Advances in Treatment for Personality Disorders

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19.1 Defining the Problem

Before discussing treatment of personality disorder (PD), clinicians need to know that this construct has been classified in different ways in different diagnostic manuals. In all systems, PD is a complex construct, describing abnormalities in personality that broadly affect functioning over many years.

The overall definitions in the *International Classification of Diseases*, 10th edition (ICD-10) [1], and in Section I of the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) [2], are similar. Both define PDs in terms of enduring patterns of cognition, affect, behavior, and relationships, manifesting themselves as inflexible responses to a broad range of life situations. However, while ICD-10 and Section II of DSM-5 describe a series of specific PD categories, Section III of DSM-5 and the proposal for ICD-11 [3] use dimensional scores of trait profiles or hybrids between the dimensional and categorical models. While the DSM-5 Section III provides some limited guidance in how to reconstruct categories from these scores, the ICD-11 proposal replaces categories entirely with dimensions. The new model introduced in DSM-5 Section III received some empirical support and justification for its use [4], but it remains the alternate model until further research demonstrates superiority over the current model for the multiple users of the DSM system.

The vast majority of research on the treatment of PD has concerned the category of borderline personality disorder (BPD), a severe form of psychopathology which is a frequent subject of clinical concern [5]. Even studies that eschew using this category, but describe treatment for severely ill PD cases in clinical settings, may be describing the same patients. As such, the majority of this section will focus on BPD.

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19.2 Efficacy of Treatment in BPD

For many years, pessimism about the treatment of PD was common among clinicians. This sense of hopelessness certainly applied to BPD. Many had the impression that these patients kept returning to clinics and emergency rooms, but almost never got better. A few clinical trials suggested that medications such as antipsychotics have some effect in reducing some of the more distressing symptoms of BPD [6]. But there were hardly any long-term follow-ups, and remission from the disorder was never observed. The literature on psychotherapy for BPD was also very limited. Although therapists wrote books focusing on their own experiences and understandings of these patients, there were no clinical trials.

Two discoveries changed these perceptions. In the 1980s it was shown that most BPD patients improve with time. The impression that they do not improve was what has been called a "clinician's illusion" [7], created by the tendency for remitted patients to stop coming, while unremitted patents continue to ask for treatment. Then, a series of follow-back studies found that most BPD patients improve enough to no longer meet diagnostic criteria by age 40 [8]. These findings have later been confirmed by prospective studies [9, 10].

The two major prospective studies have compared BPD to other personality disorders or major depressive disorder and several specific personality disorders [9, 11]. Beyond the cautious optimism regarding remission from the diagnosis for all patients with PDs, these studies have also demonstrated that impairment in functional status does persist for a significant minority of patients with PDs, even up to 16 years later [10]. Patients with BPD are also higher service users of both psychiatric and medical care, with high rates of physical health problems and poor health behaviors that may be inadequately treated and followed [12, 13]. It is important to note that these community studies generally do not include patients who have received specialized psychiatric care or specific treatment programs, suggesting that many patients with BPD seen in the community may have even milder forms of BPD.

In the 1990s it was shown that specific psychotherapies for BPD are efficacious. This literature is now sufficiently mature that several clinical guidelines have been published using meta-analysis to measure the strength of this evidence. Guidelines have been published by the Cochrane reports [14], favoring the use of cognitive therapy (Cochrane has long been famous for its conservatism, setting a high bar for any recommendation). The National Institute for Health and Clinical Excellence (NICE) in the UK reached very similar conclusions [15]. Thus strong evidence supports the use of specialized therapies for these patients.

It should also be noted that the American Psychiatric Association, as part of a series of clinical guidelines for mental disorders, published one on the treatment of BPD [6]. However, its conclusions, dating from 2001, are now seriously out of date, and the guidelines are not recommended for current use.

19.2.1 Dialectical Behavior Therapy

Dialectical behavior therapy (DBT) is an adaptation of cognitive behavioral therapy using an eclectic mix of interventions derived from several other approaches [16]. DBT

is specifically designed to target the mood instability of BPD that leads to self-harming and suicidal behaviors, i.e., emotion regulation. DBT also addresses impulsive behaviors and management of interpersonal relationships. DBT consists of a combination of weekly individual and group psychotherapy, in addition to team consultation meetings. The approach used in DBT relies on a balance of "validation" of the patient's thoughts and emotions, with change-oriented skills training to help patient develop skills to improve emotion regulation and interpersonal relationships. Developing mindfulness skills also serves as the foundation on which many of the other skills are developed. One of the important skills in DBT is behavioral analysis, which was designed to help patients understand the life events that lead to self-injury and suicidality and identify different ways in which they can act in the future.

