

Training paediatric hospital workforces to deliver low-intensity CBT for children and young people with mental health needs in the context of long term conditions

Anna Roach¹, Isabella Stokes^{1,2}, Sophie Bennett^{1,3}, Kate Settle¹, Isobel Heyman^{1,4}, Roz Shafran^{1,3}

¹ UCL Great Ormond Street Institute of Child Health, 30 Guilford Street, London WC1N 1EH, UK

² University College Hospitals, 235 Euston Rd., London NW1 2BU

³ Great Ormond Street Hospital, London WC1N 3JH

⁴ Cambridge Children's Hospital Project Team and Paediatric Psychological Medicine Service, Addenbrooke's Hospital, Hills Rd, Cambridge CB2 0QQ

Corresponding author: Anna Roach, anna.roach.21@ucl.ac.uk, anna.roach4@nhs.net, UCL Great Ormond Street Institute of Child Health, 30 Guilford Street, London WC1N 1EH

Word count: 2365

Abstract

Introduction: Despite children and young people (CYP) with long term conditions (LTCs) having significantly elevated mental health needs, accessing evidence-based psychological support remains difficult. Previous work suggests low-intensity CBT (LICBT) interventions are effective for CYP with mental health needs in the context of LTCs. If embedded in hospitals LICBT may increase access and better integrate physical and mental health care. This new provision is currently being implemented in paediatric hospitals across the UK. A vital part of successful implementation is effective training. The current paper describes hybrid training in LICBT interventions delivered to staff from a range of health care settings. The aim of the study was to analyse the effectiveness of, and satisfaction with, this training.

Methods: Two days of hybrid training in LICBT for mental health needs in the context of LTCs were delivered to staff. Attendees were introduced to LICBT strategies to support CYP with anxiety, depression and challenging behaviour. A brief questionnaire and evaluation form were completed before and after training on attendees' understanding of the topics covered and their views of the training (usefulness, relevance, preparedness).

Results: Thirteen attendees completed the questionnaire before and after training was completed. Total scores significantly increased from pre-training to post-training. Qualitative feedback indicated the majority found the training highly relevant to their work and enjoyed the hybrid model.

Conclusion: These findings support the acceptability and effectiveness of two-day hybrid training as part of enabling a paediatric hospital workforce to deliver psychological support for CYP with LTCs. Future training could consider this format to help overcome barriers to successful implementation. This work highlights the opportunity a new or existing workforce holds in integrating psychological therapies into existing physical health care pathways, coordinating care and ensuring equitable access to mental health support for CYPs, irrespective of their LTCs.

Key words: children and young people, staff training, CBT, low-intensity interventions

Introduction

In the UK, 14% (1.7 million) of children and young people (CYP) have a long-term physical condition (LTC). LTCs are defined as any diagnosed physical health condition lasting for a minimum of three months for which a cure is considered unlikely and results in limitations in ordinary activities and increased use of health services (Moore et al., 2019). Young people with LTCs are known to have elevated mental health needs compared to the general population, with around 50% meeting diagnostic criteria for at least one mental health disorder (Butler et al., 2018). The associated impairment to functioning and high economic costs mean it is important this population can access early evidence-based psychological support in an integrated way to meet both physical and mental health needs. Despite this, receiving NICE-recommended psychological support remains difficult in this population. Families are often referred to UK Children and Young People's Mental Health Services (CYPMHS) but can find it challenging to access evidence-based treatment due to their LTC. A report by the Children and Young People's Commissioner found that the outcome of referral is not known for up to 78% of CYP referred to CYPMHS for problems adjusting to their physical illness (Children's Commissioner, 2016). When care is offered, mental and physical health services are typically separate and not well integrated.

