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Accessible Summary

- Borderline Personality Disorder (BPD) is a complex disorder that is difficult to treat.
- Five psychotherapeutic approaches are used in the management of BPD. These include cognitive behavioural therapy, mentalisation-based therapy, schema-focused therapy, transference-focused therapy, and dialectical behaviour therapy (DBT).
- Of the five approaches used to manage BPD, DBT has been studied the most extensively.
- DBT is a multi-pronged approach comprising of skills based training, individual psychotherapy, telephone calls and consultation team meetings.
- DBT can have a positive effect on therapists, shifting therapeutic pessimism towards one of optimism with DBT therapists also describing personal changes resulting from their work with clients.
- A considerable number of trials have been conducted since DBT was developed in the early 1990s, and most support the usefulness of BPD in the treatment of BPD. However, two Cochrane reviews conclude that more research is needed to provide stronger evidence in support of DBT for the management of BPD.

Abstract

Borderline personality disorder (BPD) is a complex disorder that is difficult to treat. However, dialectical behaviour therapy (DBT), developed by Dr Marsha Linehan in the early 1990s, has emerged as a promising treatment option for those diagnosed with BPD. DBT is a multi-pronged treatment approach delivered normally in outpatient settings over 12 months, and requires highly skilled and trained therapists. Many trials have provided evidence to support the use of DBT in the treatment of BPD. However, outcome measures vary and are mostly limited to measurable behavioural outcomes such as incidences of deliberate self-harm or suicidal thoughts. Two recent Cochrane reviews conclude that DBT does benefit those with BPD but more robust evidence is needed. DBT training for health care professionals also has the potential to shift health care professionals’ attitudes from one of therapeutic pessimism to one of optimism.
Key words
Borderline Personality Disorder, Dialectical Behavioural Therapy, Psychotherapeutic.

Introduction

Borderline personality disorder (BPD) is the most common, complex and severely impairing personality disorder (Anon 2006). It is a costly disorder (Amner 2012) and those diagnosed with BPD are often overshadowed by intense emotional pain and distress (Miller 1994; Perseius et al. 2005). It is characterised by experiences of intense and rapid changes in mood and affect, dysfunction of emotion regulation, emotional lability, engagement in destructive and self-harming behaviour and an extremely poor capacity to engage in effective relationships. Individuals with BPD often experience chronic feelings of emptiness and they may make excessive efforts to avoid abandonment. While it is not indicated in the diagnostic criteria, there is often a background of neglect such as sexual, physical or emotional in childhood (Tyrka et al. 2007; Battle et al. 2004; Bierer et al. 2003).

Those diagnosed with BPD are often overshadowed by intense emotional pain and distress (Miller 1994; Perseius et al. 2005). Despite this, much of the literature conveys a sense of negativity towards individuals with BPD, who are regularly stereotyped by health professionals and often assumed to be manipulative and attention seeking (Fallon 2003; Brooke & Horne 2010). It is also reported that psychiatric nurses are more socially rejecting of clients with BPD than with those who had a diagnosis of depression or schizophrenia (Markham 2003) and less empathetic towards patients with BPD than those with affective disorder and ‘other’ diagnoses (Fraser and Gallop 1993). However, those with BDP express as most useful having someone they can talk to in times of crisis (Nehls 1999), but they often feel that they are not listened to and that their opinions are often dismissed (Rogers & Dunne 2011).

Working with this client group is challenging (O’Brien & Flote 1997; Nehls 2000; Cleary et al. 2002), and requires specific skills. It is often notoriously difficult to engage with, and establish therapeutic relationships with these clients (Horsfall 1999; Koekkoek et al. 2009; Ma et al. 2009). The qualities that facilitate sustained
relationships, according to service users, are demonstrated by people who were ‘calm, patient, knowledgeable, flexible, empathic and interested in them as people’ (Fallon 2003 p. 398).

A variety of psychotherapeutic approaches are used in the management of BPD; these include cognitive behavioural therapy, mentalisation-based therapy, schema-focused therapy, transference-focused therapy, and dialectical behaviour therapy (DBT) (Stoffers et al. 2012). Of these approaches, DBT has been studied the most (Stoffers et al. 2012), and is currently considered the most effective treatment for borderline personality disorder. However, despite the mounting evidence supporting the role of DBT in the treatment of BPD, therapeutic pessimism among health care professionals towards this group of clients continues (Rossiter 2008).

This paper examines the evidence in support of DBT in the treatment of BPD.

