



# Current Research in Psychology and Behavioral Science (CRPBS)

Volume 2, Issue 2, 2021

## Article Information

Received date : 13 March, 2021

Published date: 17 May, 2021

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## Key Words

Borderline personality disorder;  
Emotional dysregulation; Behavioral  
dialectic therapy

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# Historical Review of Dialectical Behavioral Therapy: An Intervention for Borderline Personality Disorder

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## Abstract

Borderline personality disorder represents one of the most difficult personality disorders to carry due to constant changes in the patient. Due to this difficulty, evidence-based interventions have had problems in developing specific intervention protocols that help the patient to develop day-to-day skills. Under this premise, this article aims to address emotional deregulation as the main feature of borderline personality disorder. Through various studies, the perspective of risk behaviors as regulatory components will be sought. Correlations with contextual models will be presented and future directions will be presented for future interventions.

## Introduction

Within the therapeutic processes with empirical evidence [1], Cognitive Behavioral Therapy (CBT) has had a high level of efficacy [2] that has allowed it to position itself as first-line treatment in psychological disorders such as depression [3], anxiety [4], substance use disorders [5], and insomnia [6]. Based on this, different authors have sought to apply CBT in other areas, one of the most interesting being personality disorders [7,8], despite this, it has been reported that its efficacy is limited, which is why the role of psychotherapy goes into the background, being an accompaniment to pharmacological treatment [9]. However, during the early 1990s, Dr. *Marsha Linehan* proposed a specific treatment in patients diagnosed with borderline personality disorder due to the limited efficacy of traditional CBT [10-12]. Currently, borderline personality disorder is defined as a pattern of instability in the image, interpersonal relationships and emotions, marked by a clear impulsivity. Currently it is diagnosed according to the following criteria; a) Efforts to avoid helplessness (real or imagined), b) Unstable interpersonal relationships that fluctuate in idealization and devaluation, c) Alteration of self-image, d) Potentially self-injurious impulsivity, e) Recurrent suicidal behavior, f) Emotional instability, g) Feeling of emptiness, h) Difficulty controlling emotions, and i) Dissociative symptoms [13]. *Linehan* called this treatment Dialectical Behavioral Therapy (DBT) and it differed from conventional CBT by not addressing a vision of information processing dysfunction, focusing its attention on the emotional regulation that patients presented. In addition to this, a clear genesis of the problem was proposed by observing a biological predisposition to emotional vulnerability combined with a disabling environment, resulting in ineffective coping and emotional regulation behaviors that put the person at risk [14].

Within *Linehan's* theory, this characteristic was called emotional dysregulation. Which is defined as the inability to change actions and emotional responses when necessary. These actions are reflected in risky behaviors, such as substance use, self-injurious behaviors, suicide attempts, among others [15]. Within the DBT treatment components, there are four important axes: basic awareness skills, interpersonal effectiveness skills, emotional regulation skills, and discomfort tolerance skills. Each of the components is worked through a specific cycle, starting in individual therapy, to later work on social skills in group therapy. At the same time, they are followed up by telephone for crisis prevention, in addition to training family members in validation strategies. Finally, it is important to mention that the DBT model proposes that the therapist have constant supervision due to the wear and tear that this type of patient generates [16]. Under this background, let us analyze the scope that DBT has had since its first publication and how it managed to consolidate itself as the first-line treatment in borderline personality disorder (BPD), analyzing the components of emotional dysregulation as a measure of change.

## First Studies

One of the first investigations carried out aimed to determine the efficacy of DBT in patients with BPD and substance use. Through a randomized clinical trial the authors compared two groups, one of them was treated with DBT while the second was treated with standard group treatment. Measurements were made before and after treatment with follow-ups at 4, 8, 12 and 16 months. Among the results obtained in this study, it was observed that the DBT group had better results in the period of abstinence and urinalysis compared to the group with standard treatment. Finally, it is reported that these results were maintained for a longer time in the patients of the DBT group, so in this study it was possible to conclude that the treatment proposed by *Linehan* gave better results and helped the global and social adjustment of the patients. We can observe that the decrease in substance use reflects more adaptive coping strategies of the patients, for which it is inferred that there is a better regulation of emotions [17].

