Psychopharmacology for Borderline Personality Disorder

ABSTRACT
Treating individuals with borderline personality disorder (BPD) is a complex and challenging process fraught with clinician stigma and bias. Clinically, polypharmacy is the most common approach, even though it is more likely to produce greater drug–drug adverse effects and interactions than effective improvement in symptoms. Currently, there are no approved medications specific for the treatment of BPD. The current article reviews the extant literature on psychopharmacology and provides treatment recommendations. [Journal of Psychosocial Nursing and Mental Health Services, 56(4), 8-11.]

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders defines borderline personality disorder (BPD) as a “pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity” with specific symptom clusters (American Psychiatric Association [APA], 2013, p. 663). The clinical presentation of clients varies and may include intermittent angry outbursts, hostility, behavioral disinhibition (e.g., impulsivity, behavioral urgency), negative emotionality, and self-harming behaviors. In addition, individuals may have comorbid conditions, such as posttraumatic stress, mood, eating, and substance use disorders (Ripoll, 2012). These behaviors pose a challenge to clinicians; in fact, many mental health clinicians acknowledge dislike, frustration, and negative bias toward individuals with personality disorders (Dickens, Halllett, & Lamont, 2016). The combination of the complexity of the disorder, comorbidity, and clinician stigma creates difficulty in treatment pharmacologically and psychotherapeutically.

OVERVIEW
Currently, there are no U.S. Food and Drug Administration–approved medications for the treatment of BPD. Originally, BPD was identified as a purely psychological disorder associated with environmental risk factors, with a poor prognosis and amenable only to psychotherapy. However, more recent research identifies key neurological impairments that correlate with symptom clusters, indicating potential response to targeted drug treatment.

Negative emotionality is linked to the medial frontal cortex, anterior cingulate, and orbital frontal cortex. Aggressive and disinhibited behavior is linked to the dorsolateral prefrontal cortex and amygdala (Ripoll, 2012). In addition, the serotonergic system is differentially imputed to affect amygdala hyperreactivity in such a way that serotonin reuptake inhibitors (SRIs) are relatively ineffective (Lieb, Vollm, Rucker, Timmer, & Stoffers, 2010;
Silk, 2011; Triebwasser & Siever, 2007). Yet, a survey of the prescribing practice for individuals with BPD shows a high frequency of medications characterized by polypharmacy. Antidepressant agents of all classes are prescribed 31% to 79%, antipsychotic medications (classical and serotonin dopamine antagonists) are prescribed 35% to 78%, mood stabilizer agents are prescribed 20% to 70%, and benzodiazepine and sedative medications are prescribed 30% to 85% (Starcevic & Janca, 2018). The typical patient with a 3-year history of BPD is likely to be taking three different medications...at any given time.

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intimation by patients who present in crisis. An alternative approach is to have a well thought-out standardized plan based on clinical and research evidence with room for flexibility.

GUIDELINES

The APA (2010) and United Kingdom’s National Institute for Health and Excellence Care (2009) propose similar guidelines for treating patients with BPD that ultimately recommend pharmacotherapy only as an adjunct to psychotherapy and limited to treat specific symptoms on a short-term basis. Both sets of guidelines, however, are dated, without recent updates. Meta-analyses indicate the most effective therapies for BPD are dialectical behavior therapy, mentalization-based therapy, schema therapy, cognitive-behavioral therapy (CBT) for personality disorders, systems training for emotional predictability and problem solving, and transference-focused therapy (Silk, 2011). In general, pharmacotherapy requires a careful initial assessment with a detailed collaborative discussion with the psychotherapist as well as the patient. If the patient is already taking medications, no changes should be made initially until reaching a trusting relationship with the patient and obtaining a thorough history regarding previous medications and effects. If the patient is not taking medications and the situation permits, the prescriber should first build a solid relationship with clearly expressed expectations by him/herself and the patient before prescribing medication. What does the patient expect from treatment, what are the most troublesome symptoms, and to what extent does the patient expect relief and over what time period? The conversation needs to include the prescriber’s expectation that the patient will continue with psychotherapy and commit to practicing coping and self-regulatory skills.

