Borderline Personality Disorder – Clinical Issues and Treatment Strategies

Donald W. Black, MD
Professor, Program Director, and Vice Chair for Education

Department of Psychiatry
University of Iowa Carver College of Medicine

SUNY Buffalo Psychiatry Grand Rounds
May 5, 2017
Disclosures

Funding Sources:
- Nellie Ball Trust

Royalties:
- APA Publishing
- Oxford University Press
- UpToDate
THE ESSENTIAL COMPANION TO THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS, FIFTH EDITION

DSM-5 GUIDEBOOK

Donald W. Black, M.D.
Jon E. Grant, M.D., M.P.H., J.D.

BAD BOYS, BAD MEN
Confronting Antisocial Personality Disorder (Sociopathy)

DONALD W. BLACK, MD

STUDY GUIDE TO INTRODUCTORY PSYCHIATRY
A Companion to the Introductory Textbook of Psychiatry, Sixth Edition

Donald W. Black, M.D.
Jordan Cates, M.D.

Systems Training for Emotional Predictability and Problem Solving for Borderline Personality Disorder
Implementing STEPPS Around the Globe

EDITED BY
DONALD W. BLACK
NANCEE S. BLUM

OXFORD
Objectives

Learners will understand:

- the definition and epidemiology of BPD
- the importance of recognizing and diagnosing BPD
- the clinical management of BPD including psychotherapy, medication and lifestyle changes
Definition and basic epidemiology of BPD

Recognition and assessment of BPD

Course and outcome of BPD

Treatment of BPD with psychotherapy, medication, and lifestyle changes

Conclusions
DSM–5 BPD

“The essential feature of BPD is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts” (p. 663).

Source: APA, 2013
BPD Criteria

- Requires $\geq 5$ of 9 symptoms
- Polythethic (“Chinese menu”) approach
  - No required symptoms
- 256 possible combinations
- Hard to generalize about BPD patients

Source: Biskin and Paris, 2012
1) Affective domain
   - Inappropriate anger
   - Feelings of emptiness
   - Mood instability

2) Cognitive domain
   - Stress related paranoia/dissociation
   - Identity disturbance: unstable sense of self
BPD Criteria

3) Behavioral domain
- Recurrent suicidal behavior/self-harm
- Impulsivity

4) Interpersonal domain
- Abandonment fears
- Unstable relationships
Prevalence of BPD in the Community and Psychiatric Settings

- 1%–2% prevalence in the community
  - 6% primary care
  - 10% psychiatric outpatients
  - 20% psychiatric inpatients
  - 30% prison population

- Bottom line: BPD is widespread and caring for these patients is unavoidable

**Source**: Grant et al., 2004; Lieb et al., 2004; Black et al., 2008
Is BPD a Woman’s Disorder?

- Most patients with BPD are female:
  - 70% women
  - 30% men
- Is this a true distinction? Or, are men with BPD diagnosed antisocial?
  - The syndromes are distinct, so it is not simply an issue of misdiagnosis

Source: Lieb et al., 2004; McCormick et al., 2007
## BPD Nearly Always Presents with Co-occurring Disorders

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 - 83%</td>
<td>Major Depression</td>
</tr>
<tr>
<td>12 - 39%</td>
<td>Dysthymia</td>
</tr>
<tr>
<td>10 - 20%</td>
<td>Bipolar Disorder</td>
</tr>
<tr>
<td>64 - 66%</td>
<td>Substance Misuse</td>
</tr>
<tr>
<td>45 - 56%</td>
<td>PTSD</td>
</tr>
<tr>
<td>23 - 47%</td>
<td>Social Phobia</td>
</tr>
<tr>
<td>16 - 25%</td>
<td>OCD</td>
</tr>
<tr>
<td>31 - 48%</td>
<td>Panic Disorder</td>
</tr>
<tr>
<td>29 - 53%</td>
<td>Eating Disorder</td>
</tr>
</tbody>
</table>