One year after the publication of the study by *Linehan's* team, a new study was reported, with important modifications. The main changes being the application of a dialectical perspective to problems with abstinence, adherence to treatment and strategies to cope with substance use. With these modifications, a pilot investigation was carried out in which 3 women with methamphetamine dependence participated. The study lasted one year and it was observed that 2 of the 3 participants decreased their consumption of psychoactive substances during the first 6 months compared to the consumption prior to treatment, in addition to practically disappearing in the last 6 months of treatment, the same results they were observed in suicidal ideas and intentions. Based on these results, the authors mentioned that DBT was emerging as a possibly effective treatment for the management of patients with Comorbid BPD with methamphetamine dependence.

Advances in research led to considering suicidal intention as a measure of change, which is correlated with better



management of emotions [18]. With this background two years after the modifications made, *Linehan's* team conducted a new study in which they used a randomized clinical trial that evaluated the efficacy of DBT in comparison with Comprehensive Validation Therapy in women diagnosed with BPD and with heroin use during 12 months of intervention. The evaluation measures were self-reports and urinalysis. In the first results, it was observed that the two treatment conditions showed a decrease in the consumption of substances compared to the baseline. In the follow-up 4 months after the end of the treatment, it was observed that in general conditions the two groups remained below the consumption limits, but in an analysis between groups it was seen that the one with DBT showed a greater decrease compared to the Comprehensive Validation Therapy group, and they remained more stable in coping skills according to self-reports. With these results, it was observed that DBT was emerging as a treatment with adequate results for people with BPD by providing more adaptive tools that lasted longer in the regulation of emotions [19]. Thus, the general bases of intervention began to show efficacy in the management of emotional regulation, which supported *Linehan's* initial hypotheses about patients with BPD, for which the investigations continued and details were refined in the research designs.

### Consolidation of dialectical behavioral therapy as first line treatment

With the preliminary study, DBT quickly positioned itself as an innovative treatment with a promising level of efficacy for this population, which is why different teams around the world began to conduct research on the efficacy of the intervention. Just one year after *Linehan's* study, in patients with BPD and heroin use, a study was conducted in the Netherlands comparing the efficacy of DBT compared to usual BPD treatment, using an allocation to randomly, it was divided into two groups, which underwent one year of treatment respectively. The variables that were measured were the course of suicidal ideation, self-mutilation and impulsive risk behaviors. At the end of the treatment, the patients who received DBT had a decrease in the frequency and intensity of self-mutilation and impulsive risk behaviors, which led to the conclusion that DBT was superior to the usual treatment. These behaviors again pointed to the fact that emotional dysregulation was a problem, important characteristic of the disorder and that providing novel tools helped to adapt better [20]. Continuing with the results obtained, *Linehan's* team continued its research, obtaining new results two years after its previous intervention, this time it conducted a study lasting three months in 50 patients with a diagnosis of BPD in hospital conditions, after a Controlled assignment the participants were divided into two groups, the first received DBT treatment and the second was on the waiting list. Self-mutilation behaviors and multiple inventories such as the Hamilton anxiety scale, the Beck depression inventory, the inventory of interpersonal problems, among others, were taken as evaluation measures. Among the results obtained, it was observed that the group that received DBT showed statistically significant changes in the scores of the questionnaires, in addition to a decrease in self-mutilation behaviors. These results showed that the structure of the treatment helped patients to improve in multiple areas, even in a shorter time than that proposed in the manuals [21].

These results encouraged progress in research and led to the creation of research designs that covered a longer follow-up time, as a measure of reliability. For this reason, the team of *Linehan* and collaborators reported the results found in a study carried out for two years of a randomized clinical trial in which DBT was compared against therapy made by experts in suicidal behavior and BPD. I had a total of 101 participants who met the BPD criteria. A randomisation was carried out, leaving two groups which were given one year of pecking and one year of follow-up. It was observed in the results that the participants who were in the DBT group had statistically significant improvements in the evaluation areas, which were composed of probabilities of suicide attempt, hospitalization for suicidal ideation and a lower attempt of self-harm behaviors compared to the group that received expert therapy. With these results, two premises began to be strengthened, that DBT is an adequate treatment for BPD due to the analysis and administration of specific techniques to reduce risk behaviors and that many of the consultants were favored compared to other interventions [22]. The efficacy studies of DBT continued to be replicated, proof of this is that just one year after the study with two years of follow-up, a study was carried out with an abbreviated version of DBT for the management of self-harm, suicidal ideation and subjective distress perceived by patients with BPD. The study was carried out with 20 patients who received the intervention that lasted 6 months, the results obtained in the management of self-harm, suicidal ideation and perceived subjective anguish were analyzed through three moments that were baseline, at three months treatment and six months of treatment. It was observed that the general episodes decreased at the end of the intervention. Although the results were encouraging, the same authors mentioned that they should be taken with caution due to methodological limitations, however they consider that the findings are consistent with those reported in the literature up to that time [23].