DBT was the subject of the first randomized controlled trial (RCT) of a psychotherapy designed for BPD [17]. The method was compared to "treatment as usual" (TAU), i.e., the limited and variable interventions that most patients receive in community clinics. After a year of treatment, the sample receiving DBT was less likely to make suicide gestures and spent less time in hospital. The gap narrowed at 1-year follow-up, but patients treated with DBT continued to show a higher functional level [18]. DBT may also be effective in BPD patients with substance abuse [19].

In the first RCT [17], over 90% of patients treated with DBT stayed in therapy for the full year—a remarkable finding in a patient population known for low compliance. However, patients who enroll in clinical trials and who receive free treatment may not be typical. Moreover, TAU can be variable and disorganized, particularly in comparison to a well-structured program like DBT. Replications in other centers have confirmed the efficacy of DBT, although overall these studies had higher rates of attrition than the initial study [20].

While the efficacy of DBT is well documented, its specificity remains to be determined. A second RCT [21] showed that DBT is superior to a range of "treatment by experts in the community" (who provided psychodynamic and client-centered therapies, but not cognitive behavioral therapy). But this time the advantage of DBT was narrower. The outcomes that differentiated the groups were overdoses and subsequent hospitalizations within the first year of treatment, although there were no differences in the frequency of self-harm. A third study [22] presented evidence that the group skills building component of DBT, which teaches specific skills, is crucial for improvement.

All studies of DBT have used small samples, and results may have been affected by selection biases. Since not every BPD patient will enter a clinical trial, we do not know whether DBT can be applied to the larger clinical population. We also do not know the long-term outcome of DBT. While the first cohort received therapy over 25 years ago, the patients were never followed up, nor have other studies followed patients over several years. Thus we do not know whether treated samples maintain their gains and continue to improve or whether they at risk for relapse.

Linehan [16] suggested that a full course of DBT could take several years, so that only the first stage (in which parasuicidal behaviors are targeted) has been formally described and tested. But because DBT is lengthy and involves a team, it is resource-intensive and expensive. Where it is available, there are usually long waiting lists. To improve access, one needs to determine whether DBT can be dismantled, shortened, and streamlined [23]. Unless costs can be brought down, DBT, like psychoanalysis,

will remain a treatment for the wealthy. That makes little sense since BPD affects a population who tend to fall within a lower socioeconomic level [24].

DBT has become very popular as a brand name. The question is whether it has specific effects that are stronger than other treatments. This issue was addressed by a study by McMain et al. [25] in a comparative trial of DBT and "general psychiatric management" (GPM), a manualized version of standard clinical care that included both regular psychodynamically informed psychotherapy and pharmacotherapy. There were no differences whatsoever, either at the end of the study or on 1-year follow-up [25]. It is possible that DBT's superiority in other trials is attributable to its highly structured approach to this clinical population.

19.2.2 Other Forms of Cognitive Therapy

Linehan developed DBT after concluding that classical cognitive behavioral therapy (CBT) was ineffective for BPD. But Davidson et al. [26] found that manualized CBT was superior to TAU. Since the mean number of sessions was 26 sessions provided over a 1-year period, the results also suggested that briefer therapies can be effective. This is an important issue because the price of both the individual and group components of DBT (and most other current therapies) puts treatment out of reach for most patients and families.

The best example to date of a brief intervention is the *Systems Training for Emotional Predictability and Problem Solving* (STEPPS) program [27]. This program provides 20 sessions of psychoeducation and skills training in a group format and is designed to be an add-on to all types of existing treatment, including both nonspecific individual therapy and medication follow-up. Its brief group format makes it accessible, and the method has most often been applied in small communities. The method has been supported by clinical trials when compared to TAU alone [28, 29].

19.2.3 Psychodynamic Therapies

Psychoanalysts have long been interested in treating BPD. But therapists using this model have adapted their methods, becoming increasingly active in session and employing more specific interventions that are helpful for patients with BPD [30].

