Brief education supported psychological treatment for adolescent borderline personality disorder: the BEST feasibility RCT

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Declared competing interests of authors: Jamie Murdoch was formerly a National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research associate board member (2015–16). Peter B Jones is Director of the NIHR Applied Research Collaborative, East of England (2019 to present).

Published December 2022
DOI: 10.3310/HNIN4621

Scientific summary

BEST feasibility RCT

Health and Social Care Delivery Research 2022; Vol. 10: No. 37
DOI: 10.3310/HNIN4621

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Scientific summary

Background

Borderline personality disorder (BPD) is a severe mental health condition characterised by a pervasive pattern of emotional instability, interpersonal dysfunction, unstable self-image and impulsive behaviour, including self-harm. Symptoms of BPD typically first present during adolescence, and there is compelling evidence in support of early intervention for BPD to reduce the high personal and societal costs of the disorder. However, current evidence-based interventions for adolescent BPD are highly resource intensive, with the result that few young people currently access timely treatment.

Therefore, there is an urgent need for accessible interventions to facilitate early access to treatment for young people presenting with BPD symptoms. The nature and severity of BPD symptoms create barriers to accessing interventions delivered within traditional child and adolescent mental health service models. Therefore, utilising opportunities to deliver early interventions in contexts that are accessible to young people through working in partnership with universal services was considered a promising strategy.

The Brief Education Supported Treatment (BEST) intervention was adapted from an existing treatment package previously delivered within secondary mental health services. The treatment package was informed by two existing evidence-based treatments for adolescent BPD: mentalisation-based treatment for adolescents (MBT-A) and dialectical behavioural therapy for adolescents (DBT-A). The adapted intervention was designed to be delivered over up to six sessions in a young person's school or college by a mental health practitioner working alongside a member of the school or college's pastoral team. Practitioners co-delivering the intervention, both mental health practitioners and pastoral team members, received training and supervision to promote adherence to the treatment manual and support the use of a mentalising approach.

Aim

The aim of this feasibility study was to (1) refine the prototype BEST intervention to maximise the likelihood of successful implementation within schools and colleges and (2) inform the design of a future trial of the clinical effectiveness and cost-effectiveness of the refined intervention.

Methods

The study was conducted in two stages. In the first stage, we conducted a rapid evidence synthesis of the barriers to and facilitators of the implementation of indicated mental health interventions for adolescents within educational settings. Alongside the evidence synthesis, we piloted the prototype BEST intervention in three schools/colleges and used process evaluation methods to identify potential barriers to successful delivery. Learnings from the evidence synthesis and pilot process were synthesised to enable us to finalise the intervention manual and resources, refine the practitioner training workshop and amend study procedures in preparation for the next stage of the study.

The second stage of the study comprised a feasibility randomised controlled trial with a parallel process evaluation conducted across 12 schools and colleges. Young people (aged 13–18 years) in school year 9 or above who reported symptoms of BPD, including a history of repeated self-harm, and who attended a school or college where staff had been trained to co-deliver the intervention were eligible to participate.

Participants were randomised in a 1 : 1 ratio to receive either the refined BEST intervention plus treatment as usual or treatment as usual alone. Participants were assessed pre randomisation (baseline) and at 12 and 24 weeks post randomisation. Mixed-methods process data were collected to understand how the intervention was implemented across settings, explore acceptability and monitor contamination.

Results

Stage 1: intervention refinement

The rapid evidence synthesis identified 50 studies that reported on factors influencing the successful implementation of indicated psychological interventions for adolescents within educational settings. Eleven analytic themes were developed from the reported barriers to and facilitators of implementation. These encompassed intervention characteristics, organisational capacity, training and technical assistance, provider characteristics and community-level factors. Findings indicated the need to select appropriate interventions, consider logistical challenges of the school context and provide training and supervision to enable staff to deliver interventions with fidelity. However, structural and environmental support is required for these facilitators to have the greatest impact on successful implementation.