**Source:** Lieb et al., 2004; Zimmerman et al., 2017
Suicidal and Self-harm Behavior: Common and Worrisome

- 73% attempt suicide
  - 3.4 lifetime attempts
- 75% deliberate self-harm
- Sometimes difficult to tease these behaviors apart

Source: Black et al., 2004
Reasons underlying Self-Harm

- Self-punishment for being “bad”
- To relieve the “emotional pain” by experiencing physical pain
- To control feelings
- To express anger
- To overcome numbness

*Source:* Gunderson, 2001
Course of BPD

- Onset late teens/early 20s
- Most severe early in its course
- Symptoms lessen over time
  - In the McLean follow-up study, 75% no longer met DSM-IV criteria at 6 years
  - Emotional disturbances persisted in 60%–80%

Source: Zanarini et al., 2003
Older Adults with BPD

- Can persist throughout adulthood
- Older persons with BPD are less likely than younger persons to have:
  - Impulsive behaviors
  - Deliberate self-harm
  - Hospitalizations
  - Stormy relationships

Source: Blum et al., 2008; Zanarini et al., 2017
Causation of BPD

No one really knows what causes BPD, but it likely results from a combination of genetics and environment.

- **Genetics**
  - Heritability estimate of .60
- **Early CH maltreatment**
  - Childhood neglect, physical/sexual abuse

Brain imaging suggests that BPD patients have:

- Limbic excitability (amygdala, insula)
- Sluggish control mechanism (DLPFC, dACC)

*Source:* Konigsberg et al., 2009
706 clinicians at 9 academic medical centers

- 47% said they preferred “to avoid caring for a BPD patient.”

**Source**: Black et al., 2011
Important to Recognize and Diagnose BPD

- Important to recognize BPD because of its prognostic significance:
  - Increased morbidity/mortality
  - Increased health care utilization
  - Limited response to medication and risk of polypharmacy
  - Importance of referring for specialized psychotherapy programs for BPD

Source: Black et al., 2004; Frankenburg and Zanarini, 2004
Zanarini Rating Scale for BPD: Sample Questions

During the past week, have you...

- felt very angry
- found that your mood has changed suddenly
- been unsure of who you are or what you’re really like
- had episodes where you felt spaced out or numb
- felt as though you were being abandoned though you really weren’t
- deliberately hurt yourself without meaning to kill yourself
- felt hatred towards someone you care about and need

Source: Zanarini et al., 2003
# BEST: Patient Self Rating Severity Scale for Borderline PD

## Borderline Evaluation of Severity over Time (Version 1.7)

<table>
<thead>
<tr>
<th>Circle the time period you have been asked to rate:</th>
<th>Last 7 days</th>
<th>Last 30 days</th>
<th>Other</th>
</tr>
</thead>
</table>

For the first 12 items, the highest rating (5) means that the item caused extreme distress, severe difficulties with relationships, and/or kept you from getting things done. The lowest rating (1) means it caused little or no problems. Rate items 13-15 (positive behaviors) according to frequency.

Circle the number which indicates how much the item in each row has caused distress, relationship problems, or difficulty with getting things done.

### A. THOUGHTS AND FEELINGS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Never/Slight</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Worried that someone important in your life is tired of you or planning to leave you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Major shifts in your opinions about others such as switching from believing someone is a loyal friend or partner to believing the person is untrustworthy and harmful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Extreme changes in how you see yourself. Shifting from feeling confident about who you are to feeling like you are still, or that you don’t even exist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Severe mood swings several times a day. Minor events cause major shifts in mood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Feeling paranoid or like you are losing touch with reality.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Feeling angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Feelings of emptiness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Feeling suicidal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### B. BEHAVIORS (Negative):