Transference-focused psychotherapy (TFP), developed by a group of psychoanalysts [31], aims to correct distortions in the patient's perception of significant others by pointing out how they affect a relationship with the therapist within the setting of a strong treatment frame. However, TFP does not put as much emphasis on the past as classical psychoanalysis. In a comparative trial comparing TFP to DBT, results were generally similar [32]. There is also one trial showing that TFP for BPD is superior to treatment by community therapists [33]. Unlike some of the other therapies for BPD, TFP does not incorporate group therapy elements, instead opting for twice weekly individual therapy for a fixed period of time.

19.2.4 Methods Combining CBT and Psychodynamic Therapy

Mentalization-based therapy (MBT), developed by two psychoanalysts, Bateman and Fonagy [34], adds particular cognitive therapy elements to a psychodynamic framework and conceptualization. MBT is based on the theory that BPD patients have a deficit in the capacity to "mentalize" (i.e., to stand outside their feelings and accurately observe thoughts, actions, and emotions in self and others). This deficit is hypothesized to arise from a disorganized attachment with the primary caregiver [34]. This idea bears some similarity to mindfulness in DBT and CBT, as both are reflective processes focusing on developing alternate or more nuanced understandings of what is observed in the present moment within and around oneself. The first RCT on MBT was carried out in a day hospital setting [35], with the second in an outpatient clinic [36]. Both studies found MBT to be superior to structured clinical management, although differences were narrow. The day hospital sample had an improvement in symptoms that remained stable after 8 years [37], a rare example of long-term follow-up of an RCT. However, a replication in another center failed to find differences between MBT and structured standard clinical care [38]. While MBT is a lengthy and resource-intensive treatment, Bateman and Krawitz [39] have proposed that it could be shortened and adapted for a variety of clinical settings, with the advantage that training for MBT is shorter than other specialized psychotherapies.

Schema-focused therapy (SFT), developed by Young [40], is also a hybrid of CBT and psychodynamic therapy. It focuses on maladaptive schema deriving from adverse experiences in childhood. Thus far the full SFT program has only been supported by a comparative trial with TFP [41]. Another relative limitation is that SFT is designed to last as long as 3 years, incorporating both group and individual psychotherapy, which makes it costly and potentially difficult to access.

Good psychiatric management [42] is an attempt at developing an integrative model that is also open to pharmacotherapeutic interventions, adapted from the control condition in a study by McMain et al. [43]. This method has not yet been subjected to RCTs compared to TAU, but is offered as practical model that adds some specific techniques and an improved structure to what most clinicians do in practice.

19.2.5 Psychotherapy Integration

There is a strong movement to replace separate, acronym-based therapies with a single integrative model [44]. One rarely finds evidence in the literature that any method of psychotherapy for any disorder is robustly superior to any alternative [45]. Instead, factors common to all approaches are important than specific technical interventions. These findings suggest that clinicians are misguided in attending workshops or buying books describing the latest forms of treatment. We should be practicing evidence-based therapy, but sometimes end up with "eminence-based therapy."

There is also little evidence that any of the current methods for treating BPD are any better than any other [46]. In head-to-head comparisons, few differences emerge. There is also no evidence that lengthy treatments such as DBT, MBT, TFP, and SFT are superior to briefer interventions such as STEPPS or standard CBT.

Clinicians might therefore consider abandoning the search for specificity, and apply an *integrative* perspective, combining the best ideas from many sources. Many basic principles can be applied to this patient population [46, 47]. For example, therapy needs to be well structured. It also needs to focus on current problems, not on the past: Linehan's [16] concept of "radical acceptance" implies that patients should be encouraged to reduce their often painful efforts to live their lives focused on past experiences; to put their past, however traumatic, behind them; and to focus their efforts on changing their current life.

Each of the specific methods includes aspects that are idiosyncratic to its developers. One example is the use of pagers or mobile phones and messaging in DBT [16], intended to coach patients who can call in for reminders of distress tolerance skills to stop themselves from carrying out impulsive actions at any point. There is no evidence that this procedure adds to the treatment package. Given the burden of treating these difficult patients, and the difficulty of finding clinicians who are committed to treating them, it is not practical to ask therapists to sacrifice personal time to their work.