When deciding to initiate medications, there needs to be a frank discussion about the patient’s diagnosis and comorbid issues requiring medications (e.g., autonomic hyperarousal related to posttraumatic stress disorder [PTSD]) distinct from symptoms of BPD. The psychotherapist, prescriber, and patient must clarify plans related to suicidal ideation and self-harming behaviors and the need for safe medication use. In times of crisis, medications should not be changed but rather environmental measures used until the patient is stabilized. All parties need to understand that there are no medications specific to treat BPD and there is a likelihood of trial and error in prescribing; therefore, the patient will need to tolerate waiting 2 to 6 weeks for evidence of effectiveness of medication. When to change the medication regimen due to minimal results requires careful consideration and thoughtfulness about tapering one medication and titration to another. This process of prescribing is important in establishing a trusting relationship that is based on understanding the patient’s distress along with the limitations of medications. Because the patient wants immediate relief, the prescriber needs to validate that desire within the reality of delayed response of the neurological system. Maintaining a nonjudgmental and validating stance is the most important clinical tool at this point.

Treating comorbid conditions requires careful assessment and prioritization, especially if substance use disorder is present. Because dependency on others and lack of faith in oneself
is characteristic of BPD, patients can become attached to medications as the only solution to relief and are vulnerable to medications with dependency and tolerance effects. Benzodiazepine medications, including sedative agents, are especially problematic and should be limited to 3 to 5 days of use. For patients who have long-term use of drugs with dependency (e.g., opioid agents, benzodiazepine agents), a clear detoxification plan needs to be written and adhered to with specific goals. The United Kingdom’s Ashton (2002) plan for benzodiazepine agent withdrawal is a reasonable guide to use. PTSD is a common coexisting disorder with BPD and requires specific attention to symptoms that overlap with BPD, such as autonomic hyperarousal, dissociation, and psychic numbing. Although patients with BPD express feelings of depression, the symptoms must be distinguished from major depressive disorder (MDD) and treated accordingly. With BPD, depression is characterized by shame, loneliness, and emotional dysregulation more so than the prolonged sense of sadness and poor concentration seen in MDD.

SPECIFIC MEDICATIONS

As there is no specific anti-BPD medication, medication selection needs to be based on the most troublesome symptoms and the neurobiological explanation for the symptom. Most importantly, the clinician needs to use parsimony in prescribing, keeping number and types of drugs to a minimum.

Although SRIs are commonly prescribed in BPD, data show the limited effectiveness of these medications (Ripoll, 2012). SRIs have modest effect on anger, anxiety, and depression. Tricyclic agents are particularly ineffective, and their anticholinergic cognitive effects may actually worsen impulsive aggression and suicidal ideation (Ripoll, 2012). Monoamine oxidase inhibitors are highly effective for treating impulsivity and depression but have low tolerability and severe danger of suicidal overdosage (Ripoll, 2012). None of the traditional antidepressant agents target the medial prefrontal cortex, anterior cingulate, or orbital frontal cortex, which are responsible for negative emotionality (Ripoll, 2012). Vortioxetine (Trintellix®), a multimodal agent, may be an exception in that it acts as a reuptake inhibitor but is also a partial agonist at 5HT₁₅ and 5HT₇ antagonists, which allows it to provide pro-cognitive effects and enhanced antidepressant and anxiolytic effects in the frontal cortex and amygdala (Stahl, 2013).