<table>
<thead>
<tr>
<th>Item</th>
<th>Never/Slight</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Going to extremes to try to keep someone from leaving you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Purposely doing something to injure yourself or making a suicide attempt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Problems with impulsive behavior (not counting suicide attempts or injuring yourself on purpose). Examples include over-spending, risky sexual behavior, substance abuse, reckless driving, binge eating, other—(circle those that apply)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Temper outbursts or problems with anger leading to relationship problems, physical fights, or destruction of property.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### C. BEHAVIORS (Positive):

<table>
<thead>
<tr>
<th>Item</th>
<th>Almost always</th>
<th>Most of the time</th>
<th>Half the time</th>
<th>Sometimes</th>
<th>Almost never</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Choosing to use a positive activity in circumstances where you felt tempted to do something destructive or self-defeating.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. Noticing ahead of time that something could cause you emotional difficulties and taking reasonable steps to avoid/predict the problem.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. Following through with therapy plans to which you agreed (e.g., talk therapy, “homework” assignments, coming to appointments, medications, etc.)</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

To the clinician: The total for each section (A, B, & C) should be recorded in the brackets next to the section titles above. At top of page record Composite Score = 15 + A + B + C

*The BEST is copyrighted 1997 by Bruce Pfohl, M.D. & Nanci Dour, M.S.W., University of Iowa, Department of Psychiatry, 200 Hawkins Drive, Iowa City, IA 52242.

**Source:** Pfohl et al., 2009
STEPPS Manual

Record of BEST Scores (Use this chart to record your BEST score each week)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
</tr>
</thead>
</table>
| 77 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |}

Graphical representation of data points.
Clinical Management of BPD

- Treatment options:
  - Psychotherapy
  - Medication
  - Lifestyle changes
First, Assess the Patient and his or Her needs and Desires

- Thorough evaluation with consideration of comorbid disorders
  - Depression, anxiety, substance abuse
- Consider patient’s stage of illness and psychosocial situation and needs
  - Safety concerns
- Consider patient’s desires
- Consider feasibility and accessibility of treatment recommendations
  - What are the barriers?
Psychological Treatments

• Individual psychotherapy
  • Treatment mainstay

• Group psychotherapy
  • Many programs exist but they may not be available
Evidence–based Psychotherapies

- Dialectical behavior therapy (DBT) (1–year)
- Mentalization–based therapy (MBT) (18 months)
- Schema–focused therapy (SFT) (3 years)
- Transference focused psychotherapy (TFP) (1 year)
- Systems Training for Emotional Predictability and Problem Solving (STEPPS) (5 months)
- Cognitive therapy (variable)
- Good Psychiatric Management (GPM)

** No evidence for program superiority **
### Psychological Treatments: RCTs

<table>
<thead>
<tr>
<th>Study</th>
<th>Treatment</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linehan et al. (1991; 1994; 2006; 2011; 2016)</td>
<td>DBT</td>
<td>↓suicidal behavior, ↓anger, ↓hospital days</td>
</tr>
<tr>
<td>Bateman and Fonagy (1999; 2009)</td>
<td>Mentalization</td>
<td>↓self harm, ↑mood, ↓anxiety, ↓hospital days</td>
</tr>
<tr>
<td>Giesen-Bloo et al. (2006)</td>
<td>Schema focused therapy</td>
<td>↓BPD sxs</td>
</tr>
<tr>
<td>Davidson et al. (2006)</td>
<td>Cognitive Therapy</td>
<td>↑mood, ↓suicidal acts</td>
</tr>
<tr>
<td>Clarkin et al. (2007)</td>
<td>Transference focused psychotherapy</td>
<td>↑mood, ↓anxiety, ↓suicidality</td>
</tr>
<tr>
<td>Blum et al. (2008); van Wel (2011)</td>
<td>STEPPS</td>
<td>↓impulsivity, ↓BPD sxs, ↑mood, ↓ER visits; s</td>
</tr>
<tr>
<td>McMain et al. (2009)</td>
<td>GPM</td>
<td>↓BPD sxs, ↓ER visits; ↓self–harm</td>
</tr>
</tbody>
</table>
Systems Training for Emotional Predictability and Problem Solving

