Borderline personality disorder: STEPPS improves symptoms

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Evid. Based Ment. Health 2008;11;120
doi:10.1136/ebmh.11.4.120

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Correction  A correction has been published for this article. The contents of the correction have been appended to the original article in this reprint. The correction is also available online at:
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**QUESTION**

**Question:** How effective is the STEPPS programme for people with a borderline personality disorder?

**Patients:** 165 people with DSM-IV borderline personality disorder (≥18 years; 83% female). Main exclusions: psychotic or primary neurological disorder; cognitive impairment; substance abuse or dependence; recent suicidal thoughts or self-harm behaviour.

**Setting:** Outpatient setting, Iowa, USA; recruitment 2002–2006.

**Intervention:** Systems Training for Emotional Predictability and Problem Solving (STEPPS) plus usual care or usual care alone (including medication, individual psychotherapy and case management). STEPPS is a manual-based group treatment programme involving psychoeducation, and emotion and behaviour management skills training, delivered in once weekly 2-hour sessions over 20 weeks, which includes education for a friend or relative.

**Outcomes:** Primary outcome: symptoms (Zanarini Rating Scale for Borderline Personality Disorder Affective (ZRS-BPD), a scale which assesses cognitive disturbance, disturbed relationships, and impulsivity). Secondary outcomes: thoughts, feelings and behaviour (Borderline Evaluation of Severity Over Time scale (BESOT)); positive and negative disposition (Positive and Negative Affect Schedule (PANAS)); Beck Depression Inventory (BDI); Symptom Checklist-90-Revised (SCL90R); Social Adjustment Scale (SAS); Barratt Impulsiveness Scale (BIS); use of medication or other therapies; physician or crisis contact; suicide or self-harm. Outcomes were assessed every 4 weeks during treatment, and every 6 months post-intervention.

**Patient follow-up:** 58.2% at 20 weeks, 75.2% included in post-treatment 20 week intention-to-treat (ITT) analysis; 49.7% assessed at least once during 1 year follow-up.

**METHODS**

**Design:** Randomised controlled trial.

**Allocation:** Unconcealed.

**Blinding:** Unclear.

**Follow-up period:** One year (post-intervention).

**MAIN RESULTS**

The STEPPS intervention plus usual care improved total symptoms at the end of 20 weeks’ treatment compared to usual care alone (mean decrease in ZRS-BPD score from baseline: 9.1 with STEPPS vs 3.9 with control; p = 0.001). For secondary outcomes at 20 weeks, the STEPPS group showed significantly greater improvement than controls on global functioning and depression measures (CGI-S and CGI-I, GAS, BDI, SCL90R Global Severity Index), impulsiveness (BIS), negative affect (PANAS), and thoughts and feelings (BESOT). The primary outcome (ZRS-BPD) was not reported over post-intervention follow-up; there were no significant differences between treatment groups in changes in any of the secondary outcome scales from the end of treatment to one year follow-up. Emergency department visits were significantly less frequent with STEPPS compared to control (visits in an average of: 0.97 months per year with STEPPS vs 1.53 months per year with control, p = 0.04).

**CONCLUSIONS**

STEPPS plus treatment as usual for people with borderline personality disorder, can improve symptoms, behaviour and global functioning across a range of scales. Outcomes remain relatively stable after 1 year.

**ABSTRACTED FROM**


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Source of funding: Sources of funding: Shire and Forest Laboratories, speaker’s bureau honoraria from Pfizer, honoraria for other consulting from Forest Laboratories and Jazz Pharmaceuticals, AstraZeneca and Wyeth, and Dr Black received grant MH-63746 from NIMH.

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**Borderline personality disorder (BPD) is a common psychiatric disorder associated with high health costs.** There is widespread pessimism about treatment for borderline personality disorder, but over the past 15 years promising evidence of effectiveness has begun to change attitudes. Compared with other personality disorders, by far the majority of therapeutic trials have been in borderline personality disorder. Psychological therapies, such as CBT, schema focused therapy, dialectical therapy and psychodynamically-based therapies have all been shown to improve outcome in BPD. More recent trials have used larger samples and been more methodologically rigorous and therefore more robust scientifically. This study by Blum and colleagues is an example of this second wave of trials.

Originating in The Netherlands, STEPPS is a cognitive behavioural therapy psychoeducational group programme that includes a session for family members or significant others and a mental health professional involved in the patient’s care. This latter systems element is innovative and makes a great deal of sense given the interpersonal problems and misunderstandings that arise about the condition in those who are trying to help. With three phases: psychoeducation, emotion management skills training and behavioural management skills training, STEPPS is designed to augment usual treatment. The weaknesses are that there was a relatively large attrition rate and blinding of assessors was problematic. The study strengths are that this is a randomised controlled trial in a sample size of over 100 and the participants were followed up over one year post-intervention. As such, the results of this study are more generalisable than earlier trials of therapies for borderline personality disorder. The STEPPS programme seems straightforward, relevant and could be delivered as an adjunctive group treatment in mental health settings. It adds to our therapeutic armamentarium. Although the systems element is innovative, and intuitively it would appear to be useful clinically, the study does not answer whether this is an essential element in leading to improvement.

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Competing interests: None.

more likely to be due to divergences in health beliefs and prescribing habits than any differences in prevalence of disorder.

**PROGNOSIS**


**THERAPEUTICS**


**AETIOLOGY**


**PREVALENCE**


**Competing interests:** None declared.

**Correction**

doi:10.1136/ebmh.11.4.120corr1

Davidson KM. Borderline personality disorder: STEPPS improves symptoms. *Evid Based Ment Health* 2008;**11**:120. In her commentary, Kate Davidson stated that STEPPS originated in The Netherlands. This is incorrect. Blum and her co-authors in Iowa are the originators of STEPPS. They have trained two groups in The Netherlands, where the program was subsequently translated into Dutch and is known as VERS.