Five young people from three education settings were recruited to the intervention pilot, of whom three completed the full intervention, one completed only the first session before disengaging and one was unable to receive any sessions because they were excluded from the setting. Analysis of recorded treatment sessions suggested good adherence to the intervention manual and revealed a range of delivery strategies employed by practitioners. Qualitative practitioner feedback indicated that the intervention was generally positively received but highlighted several ways in which the training and supervision, and content and format, of treatment sessions and research procedures could be improved.

The findings from the evidence synthesis and intervention piloting were used to finalise the intervention manual and resources, refine the practitioner training and amend study procedures in preparation for the feasibility randomised controlled trial.

Stage 2: feasibility randomised controlled trial

The feasibility trial was disrupted by the COVID-19 pandemic and resultant closure of schools and colleges. Consequently, the study was concluded early, reducing the window for recruitment and the number of data collected. However, we recruited and randomised 32 participants prior to the closure of the study. The rate of recruitment was slower than anticipated, with > 90% of referrals made directly by schools and colleges rather than mental health services, limiting recruitment outside school terms. Nonetheless, we project that our rate of recruitment would likely have been sufficient to meet our prespecified progression criteria had the recruitment window not been curtailed.

Of those participants who had the opportunity to receive the BEST intervention, 90% attended at least three treatment sessions. Retention rates were good (89.5% at 12 weeks and 73.7% at 24 weeks). However, the small number of participants eligible to be followed up ($n = 19$) and highly unusual circumstances in which follow-up assessments took place limits the potential transferability of these findings. We did not find evidence that participants allocated to the treatment-as-usual arm received elements of the BEST intervention, suggesting that it would be possible to limit contamination sufficiently to justify individual randomisation in a future trial.

The acceptability of the proposed outcome measures appears to have been satisfactory and, although the trial was not powered to detect any significant changes in outcomes, mean changes from baseline for continuous outcome measures suggest that they are sensitive to change. The health economic measures also appeared to perform adequately, indicating that they would likely be appropriate for use within any future effectiveness trial of the BEST intervention.

Analysis of session recordings suggests that the ability of practitioners to deliver the intervention with fidelity to the manual was high, with 93.5% of recordings rated as adherent. Acceptability of the intervention was also high; qualitative data indicated that the intervention was valued by, and seen to offer positive benefits for, individual participants, education practitioners involved in co-delivery and the wider school or college.

Conclusions

The refined BEST intervention represents a promising approach for providing timely support to young people experiencing BPD symptoms. A definitive trial of the clinical effectiveness and cost-effectiveness of the BEST intervention would be needed before widespread implementation could be recommended. Although the findings of the feasibility study provide support for progressing to a definitive trial, they also highlight several issues to be resolved and logistical barriers to overcome for a full trial to be successful. We intend to use the learning from this study, in conjunction with further work to resolve remaining uncertainties, to design a future definitive trial.

Trial registration

This trial is registered as ISRCTN16862589.

Funding

This project was funded by the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research programme and will be published in full in *Health and Social Care Delivery Research*; Vol. 10, No. 37. See the NIHR Journals Library website for further project information.

Health and Social Care Delivery Research

ISSN 2755-0060 (Print)

ISSN 2755-0079 (Online)

Health and Social Care Delivery Research (HSDR) was launched in 2013 and is indexed by Europe PMC, DOAJ, INAHTA, Ulrichsweb™ (ProQuest LLC, Ann Arbor, MI, USA) and NCBI Bookshelf.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nihr.ac.uk

This journal was previously published as *Health Services and Delivery Research* (Volumes 1–9); ISSN 2050-4349 (print), ISSN 2050-4357 (online)

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The research reported in this issue of the journal was funded by the HSDR programme or one of its preceding programmes as project number 17/09/31. The contractual start date was in November 2018. The final report began editorial review in February 2021 and was accepted for publication in October 2021. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HSDR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

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