**What is DBT?**

DBT, an approach first introduced by Dr. Marsha Linehan in the United States, is a complex therapy, normally delivered over one year. DBT aims to change behaviour and manage emotions and behaviours through “a balance and synthesis of both acceptance and change” (Lynch et al. 2006, p.461). It uses principles of cognitive behaviour therapy (CBT) combined with mindfulness, acceptance and dialectics. DBT however, differs from CBT in that it places less emphasis on using cognitive methods and instead focuses on the learning and practice of new skills (Amner 2012). Furthermore, mindfulness is considered to be central to DBT in the form of a practice as opposed to a philosophy (Neacsiu et al. 2012).

Three core principles underline DBT (Linehan 1993a). The first is the holistic philosophy that underpins dialectical philosophy. Secondly, opposites are encapsulated and synthesised in dialectical philosophy. This is where the person is helped find a solution for intense emotions and engages in problem solving when the intense emotions pass; referred to as “wise mind thinking” (Neacsiu et al. 2012, p.1006). Finally, continuous movement is central to DBT; by this is meant the movement of the therapist and client to a central meeting point as opposed to
movement to opposites with the movement maintained through a balance of acceptance and change (Neacsiu et al. 2012).

The multi-pronged approach of DBT fits with the bio psychosocial model proposed by Linehan (1993b), who suggested that BPD is primarily a dysfunctional emotional regulation system. Originally developed as an out-patients treatment, DBT includes weekly one-to-one sessions and skills group training as well as access to individual therapists in times of crisis. This represents four modes of intervention: group therapy, individual psychotherapy, phone calls and consultation team meetings, which run concurrently, generally over a period of a year (Table 1). More recently, evidence also supports the use of DBT to reduce symptoms of BPD among patients being treated as in-patients (Bloom et al. 2012).

The complex treatment nature of DBT matches the complexity of the population for which it is used (Rizvi 2011). The treatment goals of DBT are to reduce para-suicidal and life-threatening behaviours, to reduce behaviours that interfere with therapy and to reduce behaviours that seriously interfere with the person’s quality of life (Linehan et al. 1991).

**DBT: Early developments**

Promising evidence supporting the use of DBT in the management of BPD began to emerge in the 1990s with the work of Marsha Linehan in North America. Linehan in 1961 was admitted as a seventeen year old for her habitual cutting of her arms, legs and stomach and burning of her wrists with cigarettes. Describing her admission she said: “I was in hell. And I made a vow: when I get out I’m going to come back and get others out of here” (Carey 2011). Linehan went on to study clinical psychology and developed DBT for the treatment of women with chronic self-harming and suicidal tendencies (Linehan 1993a,b).

Linehan *et al.* undertook a series of studies (1991, 1993c, 1994) starting with a randomised controlled trial measuring the efficacy of a psychosocial treatment for BPD. The trial involved chronically suicidal woman diagnosed with BPD (n=44), and measured the efficacy of DBT in half of the group over ‘treatment as usual’ (TAU) with the other half, over a one year period. Linehan *et al.* (1991) reported a number of significant findings highlighting the benefits of DBT over ‘treatment as usual’ in the
treatment of individuals diagnosed with BPD. The individuals assigned to the DBT group engaged in less parasuicidal behaviour than those assigned to TAU. In addition, 83% of those assigned to DBT continued to attend therapy for the year whereas only 42% of those assigned to TAU continued attendance at therapy. The findings also showed that there was a significant reduction in hospital admissions in the DBT group with an average stay of 8.6 days per year compared to 38.8 days per year for the control group. In a follow-up at six and twelve months following the end of the experimental year, Linehan et al. (1993c) reported that the group of women who underwent DBT had significantly less anger, greater social adjustment and better work performance than their counterparts in the control group.

Another follow study (Linehan et al. 1994) identified that DBT was more effective than TAU in improving both general and interpersonal adjustment. However, while the group participating in DBT were found to have made significant improvements, it was identified that significant impairment was still present after 1 year. Linehan et al. (1994) concluded that although DBT was beneficial, one year of treatment may not sufficient for this client-group.