Individuals with BPD have increased plasma and cerebrospinal fluid levels of dopamine metabolites, which explain the transient paranoia and dissociative symptoms. However, dopamine antagonists (e.g., haloperidol) target dopamine with sedation and extrapyramidal effects as risks. Serotonin dopamine antagonists (e.g., olanzapine, quetiapine) at low doses have lower D₂ antagonism and occupancy along with additional 5HT₂₅ antagonism that accelerates the release of dopamine from the receptor. This class of drugs has moderate efficacy in improving negative affectivity, disinhibition, and interpersonal dysfunction by improved dorsolateral and orbital frontal cortex activation (Ripoll, 2012; Stahl, 2013). However, ziprasidone (Geodon®) is shown to be relatively ineffective for these symptoms, and the metabolic side effects contributing to obesity may be a serious deterrent for patients with comorbid eating disorders. Aripiprazole (Abilify®) more consistently demonstrates effective management of affective dysregulation, impulse control, and dissociative and paranoid symptoms, possibly due to its stabilizing effect on D₂ and as partial agonism at 5HT₁₅ and blockade of 5HT₂₅ receptors (Starcevic & Janca, 2018). Although related medications brexpiprazole (Reluxyl®) and cariprazine (Vraylar®) have not been tested with BPD in randomized clinical trials, they have similar mechanisms of action as aripiprazole (Stahl, 2013).

Mood stabilizers that act primarily on GABA are often used with BPD because of mood lability; however, this is not the same as mood lability in bipolar disorder. In BPD, mood shifts are rapid and brief often in relation to interpersonal conflicts and identity challenges. Lithium has been shown to be efficacious, especially with chronic and intense suicidal ideation but at the risk of associated toxicity and unreliable medication adherence. Lamotrigine (Lamictal®) improves negative affectivity and impulse disinhibition due to its action at the dorsolateral prefrontal cortex, but requires lengthy titration, with risk of the patient abruptly discontinuing the medication and exposure to Stevens Johnson syndrome. Valproate (Depakote®) has a similar action as lamotrigine with less risk of Stevens Johnson syndrome but more cognitive slowing, which may interfere with effective problem solving. Topiramate (Topamax®) is effective in a broader spectrum, with possible weight loss benefits or detriments depending on the patient’s comorbid conditions, but the cognitive slowing effects may interfere with psychotherapy (Ripoll, 2013).

Benzodiazepine agents are strongly discouraged in the treatment of BPD due to the worsening of impulsivity and suicidality as well as the dependency potential. Because of their immediate relief of anxiety, they also behaviorally reinforce the patient’s ineptness at self-control and need for external management. Instead, alpha adrenergic medications, such as clonidine, may be used for anxiety and attention/focus issues with the added benefit of nighttime sedation without long-term drowsiness (Ripoll, 2012). Similarly, alpha adrenergic blockers, such as prazosin (Minipress®) and doxazosin (Cardura®), may be used for anxiety, flashbacks, and dissociation related to PTSD (Starcevic & Janca, 2018). Sleep disturbances can best be treated with sleep hygiene and CBT for insomnia strategies for long-term results, whereas brief use of GABA₄ positive.
allosteric modulates, such as eszopiclone (Lunesta®), zaleplon (Sonata®), or zolpidem (Ambien®), should be limited to situational sleep disturbance of 1 to 3 weeks’ duration.

CONCLUSION

In BPD, less is best, especially when it comes to combinations of drugs. Medications should be limited to patients who are in BPD-specialized psychotherapy and with clear collaboration (preferably written) among the therapist, patient, and prescriber. Medication use needs to be adjunctive to psychotherapy and limited to specific symptom clusters. Initiating medication should occur within an established relationship with the prescriber and with clearly stated expectations of use, addressing side effects, handling crisis, and discontinuing medication. There needs to be an understanding of valuing the patient’s distress and wish for immediate relief within the reality of limited effectiveness and immediacy of medication benefits. There also needs to be a plan for when and how to discontinue medication when full benefits are achieved, and the patient has improved self-regulatory skills. Treating the patient with BPD requires patience, validation, encouragement, and collegial support and affords tremendous satisfaction over the long-term.

REFERENCES


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