that the adapted treatment program PT-AMBADIL® has an impact in improving the psychopathological and psychosomatic symptoms of patients with BPD, the everyday problem solving strategies as well as in the level of self-concept.

Therefore, the present study suggests that the PT-AMBADIL® was efficiently adapted from DBT, and could be viewed as an alternative outpatient therapy for patients with BPD with psychosomatic symptoms, deficient self-concept and with problem-solving difficulties.

As the present work shows the preliminary results of an ongoing investigation, we hope, in the future, to enlarge the sample and complement the evaluation performed with other relevant psychological scales. We also hope to inspire new services to implement this therapy, particularly in Portugal.

References