- Group treatment for outpatients with BPD
- Combines CBT, skills training, and psychoeducation
- Detailed manual
- *Systems* component

Source: Blum et al., 2002; 2008; Black & Blum, 2017
RCTs in which those with BPD were randomized to receive psychotherapy or a control condition
  - 2256 participants
Psychotherapy moderately more effective than control condition in “stand-alone” ($g=0.32$) or “add-on” designs ($g=0.40$).
  - Effective for self-harm, suicidality, health service use, general psychopathology.
Stand-alone programs had better retention
Conclusion: effects are small, inflated by risk of bias and publication bias.

Source: Cristea et al., 2017
<table>
<thead>
<tr>
<th>Source</th>
<th>Hedges g (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amianto et al,43 2011</td>
<td>-0.34 (-1.01 to 0.34)</td>
</tr>
<tr>
<td>Bateman and Fonagy,37 1999</td>
<td>1.06 (0.28 to 1.83)</td>
</tr>
<tr>
<td>Bateman and Fonagy,16 2009</td>
<td>0.75 (0.28 to 1.23)</td>
</tr>
<tr>
<td>Blum et al,44 2008</td>
<td>0.31 (-0.04 to 0.66)</td>
</tr>
<tr>
<td>Bos et al,41 2010</td>
<td>0.22 (-0.30 to 0.74)</td>
</tr>
<tr>
<td>Carter et al,45 2010</td>
<td>0.10 (-0.45 to 0.66)</td>
</tr>
<tr>
<td>Cottraux et al,46 2009</td>
<td>-0.48 (-1.53 to 0.56)</td>
</tr>
<tr>
<td>Davidson et al,17 2006</td>
<td>0.10 (-0.30 to 0.51)</td>
</tr>
<tr>
<td>Doering et al,18 2010</td>
<td>0.25 (-0.13 to 0.64)</td>
</tr>
<tr>
<td>Farrell et al,47 2009</td>
<td>1.04 (0.25 to 1.84)</td>
</tr>
<tr>
<td>Gratz and Gunderson,48 2006</td>
<td>1.02 (0.16 to 1.88)</td>
</tr>
<tr>
<td>Gratz et al,49 2014</td>
<td>0.89 (0.35 to 1.43)</td>
</tr>
<tr>
<td>Gregory et al,50 2008</td>
<td>0.26 (-0.51 to 1.03)</td>
</tr>
<tr>
<td>Jørgensen et al,51 2013</td>
<td>0.35 (-0.15 to 0.85)</td>
</tr>
<tr>
<td>Koons et al,42 2001</td>
<td>0.62 (-0.25 to 1.50)</td>
</tr>
<tr>
<td>Kramer et al,52 2014</td>
<td>0.07 (-0.38 to 0.52)</td>
</tr>
<tr>
<td>Leppänen et al,53 2016</td>
<td>0.25 (-0.31 to 0.81)</td>
</tr>
<tr>
<td>Linehan et al,38 1991</td>
<td>0.49 (-0.14 to 1.11)</td>
</tr>
<tr>
<td>Linehan et al,19 2006</td>
<td>0.30 (-0.12 to 0.72)</td>
</tr>
<tr>
<td>McMain et al,40 2009</td>
<td>0.02 (-0.27 to 0.31)</td>
</tr>
<tr>
<td>Pascual et al,54 2015</td>
<td>-0.73 (-1.32 to -0.14)</td>
</tr>
<tr>
<td>Priebe et al,55 2012</td>
<td>0.42 (-0.05 to 0.89)</td>
</tr>
<tr>
<td>Reneses et al,56 2013</td>
<td>0.55 (-0.05 to 1.16)</td>
</tr>
<tr>
<td>Soler et al,57 2009</td>
<td>0.56 (0.04 to 1.08)</td>
</tr>
<tr>
<td>Turner,58 2000</td>
<td>1.07 (0.24 to 1.91)</td>
</tr>
<tr>
<td>Verheul et al,39 2003</td>
<td>0.51 (-0.14 to 1.16)</td>
</tr>
<tr>
<td>Weinberg et al,59 2006</td>
<td>0.82 (0.06 to 1.57)</td>
</tr>
<tr>
<td>Overall</td>
<td>0.35 (0.20 to 0.50)</td>
</tr>
</tbody>
</table>
National Institute for Health and Care Excellence (NICE) Guidelines: Psychotherapy