The evidence supporting DBT as a treatment for BPD

In the first study on DBT to be conducted outside of its development site, Koons et al. (2001) examined the efficacy of DBT versus TAU in women veterans diagnosed with borderline personality disorder. Twenty eight women met the study’s inclusion criteria and were randomised. The treatment time was shorter than Linehan et al’s (1991) one year by six months and the length of the skills training group and the therapist consultation meeting were also shorter than that used by Linehan et al. (1991), at 90 minutes each weekly. 20 women, ten in each group completed the treatment. Koons et al. (2001) reported that the women in the DBT group improved significantly more than those in TAU in relation to four of the study’s eleven outcome variables. i.e. suicidal ideation, hopelessness, depression and anger. However, in contrast to the findings of Linehan et al. (1991) there was no significant change identified in hospital admissions either for DBT or TAU. This latter finding may have been due to the shorter treatment time period of six months. It was also identified that unlike the findings of Linehan et al. (1991), there was a lower dropout rate in the TAU group (17%) compared to DBT (23%); this however was suggested by Koons et
al. (2001) to be attributed to the proximity of the location to participants where TAU was being run (Koons et al. 2001).

Another replication of Linehan et al.’s (1991) study was undertaken by Linehan et al. (2006). This study involved a randomised controlled trial and follow-up of DBT versus treatment by ‘experts' for suicidal behaviours and BPD. A total of 101 women meeting the criteria for BPD were randomised to DBT (n=52) or community treatment by experts (CTBE) (n=49). Community mental health leaders nominated ‘experts’ in treating difficult clients. CTBE was developed specifically for the study and the treatment provided by the experts was uncontrolled by the research team; therapists were asked to provide a type and format of therapy that they believed to be the most suitable. Outcomes were measured as a baseline and at 4 monthly intervals during the treatment period of 12 months and the subsequent 12 months following treatment completion. It was found that DBT was superior to CTBE in preventing suicide attempts and was more effective in reducing visits to the Emergency Department as well as reducing inpatient psychiatric admissions. DBT was also found to be twice as effective in maintaining people in treatment. However, the study also showed a 25% dropout rate in DBT compared to 59 % dropout in CTBE.

Similar to the previous studies outlined above, van den Bosch et al.’s (2005) RCT examined DBT versus TAU among a sample of 58 women randomly assigned. The frequency of BPD symptoms were measured at baseline, start of treatment and at 12 weekly intervals up to 6 months following completion of treatment. After 12 months of DBT, van den Bosch (2005) reported it had a significant effect on the extent of impulsive and self-mutilating behaviour and alcohol consumption. They identified that between the beginning and end of the treatments, all of these behaviours were reduced more in the DBT group than the control group. Moreover, in a follow-up study 6 months after treatment was finished lower levels of self-mutilation and impulsive behaviours were sustained, and at 18 months there was no return to former levels of problem behaviour for the DBT group (van den Bosch 2005).

More recently however, another RCT of DBT versus TAU in a total of 73 women with borderline personality disorder failed to replicate some of the findings from earlier similar studies (Carter et al. 2010). Carter et al. (2010) reported no significant differential reduction in deliberate self harm or in psychiatric hospitalisations. They
concluded that this may be as a result of the possible inferiority of the training of the DBT therapists compared with those in other studies, and the 6 month duration of the study compared to the longer duration of earlier studies. Furthermore, McMain et al. (2009) reported no significant differences in outcomes (frequency and severity of suicidal and non suicidal self harm incidents) between two randomly assigned groups of 180 patients with BPD to either DBT or general psychiatric management. However, the limited outcome measures in this study may have contributed to this finding.

Interestingly, Rizvi (2011) presents a case history of what she describes as ‘treatment failure in dialectical behaviour therapy’, and acknowledges the difficulties in measuring the success or failure of DBT when dealing with emotion dysregulation since there is no consensus on what a normal level of emotional dysregulation would be. Linehan (1993) developed DBT on the premise that the client engaging in this treatment cannot fail. If clients drop out of treatment or fail to make changes, it is assumed that the therapist, the therapy or both have been ineffective in helping the client so moving the blame away from the client (Chapman et al. 2011). When reflecting on the case history, Rizvi (2011) acknowledged her being a novice therapist, which may have affected the therapeutic alliance with the client. Moreover, she admitted to not revealing her difficulties to the DBT consultation team. The support of the DBT team is critical in DBT (Rossiter 2008).

