Borderline personality disorder: STEPPS is practical, evidence-based, easier to use

20-week adjunctive group program improves multiple BPD symptom domains

Treatment of borderline personality disorder (BPD) often is viewed as challenging and the results so discouraging that some clinicians avoid referrals of BPD patients. Psychotherapy has been the treatment mainstay for decades, and supportive approaches are probably the most widely employed. Psychodynamic therapy often has been recommended.

This article introduces a new evidence-based group treatment program that we developed for BPD patients. Systems Training for Emotional Predictability and Problem Solving (STEPPS) is founded on the successes of better known psychoeducational models but is easier for practicing psychiatrists to implement.

A different approach to BPD
Linehan introduced dialectical behavior therapy (DBT)—a manualized, time-limited, cognitive-behavioral approach in which patients learn to regulate their emotions and behaviors rather than change their personality structure. Other evidence-based BPD treatments include transference-focused psychotherapy, schema-focused psychotherapy, and Bateman and Fonagy’s mentalization program. For a description of the unique challenges presented by BPD patients, visit this article at CurrentPsychiatry.com.

In the mid-1990s, we set out to create a treatment program for our BPD patients in response to managed care directives to lower the cost of care, decrease length of inpatient treatment, and reduce rehospitalization rates. Despite DBT’s many appealing features,
we felt this model was too lengthy and labor-intensive for our treatment setting. We concluded that modifying a program developed by Bartels and Crotty would serve our needs. This 12-week psychoeducational program:

- employs established cognitive-behavioral techniques in group treatment intended to supplement but not replace patients’ ongoing treatment
- incorporates a “systems” component that recognizes the importance of the patient’s family and friends.

We adapted Bartels and Crotty’s manual (with permission), lengthened the program to 20 weeks, and developed specific session agendas with explicit facilitator guidelines.

We eventually renamed the program Systems Training for Emotional Predictability and Problem Solving (STEPPS) and created a new manual (see Related Resources, page 36) to simplify group leader training and ensure fidelity to the model. Data from 5 studies, including 2 randomized controlled trials (Table 1), show that STEPPS has a robust antidepressant effect and leads to broad-based improvements in the affective, cognitive, impulsive, and disturbed relationship domains of BPD.\textsuperscript{11-15}

### STEPPS’ theoretical foundation

Because STEPPS employs general psychotherapy principles and techniques commonly taught in graduate-level psychotherapy training programs, it requires little additional training for mental health workers.\textsuperscript{16} Further, because it supplements ongoing treatment, STEPPS:

- does not disrupt the patient’s present regimen, and
- potentially enhances relationship skills by encouraging the patient to remain in longer relationships with professional and non-professional support.

STEPPS also integrates the patient’s

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**Table 1**

**STEPPS: Trials show improvement across BPD domains**

<table>
<thead>
<tr>
<th>Study</th>
<th>Patients</th>
<th>Results</th>
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<tbody>
<tr>
<td>Uncontrolled trials</td>
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<tr>
<td>Blum et al, 2002 \textsuperscript{11}</td>
<td>52 outpatients; 94% female; mean age 33</td>
<td>Significant improvement in BEST score; significant drop in BDI score and the PANAS negative affect scale</td>
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<tr>
<td>Black et al, 2008 \textsuperscript{12}</td>
<td>12 incarcerated women; mean age 35</td>
<td>Significant improvement in BEST score; significant drop in BDI score and the PANAS negative affect scale</td>
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<tr>
<td>Freije et al, 2002 \textsuperscript{13}</td>
<td>85 patients; 91% female; mean age 32</td>
<td>Significant improvement in score on a Dutch version of BEST; significant improvement on SCL-90 subscales, especially those rating anxiety, depression, and interpersonal sensitivity</td>
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<tr>
<td>Randomized controlled trials</td>
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<tr>
<td>Blum et al, 2008 \textsuperscript{14}</td>
<td>165 adults with BPD assigned to STEPPS plus treatment as usual or only treatment as usual</td>
<td>Patients receiving STEPPS plus treatment as usual experienced greater improvements in ZAN-BPD total score, impulsivity, negative affect, mood, and global functioning</td>
</tr>
<tr>
<td>van Wel, 2007 \textsuperscript{15}</td>
<td>79 adults with BPD assigned to STEPPS plus treatment as usual or only treatment as usual</td>
<td>Patients receiving STEPPS plus treatment as usual had greater improvements in global psychiatric symptoms using the SCL-90, BPD symptoms, and quality of life measures at the end of treatment and at 6-month follow-up</td>
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</tbody>
</table>

BDI: Beck Depression Inventory; BEST: Borderline Evaluation of Severity Over Time; BPD: borderline personality disorder; PANAS: Positive and Negative Affect Scale; SCL-90: Symptoms Checklist-90; STEPPS: Systems Training for Emotional Predictability and Problem Solving; ZAN-BPD: Zanarini Rating Scale for Borderline Personality Disorder
ongoing social and professional support system, thereby avoiding the perception of abandonment common among patients with BPD.