19.3 Psychopharmacological Treatment in BPD

Psychiatric practice has moved away from the use of psychotherapy [48]. PDs, traditionally treated with psychotherapies, are also now likely to be managed with one or several medications [49, 50]. Yet up to now, no drugs have been formally approved as indicated for BPD. Research also needs to establish whether medications have specific effects on the disorder. This question has been addressed in a Cochrane report [14], in a NICE report [15], and in other systematic reviews [51, 52]. The overall conclusion from all these reviews is that the value of medication in BPD remains to be proven.

Unfortunately, there are other limitations in the literature that raise questions about the generalizability of the existing literature on pharmacotherapy for BPD. Most studies use long lists of exclusion criteria such that patients enrolled in research represent much milder forms of the illness. Studies are often short term, rarely lasting beyond 12 weeks of blinding, which makes interpretation for a chronic condition such as BPD hard to interpret. The dropout rate in many studies is also unreasonably high which limits the interpretation of the results and applicability to clinical practice, particularly in the context of the very small samples used. Finally, the outcome measures used rarely assess for improvements or remission in BPD, preferring to focus on improvements in mood, anxiety, anger, or impulsivity. Another consideration is that pharmacotherapy is rarely without notable adverse effects, such as marked weight gain and potential lethality in overdose. In a population with higher rates of obesity and related medical complications, as well as poorer health behaviors, further adding to the burden is questionable [12, 53].

19.3.1 Antidepressants

Patients with BPD are often comorbid for major depression [54]. Thus it might seem logical to offer them antidepressants. However, consistent evidence shows that the presence of a personality disorder makes drug treatment of depression less effective [55]. Even in depressions not complicated by a PD, there is only a small advantage of drug over placebo in mild to moderate depression [56].

An older literature examined the effects of tricyclics and mono-amine oxidase inhibitors on BPD [6]. However, these agents are rarely used today, as they have many side effects and are dangerous in overdose.

Specific serotonin reuptake inhibitors (SSRIs) are safe drugs that have been used widely in BPD. However, clinical trials suggest that their efficacy for mood symptoms is doubtful [57]. Some studies have suggested that these agents have more effect on aggression [58]. Recent literature has not, however, supported an earlier claim that SSRIs could be effective for self-harm [59]. Finally, even if SSRIs can "take the edge off" symptoms, they do not lead to remission of the disorder.

19.3.2 Mood Stabilizers

BPD is associated with marked affective instability [60]. Some have thought that BPD lies in the bipolar spectrum and should therefore respond to the same drugs [61]. This hypothesis is not supported by research and may be one reason why patients with BPD take so long to receive [62] the diagnosis and referral to appropriate treatment [50]. Mood stabilizers do not yield remission in BPD, as they often do in bipolar disorder types I and II [63]. Like SSRIs, these agents seem to have more effect on anger and impulsivity [64, 65]. In spite of a lack of evidence for controlling mood instability, anticonvulsive mood stabilizers have been widely used "off label" in BPD. The terms "antidepressant" and "mood stabilizer" have led clinicians to assume that these agents have effects that are not dependent on diagnosis. This turns out not to be the case.

19.3.3 Antipsychotics

These agents, particularly olanzapine [66], have a more robust evidence base in BPD, although the overall findings when compared to placebo are less and less impressive as the size and quality of the studies increase. Short-term clinical trials [15, 49, 57] suggest that the most consistent effect is a reduction in impulsivity, without full remission. Similarly, a recent trial of quetiapine reported short-term reduction in impulsive symptoms [67], but there may have been methodological problems with the research. Only one trial of aripiprazole has been published [68], and although the results are very promising, they have not been replicated by other teams.

The question is whether antipsychotics should be used long term or short term. Gains may or may not be maintained on follow-up, and compliance can be limited by

side effects. While atypical neuroleptics are better tolerated, these agents put patients at risk for metabolic syndrome associated with weight gain and/or diabetes [69]. While low doses of atypical antipsychotics are usually tolerated, results can best be described as reduction in a few specific symptoms without remission.

19.3.4 Other Agents

Naloxone, an opioid antagonist, may specifically reduce dissociative symptoms [70] and reduce the urge to self-harm. One study has reported symptom reduction in BPD using omega-3 fatty acids [71]. Both of these agents need substantially more research before they can be recommended in clinical practice.

19.3.5 Polypharmacy

None of the drugs used for BPD lead to remission of the disorder. When short-term improvements do not last, as is often the case, clinicians may add a new drug—without subtracting the minimally beneficial treatment that the patient is already taking. This helps explain why so many BPD patients are on a polypharmacy regime of 4–5 drugs [50], with at least one agent from each major group.

