

## **Appendix 1: Forms of psychotherapy for borderline personality disorder**

The most popular forms of psychotherapy for borderline personality disorder (BPD) are dialectical behaviour therapy, mentalization-based treatment, transference-focused psychotherapy, and systems training for emotional predictability and problem solving. Other forms of psychotherapy can be helpful, as well. The evidence supporting the use of dialectical behaviour therapy and mentalization-based treatment is reviewed in the main article (available at [www.cmaj.ca/lookup/doi/10.1503/cmaj.112055](http://www.cmaj.ca/lookup/doi/10.1503/cmaj.112055)).

### **Transference-focused psychotherapy**

Transference-focused psychotherapy is a variant of psychodynamic psychotherapy, often lasting for a year with twice-weekly individual therapy sessions.<sup>1</sup> The primary focus is on emotions arising in the relationship with the therapist, and the therapist uses traditional psychodynamic techniques, such as interpretation. Clear limits and a treatment contract are developed at the beginning of therapy.

Results from three studies support the use of transference-focused psychotherapy. In one study, a comparison of three years of transference-focused psychotherapy with three years of schema-focused therapy, a variation of cognitive behavioural therapy,<sup>2</sup> showed similar effectiveness for the two therapies in treating BPD, although there was no comparison group receiving treatment as usual.<sup>3</sup> Both groups showed improvements in BPD symptoms, with effect sizes of 1.85 for transference-focused psychotherapy (n=42) and 2.96 for schema-focused therapy (n=44), as well as improvements in quality of life, with effect sizes of 0.64 for transference-focused psychotherapy and 1.84 for schema-focused therapy. A three-arm study involving 90 patients compared one year of treatment with transference-focused psychotherapy, dialectical behaviour therapy or supportive therapy.<sup>4</sup> Transference-focused psychotherapy was found to have a unique effect in reducing anger and impulsivity, with effect sizes of 0.44 and 0.33 respectively, and both transference-focused psychotherapy and dialectical behaviour therapy, but not supportive therapy, led to reductions in suicidality and improvements in global functioning, with effect sizes ranging from 0.33 to 0.44. The most recent study (n=104) compared transference-focused psychotherapy with therapy by experienced community psychotherapists.<sup>5</sup> Substantially greater improvements in BPD symptoms (effect size 1.6) and psychosocial functioning (effect size 1.0) favoured transference-focused psychotherapy, although patients in the comparison group received significantly fewer sessions of therapy.

### **Systems training for emotional predictability and problem solving**

Systems Training for Emotional Predictability and Problem Solving (STEPPS) is a 20-week group therapy for patients with BPD that incorporates elements of cognitive behavioural therapy, skills training and systems therapy.<sup>6</sup> It is intended as an “add-on” treatment for patients being managed in the community. In a trial involving 124 participants, Blum and colleagues<sup>6</sup> found reduced BPD symptoms, with an effect size of 0.84, among patients in the STEPPS group at the end of treatment, but no reductions in self-harm, suicide attempts or number of days in hospital. At one-year follow-up, gains were maintained, but there were no significant differences between the study groups.<sup>6</sup> A second study involving 79 patients found similar results using an 18-week version of STEPPS that included biweekly individual therapy,<sup>7</sup> with effect sizes of 0.68 for BPD symptoms and 0.61 for quality of life favouring STEPPS, but again no changes in parasuicidal behaviours were noted.

## Other forms of psychotherapy

Standard cognitive behavioural therapy can also be effective. In one study, cognitive behavioural therapy over a one-year period reduced suicidal actions and anxiety compared with usual treatment, both at the end of treatment and at follow-up one year later,<sup>8</sup> although differences were less striking at the six-year follow-up; there were no differences in quality of life or episodes of self-harm.<sup>9</sup> Another study compared one year of cognitive therapy with one year of Rogerian supportive therapy and found few differences between the two treatments until the end of the one-year follow-up, when global improvement was observed to be significantly better in the cognitive therapy group.<sup>10</sup> In a study of manual assisted cognitive treatment, a six-session therapy focused on reducing self-harm that combines dialectical behaviour therapy, cognitive behavioural therapy and bibliotherapy, significantly greater reductions in self-harm were observed when the therapy was added to usual treatment.<sup>11</sup> Cognitive analytic therapy, a 24-week individual therapy, was compared with manualized clinical care in the treatment of adolescents with BPD, but no differences in retention rates or outcomes were noted, although both groups improved on all measures.<sup>12</sup> Even a 12-week group psychoeducation program led to some improvement in BPD symptoms compared with usual treatment.<sup>13</sup>

## References

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