STEPPS employs cognitive-behavioral methods, including identifying and challenging distorted thoughts and specific behavioral change, combined with psychoeducation and skills training. The addition of a systems component that enlists the help of the patient’s family and friends is unique to STEPPS (Box 1).

Emotional intensity disorder. Many clinicians assume that the core deficit in BPD is inability to manage emotional intensity. In STEPPS, therapists reframe BPD as emotional intensity disorder (EID), a term patients find easier to understand and accept. Patients tend to “see themselves as driven by the disorder to seek relief from a painful illness through desperate behaviors that are reinforced by negative and distorted thinking.”

Starting with the first session, STEPPS therapists validate the patients’ experience of BPD and provide hope by teaching that patients can acquire skills to manage the disorder.

Group format

STEPPS consists of 20 consecutive weekly, 2-hour sessions led by 2 therapists (we prefer the term “facilitators”). Sessions take place in a classroom setting and are highly structured, with specific facilitator guidelines for each session.

When they arrive at each session, patients fill out the Borderline Evaluation of Severity Over Time (BEST) scale (Box 2, page 28) and record the results on a graph to measure their progress. Each session has a specific handout, including an agenda, followed by the homework assignment for the next week. Participants read the handout material aloud during the group session and start the homework assignment to be sure they understand it.

Handouts also include poems, essays, drawings, and examples created by previous STEPPS participants; these provide a sense of ownership among participants past, present, and future. Participants are
encouraged to share their own writings and drawings, as well as other resources they have found helpful to illustrate the skills being taught.

**Skills training.** Facilitators introduce a new skill at each session, and each skill builds on previously taught skills. A recurring theme in STEPPS is that “most of the work is done between sessions”—during the week, patients are expected to practice the skill taught at the previous session. Using the STEPPS skills is framed as “change from the outside in.” As patients challenge maladaptive filters and distorted cognitions, they find that negative feelings and dysfunctional behaviors change.

Patients identify their use of specific skills by completing a 5-point Emotional Intensity Continuum (EIC) scale. This abstract concept is made concrete with drawings of pots on a burner. At level 1 (baseline), there is no heat under the burner; at level 5, the pot is boiling over.

**Clinical Point**

Patients learn skills to predict emotional states, anticipate stress, and develop coping strategies.

### 3 components of STEPPS

**Awareness of illness.** The first step is for patients to replace misconceptions about BPD with awareness of the behaviors and feelings that define the disorder. They are provided with a printed handout listing DSM-IV criteria for BPD and given time to acknowledge examples in their own behavior. This is called “owning” the illness.

The second step is to introduce the concept of schemas, referred to as cognitive filters. With the author’s permission, we extracted 64 items from Young’s Schema Questionnaire, which helps patients identify their early maladaptive schemas. We encourage patients to understand the relationship among these filters, DSM-IV criteria, and their subsequent pattern of feelings, thoughts, and behaviors.

**Emotion management skills** taught in STEPPS are distancing, communicating, challenging, distracting, and managing problems (Table 2, page 28). Using these

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www.PrescribingforBetterOutcomes.org
Patient skills taught in STEPPS

<table>
<thead>
<tr>
<th>Awareness of illness</th>
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<tbody>
<tr>
<td>Understand what BPD is</td>
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<tr>
<td>Reframe BPD as ‘emotional intensity disorder’</td>
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<tr>
<td>‘Own’ the illness</td>
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<tr>
<td>Identify and challenge dysfunctional schemas</td>
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<table>
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<tr>
<th>Emotion management skills</th>
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<tbody>
<tr>
<td>Distancing: Provide distance from emotional intensity</td>
</tr>
<tr>
<td>Communicating: Describe and define feelings, physical sensations, thoughts, filters, action urges, and behaviors</td>
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<tr>
<td>Challenging: Identify distorted thinking and develop alternate ways of thinking</td>
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<tr>
<td>Distracting: Identify and engage in behaviors that lower emotional intensity or assist in getting through an episode without resorting to damaging behaviors</td>
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<tr>
<td>Managing problems: Identify and define problems, then plan and carry out action steps</td>
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<tr>
<th>Behavior management skills</th>
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<tbody>
<tr>
<td>Setting goals: Identify specific goals and develop strategies to manage specific problematic behaviors</td>
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<tr>
<td>Eating: Balanced diet</td>
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<tr>
<td>Sleeping: Good sleep hygiene</td>
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<tr>
<td>Exercising: Regular and balanced exercise</td>
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<tr>
<td>Leisure: Regular leisure activities</td>
</tr>
<tr>
<td>Physical health: Manage medical problems</td>
</tr>
<tr>
<td>Abuse avoidance: Develop strategies to replace abusive behaviors (self-harm, substance abuse, gambling, etc.)</td>
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<tr>
<td>Relationship management: Identify and determine strategies to develop healthy relationships. Understand and implement healthy boundaries</td>
</tr>
</tbody>
</table>

BPD: borderline personality disorder; STEPPS: Systems Training for Emotional Predictability and Problem Solving

Clinical Point
Evidence suggests BPD patients rated as more symptomatic experience greater improvement from STEPPS

Box 2
BEST: A new tool for assessing severity of BPD behaviors

We developed the Borderline Evaluation of Severity Over Time (BEST) to rate severity and change in patients with borderline personality disorder (BPD). The self-rated scale has 15 items for which patients rate themselves on a 5-point scale; scores can range from 12 to 72.

