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Dialectical Behavior Therapy: A Highly Effective Treatment for Some Adolescents who Self-Harm

Invited Commentary on: 'Efficacy of Dialectical Behavior Therapy for Adolescents with High Risk for Suicide: A Randomized Clinical Trial'

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Self-harm is a highly common behaviour in adolescents, which is associated with future attempted and completed suicide, and onset of mental illness.[1] It is associated with significant distress (both as a cause and an outcome) and social impairment.[2] It is therefore essential that we provide effective treatment. Self-harm is a hazardous behaviour that can occur in young people with any mental disorder, and indeed in young people with no psychiatric diagnosis.[2] This demonstrates the need for specific treatments aimed at adolescent self-harm, which may confer additional benefits on top of treatments aimed at the underlying disorder. This is particularly true for young people who do need meet strict criteria for any psychiatric illness, but do have impairing self-harm.

Recently there have been randomised controlled trials demonstrating the effectiveness of dialectical behavior therapy (DBT), cognitive-behavioral therapy, mentalization-based treatment and interpersonal therapy-adolescent-intensive at reducing adolescent self-harm.[3-6] However, small sample sizes (n = 40-80) and lack of replication have up to now made it unwise to draw firm conclusions that these treatments are truly effective. The need for replication has been demonstrated by the fact that an initial small study demonstrated a group CBT-based treatment for self-harm to be more effective than control, while subsequent larger studies have not supported this.[7] It is therefore welcome that the accompanying study has attempted to replicate the investigation of DBT with both a larger sample size (n = 173) and longer follow-up (12 months). [Copy-editors: please add final reference for the McCauley et al paper here]

This study has replicated the earlier finding that dialectical behavior therapy reduces self-harm over the six month treatment period.[3] This was true for all outcome measures: suicide attempts, non-suicidal self-injury and suicidal thoughts. Such findings were both clinically and statistically significant, with 47% of the DBT group and 28% of the control group being totally free of self-harm, a number needed to treat of six. Over the six month follow-up period, DBT continued to be superior to control, however this difference was not statistically significant. It is important to note that both groups continued to improve to very low levels over follow-up – it was certainly not the case that people deteriorated once DBT stopped. While one conclusion could be that longer-term specific treatment is needed, it would also be fair to say that a much larger study is needed to have enough power to test whether differences in low rates of self-harm are statistically significant over follow-up. It is also important to say even though there was no difference at 12 months, the greater reduction in self-harm during the treatment period is likely to have been valuable to patients, families and health services.

An important potential problem in any RCT is that any difference between new treatment and control could be due to greater therapy time in the active treatment group and/or greater levels of training and monitoring for the active treatment. The authors made sterling efforts to minimise such differences, and delivered a theoretically-rational, active and manualised control treatment (individual and group supportive therapy, IGST). However participants in the DBT group had higher attendance than those receiving IGST. Analysis suggested that this difference in attendance did not affect results; however such analyses are subject to type 2 errors in relatively small epidemiological studies such as RCTs. The authors' assertion that DBT led to greater retention in treatment than IGST is both correct and an advantage of this treatment. However, it is also true that fewer sessions of IGST led to a large reduction in self-harm. IGST thus may be a cheaper and more cost-effective treatment. Therefore health economic analysis would be a highly useful component of a future study; indeed DBT would be further supported if cost savings from reduced hospital admissions due to self-harm outweighed any extra direct costs of DBT.

The study has a number of other important strengths, including modern statistical analysis (imputing missing data thus reducing attrition bias) and high levels of treatment fidelity in both groups. It is also highly useful that suicidal and non-suicidal self-harm were separated, and that DBT was shown to reduce both. There is current controversy and debate about whether suicidal and non-suicidal self-harm can and should be separated.[1] It is therefore important to give outcomes separately for these behaviors, to test whether they differ in, for example, response to treatment. In this case, DBT benefits both.

The main limitation of the study is generalizability. 95% of participants were female. Some recent studies have suggested that gender does not influence self-harm rates, especially when self-harm other than cutting is specifically asked for, and the most important outcome, suicide, is well-known to be more common in boys.[8] The previous adolescent DBT study likewise was 87% female. So whether this treatment works for adolescent boys is unknown. In addition, participants needed to have made suicide attempts and have at least three symptoms of borderline personality disorder (another criterion shared with the prior DBT study). Therefore whether it is effective for those with without personality disorder traits, or those with non-suicidal self-injury only, is not established. More importantly, and in common with all RCTs, only participants who were thought suitable for, and who consented to, such an intensive treatment programme were recruited. We do not know whether DBT could be effective for those young people we see who have emerging borderline PD, who are more chaotic and who are hard to enrol in, and maintain in, treatment. Linked to this, participants attended a mean of 20 sessions; some services are not resourced to provide this level of treatment, and DBT would be impractical in such services.

Overall, we now have two well-conducted RCTs demonstrating that DBT is an effective treatment at reducing self-harm in adolescent girls with emerging borderline personality disorder. Investment in training and delivery of DBT is now justified for this important population. Further research is needed in boys, self-harming adolescents without emerging PD, and into the cost-effectiveness of DBT.

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Conflicts of Interest

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