Focusing on DBT skills training (one of the four modes of DBT intervention), Soler et al. (2009) explored its effectiveness with standard group therapy (SGT) psychotherapy among a group of females (n=63) meeting the DSM-IV diagnostic criteria for BPD randomly assigned to two groups. DBT skills training included all of the original skills as described by Linehan (1993b) while standard group therapy was oriented to allow persons with BPD to share and explore their characteristic difficulties. Both interventions consisted of thirteen psychotherapy sessions, for two hours each. There was no individual psychotherapy made available for any participant throughout the study. By the end of the study, the drop-out rate was higher for the SGT group, with a retention rate of 36.6% compared to the retention rate of 65.5% for the DBT skills training group. Furthermore, the DBT skills training group showed more improvement across more psychopathology scales, in particular,
there was a greater decrease in depression, anxiety and general psychiatric symptoms in this group when compared to the SGT group (Soler *et al.* 2009).

Much of the available literature investigating the effectiveness of DBT for BPD is focused on measurable behavioural outcomes such as incidences of deliberate self-harm or suicidal thoughts. In an effort to extend knowledge of DBT and its impact on borderline personality disorder, Davenport *et al.* (2010) explored changes in personality pre and post DBT. They based this approach on the five factor model of personality (McCrae & Costa 2003). The five personality traits in this model (Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness) are believed to be universal, and Davenport *et al.* (2010) hypothesised that pre-DBT, participants would score high on Neuroticism and low on Extraversion, Agreeableness and Conscientiousness, compared to the normal population. Post-DBT, they hypothesised that participant' scores for these personality traits would not be significantly different from the general population normal values. Two groups of participants were drawn from a DBT programme provided by a team of therapists attached to an Australian private hospital. The first group (n=17) were either on a waiting list to start DBT therapy or had just started their 8-week skill building module. The second group (n=15) were those who had successfully completed the DBT programme in the past three years. The study questionnaire was sent to the 32 participants and an overall response rate of 56% was achieved. The findings supported the study’s first hypothesis, i.e. those who had not undergone DBT were under-controlled when compared to post-treatment participants. The pre-treatment group also produced significantly higher scores for Neuroticism and lower Conscientiousnesses and Agreeable mean scores compared to the norms. In addition, the post treatment group produced significantly higher Conscientiousnesses and Agreeableness scores; however, there was no significant difference between pre and post treatment Extraversion and Neuroticism scores. Interestingly, Davenport *et al.* (2010) concluded that the lack of change on Neuroticism between pre and post treatment groups ‘fits’ with Linehan’s (1993a) biosocial theory explaining the origins of BPD. Despite the small sample size this study offers encouraging direction for future research on personality and self-control in BPD.
A number of systematic and Cochrane reviews have also contributed to the increasing evidence supporting the use of DBT in clients with BPD. Brinks et al.’s (2009) Cochrane review identified seven studies for inclusion, with six out of these focused on the treatment of BPD with DBT. The review concluded that despite the difficulty in treating people with BPD, if the person with BPD engaged in their treatment plan there was a reduction in anxiety levels, depression, self-harm, hospital admission and use of prescribed medication. However, the review also cautioned that the studies included were too small and few to offer full confidence in their findings. More recently, Stoffers et al.’s (2012) review concluded that psychotherapy plays a substantial role in the treatment of BPD but all of the treatments reviewed, including DBT, lacked a strong evidence base.

**Discussion**

Evidence suggests that DBT is now the treatment of choice for individuals with borderline personality disorder (Linehan et al. 2006, 1994, 1993c, 1991; Koons et al. 2001); however, this is as much due to the scarcity of evidence supporting other therapies rather than evidence for the effectiveness of DBT over other therapies (Stoffers et al. 2012). Moreover, trials with DBT predominantly include females, therefore are unrepresentative of men with BPD (NICE 2009).

Other available treatments for BPD include low-intensity manual-assisted cognitive therapy (MACT). MACT has shown some evidence of reducing self-harm and suicidal acts but this is reported from a single study so must be viewed cautiously (NICE 2009). However, MACT is reported to cost less and be more effective when compared with treatment as usual (NICE 2009).

Individual psychological therapies for BPD include cognitive behaviour therapy, cognitive analytic therapy, interpersonal therapy, psychodynamic interpersonal therapy and psychodynamic/psychoanalytic psychotherapy. However, these have shown little effect on BPD symptoms compared to treatment as usual (NICE 2009).

Developments in the use of DBT are ongoing with modifications being the focus of recent research. These include modification to DBT for women with BPD who are substance abusers (Dimeff et al. 2000) and those who also have an eating disorder (Kröger et al. 2010) with both studies reporting promising results. Moreover, the
potential of DBT in the reduction of self-harm among adolescents is reported by James et al. (2011). In addition, the usefulness of DBT with behaviourally challenged incarcerated adolescent males (Shelton et al. 2011) and adolescents in long-term psychiatric care (McDonnell et al. 2010) is also reported.