The BEST shows evidence for good internal consistency and for both face and content validity because the items were constructed to assess behaviors relevant to BPD. We recently assessed the BEST in subjects who had participated in our randomized controlled trials and concluded that the scale is reliable, valid, and sensitive to clinical change as early as week 4. To obtain a copy of this scale, contact the authors.

Patient characteristics
Although some patients learn of STEPPS from previous participants, at our facility we usually request a formal professional referral. We then send potential participants a letter inviting them to attend the group, along with a brochure describing STEPPS and a dated syllabus. We generally begin with 12 to 15 patients but typically have 7 to 10 by the fifth session.

Patients with strong narcissistic or antisocial traits may have difficulty in group settings, probably because they prefer to be the center of attention. That said, we have successfully implemented STEPPS in Iowa prisons and have not experienced difficulties. Patients who are abusing substances or have active eating disorders (primarily anorexia nervosa) may not be cognitively able to benefit from STEPPS until these behaviors are better controlled. We recommend that patients seek treatment for these behaviors before—or concurrent with—STEPPS participation.

Persons who deal with conflict by physical threats or intimidation are potential

continued on page 35
threats to group integrity and are removed immediately. We avoid forming groups with a lone male participant because:

• he may come to represent all men to the rest of the group
• he may have difficulty identifying with problems unique to women with BPD.

Patients who do well in STEPPS are able to share time with others, limit discussion of their own problems, have some capacity for empathy, and demonstrate an ability to consider that another’s perception may be different from their own. We encourage referring clinicians to discuss with the patient his or her readiness to enter STEPPS, as well as the requirements for and expectations of the program (such as capacity to listen, compliance with homework assignments, etc.). Some patients may need to wait until they are psychologically ready to participate.

In a recent study we found that patients who were rated as more symptomatic at baseline experienced the greatest improvement. Apart from this finding, there were few response predictors, but it was reassuring that both men and women improved. Members are cautiously encouraged to use each other as reinforcement team members between sessions, once they feel safe in the group. They are instructed to follow the reinforcement team guidelines.

The facilitators’ role
STEPPS groups are led by 2 facilitators with graduate level training in social sciences and psychotherapy experience. Therapists may be trained in STEPPS during a 1- to 2-day on-site workshop or by attending a 20-week group. These trainees are identified as professionals and do not participate in the sessions.

Using 1 male and 1 female facilitator for a STEPPS group allows modeling of relationship behaviors between genders, projects a healthy male role, and provides support for male participants, who in most groups are in the minority. Initially the facilitators’ stance is active and directive, although this tends to decrease as patients gradually are given increasing leadership responsibilities (such as leading brief reviews of homework assignments). The therapists’ main tasks include:

• maintaining the psychoeducational format
• adhering to the guidelines
• avoiding involvement in individual issues and past traumas (providing individual psychotherapy in a group setting)
• maintaining focus on skills acquisition
• encouraging group cohesion through identification
• facilitating participants’ change of perspective from victims of EID to experts on managing EID.

Crises are common among patients with BPD and if not attended to appropriately can easily derail the group process. Crises are acknowledged, then managed in the group by careful attention to the use of skills (such as using a crisis as an example of applying the skill to be learned that session). Facilitators direct patients to deal with long-standing personal issues with their individual therapists. Patients who appear in imminent danger of self-harm or suicide are removed from the group and immediately referred to emergency personnel. On these rare occasions, the referral is done swiftly to avoid disrupting the group and creating a perception of special treatment.

Follow-up: STAIRWAYS
STAIRWAYS is a 1-year follow-up group that meets twice a month after the 20-week STEPPS program and consists of stand-alone modules addressing:

• Setting goals
• Trying new things (oriented toward long-term goals, such as obtaining a degree, employment, etc.)
• Anger management
• Impulsivity control
• Relationship management (emphasis on conflict management)
• Writing a script (identifying and preparing for future stressors)
• Assertiveness training
• Your choices (making healthy choices)
• Staying on track (relapse prevention).

STAIRWAYS follows a format similar to
STEPPS, with a classroom-like setting and homework assignments. It maintains participants’ contact with the STEPPS model by emphasizing ongoing use of newly learned skills and reinforcing STEPPS skills.

References

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**Bottom Line**

STEPPS is a 20-week outpatient group treatment program for persons with borderline personality disorder (BPD). It combines cognitive-behavioral elements and skills training with a ‘systems’ component that enlists the help of family, healthcare professionals, and others with whom the patient regularly interacts. STEPPS has a robust antidepressant effect and leads to broad-based improvements in the mood, cognitive, impulsive, and disturbed relationship domains of BPD.