The use of algorithms for drug treatment, with a sequence of prescriptions, each of which would target different symptoms, encourages this practice. This approach was recommended by the American Psychiatric Association guidelines [6], but with remarkably weak evidence, and algorithms were not recommended by Cochrane [57] nor by NICE [15].

Notably, there has been no research on drug combinations in BPD. Moreover, the observation that different drugs have similar effects on BPD suggests a common mechanism of action. Any drug with sedating properties can reduce anger and impulsivity. We need to develop more specific agents, as opposed to nonspecific "stopgaps" that were developed for other purposes. Further research on the sustained effects of existing, frequently used treatments would also help us understand the long-term benefits of these medications, particularly considering the long-term risks related to side effects. Finally, the combination of medication and specialized psychotherapies, such as DBT, should be evaluation. One study of patients receiving DBT found that the addition of pharmacotherapy to psychotherapy led to lower response rates compared to not adding any medications [72]. This finding has significant implications particularly for some structured treatments that combine psychotherapy and pharmacotherapy, such as GPM.

The NICE guidelines [15] concluded that there is insufficient evidence to recommend the prescription of *any* drug for BPD. Similarly, conservative conclusions appeared in a report published by the World Federation of Societies of Biological Psychiatry [73]. Some years ago, Tyrer and Bateman [74] emphasize the lack of specificity of current pharmacological therapies for PD, and the situation has not changed.

19.4 Treatment of Other PDs and of Mixed PD Populations

There is surprisingly little research on the treatment of categories of PD other than BPD.

Only a few studies have examined therapy for antisocial personality (ASPD), which is a high prevalence disorder [75], or the closely related construct of psychopathy [76]. These patients rarely come to mental health clinics and drop out of research and clinical follow-up quickly, and most reports come from correctional samples. Moreover, follow-up data in this population is rare. Derefinko and Widiger [75] concluded: "….treatment for psychopathy and ASPD remains a very controversial subject; while meta-analytic findings demonstrate positive results, considerable evidence also indicates that these disorders are resistant to typical interventions." This conclusion seems relatively unchanged in recent decades, with the exception that treatment of comorbid substance use disorders is increasingly recognized as important for long-term improvement [77].

Schizotypal personality is often considered to be a milder form of schizophrenia [78]. There is some evidence that antipsychotics [78] as well as the sympathomimetic drug guanfacine [79] can help control symptoms, although the studies are fraught with the same challenges as the pharmacotherapy studies in patients with BPD.

Avoidant personality overlaps with social anxiety disorder, of which it may be a more severe or persistent form. But due to lack of suitable studies, Cochrane withdrew its protocol to examine treatment methods for this condition in 2014. At this point, with respect to both pharmacology and psychotherapy, there are only scattered case reports and small sample studies [80].

The lack of research applies to the other categories in DSM-5 and ICD-10. For example, while there has been research interest in narcissistic PD [81], there are no studies of treatment, probably because these patients rarely present to clinics. It is also possible that future classifications may eliminate current categories entirely [3].

Some studies of psychotherapy in PD have been applied to clinical populations that have a mix of categories. This approach is more common in the UK where categorical diagnosis is not given the same weight. For example, a recent report found that psychoeducation and brief therapy in community clinics alone was not superior to standard care [82]. Another report found that therapeutic communities supported the effectiveness of an inpatient population [83]. These findings may not, however, be generalizable to countries where community care is weak and/or where hospital admissions tend to be brief.

19.5 Future Directions

At our present state of knowledge, there is much stronger evidence for the effectiveness of psychotherapy in specific PDs than there is for *any* pharmacological intervention. The main reason psychological therapies are not more widely used is their cost and lack of specialized therapists. However, scarce resources can be used more effectively by providing brief treatment for most patients while reserving expensive rehabilitation programs for more chronic and severely disabled patients [84].

Since PDs are by definition chronic, research on treatment has to move beyond short-term studies and examine long-term effects. Treatment effects also need to be shown as superior to naturalistic remission. Second, there are striking common factors in all therapies that help patients. Much of the literature suggests that improvement occurs with different methods rooted in different theories. This gives clinicians the impression that they mainly need to learn technical procedures. Yet as has been consistently shown in the psychotherapy research literature, common factors are more efficacious than any specific technique.

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