Recent studies have also focused on the adaptation of DBT in the treatment of adults with major depressive disorder (Feldman et al. 2009). Also, when Drossel et al. (2011) delivered an adapted Linehan’s model of DBT skills training to a group of caregivers of persons with dementia, the outcome showed a significant increase in the psychosocial functioning of the caregivers as well as enhanced emotional well-being. Moreover, because DBT has proved to be successful in the treatment of borderline personality disorder, Van Dijk et al. (2011) utilised DBT skills training in a psychoeducational group for individuals with bipolar disorder, which similar to BPD, is also marked by prominent affective disturbances. Preliminary evidence suggests that depressive symptoms were reduced as well as an improvement in affective control and self-efficacy. Similarly, an adapted version of DBT proved successful in the treatment of adolescents with bipolar disorder (Goldstein et al. 2007).

The financial savings associated with DBT are also highlighted by Amner (2012) who, in the first UK cost analysis of DBT treatment provision showed that one year’s treatment of DBT can reduce secondary mental health care costs associated with BPD. Moreover, the potential to reduce cost with group DBT programmes has been recently shown. Gutteling et al. (2012) treated 34 female patients with BPD using a 12 month adapted group DBT program in an outpatient setting. Significant reductions in depressive symptoms, suicidal thoughts, anger and anxiety were seen following the program which used both standard DBT skills training and individual DBT therapy sessions in a group format.

Services should not put upper age limits on who gets therapy for BPD; there is no evidence that older clients with BPD are more difficult to treat (Barnicot et al. 2012). In addition, evidence suggests the most potential for change from therapy is seen among those with severe symptoms (Barnicot et al. 2012).

Skills training for staff is central to DBT. While the importance of the therapeutic alliance in the treatment of BPD is paramount (Barnicot et al. 2012), the quality of training for DBT therapists is fundamental to the success of the therapy (Carter et al. 2012).
Therapists who are non-judgmental and validating and challenging in their approach are viewed positively by those with BPD who have undergone DBT (Cunningham et al. 2004). Moreover, feeling equal with the therapist has an empowering effect on clients undergoing DBT treatment (Cunningham et al. 2004).

DBT skills training can also benefit staff. Unsurprisingly, DBT therapists have reported how their work has changed them personally (Rossiter 2006), illustrated in one DBT therapist's following viewpoint: “A greater awareness of myself…also those around me and my interactions with them, but a greater awareness around notions of self…when things are okay, when things are not quite so okay. Do I need to work on them, or do I need to just go, let it go” (Rossiter 2008, p. 130).

Tackling embedded pessimistic attitudes towards those with BPD can be achieved indirectly through DBT skills training for staff. While nurses need advanced skills training to deliver DBT programs, basic training in DBT for all mental health nurses working with clients with BPD should be a priority. Two day training workshops for nurses on DBT has been shown to improve nurses’ attitudes towards clients with BPD and introduce optimism in their outlook (Hazelton et al. 2006). This positive change in attitude towards clients with BPD occurs as a result of being introduced to the conceptual framework underpinning DBT and gaining an insight into the distress and suffering experienced by clients (Rossiter 2008). This change in attitude can promote improved staff engagement with clients with BPD (Hazelton et al. 2006), which ultimately will positively impact on clients’ engagement with services.

**Conclusion**

DBT, as skills focused therapy, aims to empower clients with borderline personality disorder by furnishing them with coping skills and providing structure to the environment which enables the client to practice these skills. The importance of DBT in the treatment of BPD is evident and emerging literature suggests that adaptations and modifications of the original DBT model are successful in other areas of mental health care.

Despite the lack of strong evidence, DBT has been endorsed both by the American Psychiatric Association (2004), the National Institute for Mental Health in England (2003) and NICE (2009) as the treatment of choice for BPD. However, this
endorsement has arisen because of the lack of evidence supporting other therapies rather than evidence for the effectiveness of DBT over other therapies (Stoffers et al. 2012, p.76). The context of this lack of evidence is captured by Scheel (2000) who posits that “…it is not known if DBT itself specifically causes anything. However, it can be said that something about being a DBT subject has usually been associated with positive outcomes”

Further evidence is needed to support the use of DBT in BPD. Future research should also focus on both DBT therapists and clients’ experience of DBT which would advance our understanding of this treatment and also glean a deeper insight into the lived experience of recovery for those with BPD.
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