Thus, the research on the efficacy of DBT continued, being of interest not only the reduction of suicidal behaviors and self-harm. Now it was sought to understand which were the components of the treatment that helped in the improvement and implementation of the treatment. In this framework, the team of Dr. *Joaquín Soler* in 2009 [24], carried out a randomized clinical trial in which the effectiveness of DBT was compared against group therapy to be given, in this study they began to place greater emphasis on the skills of the therapist. The study included 60 patients with a diagnosis of BPD. A randomized double-blind allocation was performed in which the participants were divided, the first group received DBT and the second group standard therapy receiving a total of 13 weeks of treatment. In the results obtained, it was seen that the group that received DBT had improvements in the symptoms of BPD and a lower rate of treatment abandonment, which is why the results again showed agreement with what is reported in the literature [24]. As can be seen, DBT began to show sufficient evidence in its application in BPD, which is why it was quickly used as an intervention in disorders of a distant nature, such as bipolar disorder [25], eating disorders [26], and comorbid depression in older adults [27]. All of these interventions consolidated DBT as an evidence-based practice.

### Actual state

With the advance of research, in the second decade of the year 2000 the efficacy of DBT observed began to be evaluated. In a first meta-analysis of 2010, the efficacy of DBT in patients with BPD was analyzed, an analysis was carried out in databases such as Can, PsycINFO, PsychSpider, Medline, in which studies that applied DBT were searched, the exclusion criteria were limited not to consider other comorbid diagnoses, which did not use the DSM criteria for diagnosis; With this, the sizes of the global effect and the size of the reduction of the effect for suicidal behaviors and self-harm were calculated, under this first meta-analysis it was concluded that DBT showed moderate efficacy in reducing symptoms, therefore it is considered important to compare these effects with other specific treatments for BPD [28]. Four years later, the team of *Patrick T. Paños et al.* Conducted a meta-analysis seeking to analyze the efficacy of DBT and its recommendation as an application treatment for BPD. Databases such as MEDLINE, EMBASE, PsychINFO and the Cochrane Central Register of controlled trials were searched, spanning a 10-year time period. Within the inclusion criteria, only five studies that met them were taken into account, an analysis was made of the decrease in suicidal symptoms, observing a statistically significant reduction, which led to the conclusion that DBT is effective in reducing suicidal behaviors and risk in patients with BPD [29].

Despite the improvement in the meta-analytical studies, it was still seeking to compare DBT with other treatments for BPD, for which the team led by *Ivana A. Cristera et al.* Performed a comparative meta-analysis between various psychotherapies focused on BPD, the inclusion criteria considered only studies that had controlled and randomized clinical trials, selecting studies of independent designs differentiated from complementary designs. They reviewed databases such as Can, PsycINFO, EMBASE, and the Cochrane Central Register of Controlled Trials. Among the results obtained, it was found that DBT and therapies with psychodynamic orientation showed a significant improvement, although there is confirmation bias that should be considered [30]. Finally, this year a final meta-analysis was carried out in which the efficacy of Data is evaluated through three components, self-directed violence, suicidal behaviors and suicidal ideation. Only studies with controlled clinical trials were included up to May 2017, databases such as Medina, PsycINFO, Psyc Articles and PubMed were consulted, despite clinical improvements, it was agreed that DBT presents stable results in the prevention and management of suicidal behaviors and self-directed violence and moderate efficacy in suicidal ideation, for which DBT is positioned as the psychotherapy with the highest efficacy index in this population [31].