- Comprehensive ("stand alone") programs (e.g., DBT)
  - reduced suicidal behavior, anger, depression, anxiety

- Adjunctive ("add–on") programs (e.g., STEPPS)
  - improved general functioning

- Interventions should last >3 months

Source: NICE, 2009
Medication in BPD

- No drug targets all symptoms
- No FDA approved medications
- In a large European data base (2195 inpatients), 90% were prescribed medication
  - 70% received antipsychotics and/or antidepressants
  - 33% anticonvulsants
  - 30% benzodiazepines
  - 4% lithium
- 54% prescribed ≥3 medications
- Bottom line: Polypharmacy is common in these patients

Source: Bridler et al., 2015
Use of Atypical Antipsychotics 2001–2011

Source: Bridler et al., 2015
Cochrane Review: Medication

- **Antipsychotics**
  - **FGAs:**
    - haloperidol – ↓ anger
    - flupentixol – ↓ suicidal behavior
  - **SGAs:**
    - aripiprazole, olanzapine – ↓ BPD sxs
- **Antidepressants:**
  - Amitriptyline – ↓ depression

*Source: Lieb et al., 2010; Stoffers et al., 2010*
Mood stabilizers:
- Valproate – ↓ interpersonal problems, depression
- Lamotrigine – ↓ impulsivity;
- Topiramate – ↓ interpersonal problems, anxiety, general sx$s$

Omega–3:
- ↓ suicidality, depression
“The (findings) suggest a benefit from using SGAs, mood stabilizers, and omega-3 fatty acids, but ... available information for individual comparisons indicated marginal effects for FGAs and antidepressants.”

“Current findings ... are not robust and can easily be changed by future research endeavors. “
NICE Guidelines: Medication

- Evidence that medication treats:
  - depression, anxiety, hostility, impulsivity

- No evidence that medications alter the fundamental nature of BPD

- Medication should be directed at the comorbid disorder

Source: NICE, 2009
Quetiapine in BPD

Source: Black et al., 2014
What about BZPs?

- Only a single study addresses this:
  - Alprazolam vs. carbamazepine vs. tranylcypromine vs. trifluoperazine
  - 16 subjects; double-blind crossover design
  - Alprazolam led to ↑ behavioral dyscontrol and ↑ suicidality

- Bottom line: avoid BZPs

Source: Cowdry and Gardner, 1988
Pay attention to the patient’s lifestyle behaviors:

- Medical needs
- Nutrition and diet
- Physical activity
- Sleep
- Leisure activities
Bottom line: Medication Recommendations

- **Medication:** target the patient’s symptoms/comorbidity
  - Mood instability – mood stabilizers, antipsychotics
  - Anger/irritability – antipsychotics
  - Depression/anxiety – SSRIs
  - Psychotic–like symptoms – antipsychotics
  - Self–harm – antipsychotics

- Avoid BZPs
- Avoid potentially dangerous medications (TCAs, MAOIs)
Conclusions

• BPD common and problematic
• BPD diagnosis often missed or ignored
• Psychotherapy is a mainstay
  • Evidence-based group therapy programs
• Medication
  • Limited but important role
• Select medication to target main symptoms/comorbid disorders
• Don’t forget patient’s other needs
Thank you!
Questions?
References


Black DW, Blum N: STEPPS for Borderline Personality Disorder. New York: Oxford University Press, 2017


Cowdry RW, Gardner D: Pharmacotherapy of BPD. Arch Gen Psychiatry 1988; 45:111–118.

References, cont.


