Mentalization-Based Treatment for Self-Harm in Adolescents: A Randomized Controlled Trial

Trudie I. Rossouw, M.R.C.Psych., AND Peter Fonagy, Ph.D., F.B.A.

Objective: We examined whether mentalization-based treatment for adolescents (MBT-A) is more effective than treatment as usual (TAU) for adolescents who self-harm. **Method:** A total of 80 adolescents (85% female) consecutively presenting to mental health services with self-harm and comorbid depression were randomly allocated to either MBT-A or TAU. Adolescents were assessed for self-harm, risk-taking and mood at baseline and at 3-monthly intervals until 12 months. Their attachment style, mentalization ability and borderline personality disorder (BPD) features were also assessed at baseline and at the end of the 12-month treatment. **Results:** MBT-A was more effective than TAU in reducing self-harm and depression. This superiority was explained by improved mentalization and reduced attachment avoidance and reflected improvement in emergent BPD symptoms and traits. **Conclusions:** MBT-A may be an effective intervention to reduce self-harm in adolescents. **Clinical trial registration information**—The emergence of personality disorder traits in adolescents who deliberately self harm and the potential for using a mentalisation based treatment approach as an early intervention for such individuals: a randomised controlled trial; http://www.controlled-trials.com; ISRCTN95266816. J. Am. Acad. Child Adolesc. Psychiatry; 2012; 51(12):1304-1313. **Key Words:** self-harm, treatment, borderline, RCT.

Self-harm can be defined as any act of deliberate harm to oneself, regardless of whether it is accompanied by suicidal thoughts.[1] It is common in community samples,[2] and the incidence of self-harm without suicidal intent is increasing.[3] Self-harm in clinical groups is associated with negative outcomes.[1] Self-harm is common among young people with treatment-resistant depression, and is a significant predictor of future suicide.[4] In a population-based US sample, the prevalence of self-harm in youths was 17%.[5] Of young people with self-harm behaviors, 30% continue to harm themselves into adulthood.[6] When adolescents present with self-harm and depression, the close association of self-harm with suicide is of particular clinical concern.[1,4]

There are few evidence-based treatments for adolescents who harm themselves.[7] A promising group program evaluated in a small randomized clinical trial (RCT) showed a reduction of self-harming behavior in adolescents over 12 months of treatment compared to with treatment as usual (TAU) (either family work or supportive therapy).[8] However, two large-scale replications failed to demonstrate benefit.[9,10] In their study of multisystemic therapy, Huey et al[11] reported that multisystemic therapy, conducted over 6 months, appeared to be more effective than hospitalization on a single-item measure of suicidality but no more effective than TAU in reducing suicidal ideation, depression, or hopelessness. An RCT of cognitive analytic therapy for adolescents with borderline personality disorder (BPD), 91% of whom presented with self-harm,[12] found that cognitive analytic therapy was no more effective than TAU in reducing self-harm, depression, and changes in BPD symptoms. Two open trials with dialectical behavior therapy (DBT) reported

This article is discussed in an editorial by Dr. David J. Miklowitz on page 1238.

Clinical guidance is available at the end of this article.

This article can be used to obtain continuing medical education (CME) category 1 credit at www.jaacap.org.

Supplemental material cited in this article is available online.

that DBT yielded no additional reduction in self-harm when added to inpatient treatment[13] or when delivered on an outpatient basis in comparison to psychodynamic psychotherapy.[14] Brief solution-focused family intervention failed to reduce self-harm or depression.[15] Treatment trials for depressed adolescents (including self-harming and non–self-harming adolescents) have shown limited effectiveness in reducing self-harm.[1,16,17] This pattern of null results was confirmed by a narrative review[7] and a meta-analysis using engagement in treatment as primary outcome,[18] which found no difference between specifically developed therapies and TAU. These findings are disappointing, particularly given the modest but significant benefits associated with manualized psychotherapy for adolescents with major depression.[19]

We drew on our work with patients with severe BPD to develop an alternative conceptual and clinical strategy for self-harm in depressed adolescents. Two RCTs have shown mentalization-based treatment (MBT) to be effective in reducing self-harm in adult patients.[20,21] Mentalization is the capacity to understand actions in terms of thoughts and feelings. Its enhancement is assumed to strengthen agency and self-control in those with affect dysregulation and impulse control problems.[22] We have suggested that self-harm in adolescents occurs in response to relationship stress, when the individual fails to represent the social experience in terms of mental states.[23] When mentalizing is compromised, self-related negative cognitions are experienced with great intensity, leading to both intense depression and an urgent need for distraction. Furthermore, when non-mentalizing engenders social isolation, engaging in manipulative behavior and self-harm may aid reconnection.[24] When mentalization of social experience fails, impulsive (poorly regulated) behaviors and subjective states triggering self-harm become prominent. (For more information on the theoretical assumptions associated with this intervention, please refer to Supplement 1, available online.)

Given the limited success of self-harm–focused psychological interventions, we tested whether a modification of this intervention, mentalization-based treatment for adolescents (MBT-A), would reduce self-harm in adolescents. We designed and manualized a 12-month intervention program that included both individual[25] and family[26] therapy.

METHOD

Study Design

The study was a pragmatic small-scale randomized, superiority trial comparing MBT-A with TAU for adolescents with self-harm (inclusive of suicidality). Allocation was by minimization, controlling for past hospital admissions, gender, and age. The treatment period per case was 1 year, with measurement at 3, 6, 9, and 12 months postrandomization. The primary outcome measure was self-harm in the previous 3 months. Secondary outcomes included symptoms of BPD, risk taking, and depression. Assessors and participants were both blinded to assignment. There was no difference in the information given to the groups during the consent process.

Entry Criteria

The RCT took place in northeastern London (population ~1 million). We recruited from consecutive case individuals presenting with self-harm to community mental health services or acute hospital emergency rooms. After an emergency assessment conducted by the on-call clinician, all case individuals who did not require inpatient treatment were invited to participate. Those who agreed were contacted by a research assistant who provided them with verbal and written information and obtained written consent from both youths and parents. Eligible participants were those 12 through 17 years of age who presented with at least one episode of confirmed self-harm within the past month, and for whom self-harm was the primary reason for referral and was confirmed as intentional. For our purposes, self-harm was defined as any intentionally self-inflicted injury (including poisoning) irrespective of the apparent purpose of the behavior (however, if poisoning appeared to be the result of excessive use of recreational drugs, the episode was not considered eligible). Individuals with a comorbid diagnosis of psychosis, severe learning disability (IQ < 65), pervasive developmental disorder, or eating disorder in the absence of self-harm were excluded. Concurrent substance misuse was not an exclusion criterion, but chemical dependence was.

Structure of Treatment Programs

MBT-A. The MBT-A program is a year-long, manualized, psychodynamic psychotherapy program with roots in attachment theory (a copy of the manual is available from the first author on request). It involves weekly individual MBT-A sessions and monthly mentalization-based family therapy (MBT-F) with a focus on impulsivity and affect regulation (a more detailed explanation of MBT-A is provided in the Supplement 1, available online). The program aims to enhance patients' capacity to represent their own and others' feelings accurately in emotionally challenging