### Integration with contextual models

In advance, evidence-based practices, cognitive-behavioral models had a return to the behavioral roots and intervention models began to be developed that were called third generation therapies or contextual therapies, within the most representative models is Therapy Acceptance and Commitment (ACT), Functional Analytical Psychotherapy (FAP), Behavioral Activation, Integrative Couple Therapy and DBT [32,33]. One of the contextual models that have shown efficacy in multiple disorders has been ACT [34], which is why it has been theorized that it can be used in the treatment of patients with BPD, by reducing symptoms associated with the disorder. Despite this, the objective in ACT is not to reduce symptoms itself, but rather that BPD patients have more flexible repertoires of action and directed to valuable life situations, when this happens the symptoms decrease [35]. In group sessions, an ACT protocol was worked with patients with BPD who attended first-level services, ACT and usual treatment were compared through three intervention groups vs. usual treatment, it was observed that patients who received the ACT protocol improved in psychological flexibility and emotional regulation



skills, as well as a decrease in anxiety and depression symptoms, and an improvement in the symptoms of the disorder [36]. Despite the fact that contextual therapies and DBT have a different philosophical and conceptual basis, in a study carried out at the Juan Ramón de la Fuente Muñiz Psychiatric Hospital in Mexico City, the effectiveness of the integrations between these contextual models was analyzed (ACT, FAP and DBT) in a patient with BPD, observing a decrease in the symptoms of the disorder and an increase in regulation abilities, despite the favorable results, the authors mention that they should be taken with caution due to the limitations of the research design [37].

Despite the fact that contextual models can be an effective tool in the management of patients with BPD, the characteristics of the disorder and of each model limit its application [38]. An example of this is FAP, which uses the therapeutic relationship in session as a strategy for change [39,40]. Although in-session exercises can help the patient feel validated [41,42], they do not generate interpersonal interaction skills and emotional regulation outside of session that are validated [43]. In addition to this, the relationship between the intervention components, the contextual models could only address one of the two modalities of the biosocial model that gives rise to the genesis of BPD, therefore its treatment implementation would only be a part within the DBT model and not one intervention are proven to be effective for this disorder [44].

## Conclusion

From the present review, multiple conclusions emerge, the first one is aimed at understanding the DBT model and its relationship with BPD, being a structured treatment, thought and directed only to this disorder. As an evidence-based practice, it was shown to be effective in preliminary studies in reducing impulsive and risky behaviors for the patient, which support the initial hypothesis about its origin and maintenance. With this, it is seen that clinical practice cannot be derived from applied research for the corroboration of hypotheses. A second conclusion is the fact that the initial measures were solemn and once again adhered to the characteristics of the disorder, the self-reports of self-harm behaviors and risk behaviors, helped to understand the experience of the participants and the verification of results with Laboratory studies helped to contrast these reports without invalidating the experience of the participants, the latter is perhaps one of the most important points to consider in the dialectical process, and that the dialectical process of the genesis of the disorder is broken and a dialectical process is opened acceptance and understanding of the environment. Despite the efforts that are being made to join DBT with contextual treatments, the theoretical differences mean that compatibility does not exceed the technical union between each model, despite the efficacy in favor of contextual models, their effectiveness within DBT It depends on the structure of the intervention itself, since when performing component analysis it is observed that the axes are interrelated and if they are worked separately, problems similar to those observed in conventional cognitive-behavioral approaches would arise. However, the changes in the diagnostic criteria and the difficulty in the diagnosis have led DBT to take into account multiple criteria of efficacy in the treatment, such as a decrease in the use of substances, a decrease in suicidal episodes or an improvement in emotional regulation However, the contextual models of BPD give priority to emotional regulation and start from it to talk about an improvement in the person.

Finally, I consider that the limitations reported in the literature are expected due to the very difficulty of obtaining patients with "pure" diagnoses of BPD on the one hand and their cooperation on the other, we must remember that the level of wear and tear that they generate makes the follow-up and even the termination of the draw extremely complicated, so the work carried out in the last 20 years is only the beginning of an evidence-based practice that aims to provide effective treatment to patients with BPD, and that is *Linehan's* words, help you live a life worth living.

**Acknowledgement:** We appreciate the support of the organization Frente del Pueblo Resistencia Organizada in reviewing the manuscript.

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