Low-intensity cognitive behavioural therapy (LICBT) is a NICE-recommended psychological therapy for common mental health disorders that can increase access to evidence-based support. LICBT has been defined as utilising self-help materials, with six hours or less of contact time, with each contact typically 30 minutes or less, where input can be provided by trained practitioners or supporters (Shafran et al., 2021). The Improving Access to Psychological Therapies (now known as Talking Therapies) programme in England created a workforce of trained practitioners to deliver LICBT to improve access to support across settings in 2008. This has been expanded to CYP, specifically as 'Child Wellbeing Practitioners (CWPs)' and 'Education Mental Health Practitioners (EMHPs)'.

LICBT has been found to be effective for young people with LTCs who are experiencing symptoms of anxiety, depression and challenging behaviour (Catanzano, 2020). However, LICBT is not easily accessible since new workforces for CYP are not integrated in hospital and health care settings, unlike the LTC workforces for adults commissioned in 2016 (NHS England, 2018). As a result, young people with LTCs are at a disadvantage for accessing this support. There is a need to train a new workforce to deliver LICBT for young people with LTCs to improve access to NICE-recommended psychological support.

A 'proof-of-concept' study found that training hospital staff in LICBT to address anxiety, depression and challenging behaviour was effective (Bachelor et al., 2020). Furthermore, these interventions have shown to be effective with a reduction in emotional and behavioural symptoms and improved quality of life for young people and families attending a drop-in mental health service offering LICBT in a paediatric hospital (Catanzano, 2021).

The drop-in centre model is now being scaled-up and implemented in several paediatric healthcare settings across the UK. A recent rapid review found that an essential aspect of successful implementation is training (Roach et al., 2023). The current study aimed to train staff from different healthcare and hospital sites in delivering LICBT. This training was delivered using a hybrid format, so attendees could join online or attend in person. Hybrid teaching utilises technology to create different learning environments which are shown to increase attendance and enhance learning (Linder, 2017). The previous study (Bachelor et al., 2020) was limited to training mental health staff at one specialist hospital and was entirely online due to the coronavirus pandemic. This paper describes the hybrid training that was delivered to staff across the UK from a broad range of

healthcare services, including outside of mental health settings. The study reports on the effectiveness of, and satisfaction with, this training.

Method

Participants

Fourteen staff who work with CYP with LTCs attended two training days from various physical healthcare settings across the UK (Table 1).

Table 1. Participant characteristics

Paediatric Healthcare Setting	Job Title
Community Trust	Clinical Psychologist
	Clinical Psychologist
	Assistant Psychologist
	Assistant Psychologist
Large Outer London Hospital	Paediatric Nurse
	Epilepsy Clinical Nurse Specialist
Small District General Hospital	Epilepsy Clinical Nurse Specialist
	Epilepsy Consultant
Large Inner London Hospital	Assistant Psychologist
	Senior Youth Support Co-ordinator
	Cancer Clinical Nurse Specialist
	Play Worker
	Play Worker
	Assistant Psychologist

Materials

Hybrid training on LICBT interventions was delivered across two days (8 hours total) and introduced participants to (i) assessment and goal setting, (ii) evidence-based strategies to support CYP with anxiety, depression and challenging behaviour, (iii) relapse prevention and signposting. Teaching methods included PowerPoint slides, case vignettes, video demonstrations and group discussions. Evidence-based strategies outlined to the group included graded exposure, behavioural activation, problem solving, cognitive restructuring and parent-training. The interventions were not modified for CYP with LTCs but did include frequent reflections of how LTCs can impact CYP and their families' mental health.

The training was delivered by a clinical psychologist and PhD student. The teaching built on the previous two-day online training on LICBT interventions remotely delivered during the pandemic (Batchelor et al., 2020). The training sessions were all recorded through Microsoft Teams and remain available to share with new staff.

Procedure

Participants were asked to complete an anonymous questionnaire about the training. Participants rated their understanding of the seven topics covered in the training (guided self-help, information gathering including risk, goal setting, challenging behaviour, anxiety, depression and signposting) on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Thirteen attendees completed the questionnaire at the start and end of training. Eleven participants also filled out an evaluation form

and rated on a 4-point scale (1 = not at all to 4 = extremely) how useful, interesting, likely they are to use the training in their work and how prepared they feel to deliver LICBT. Participants were also given space to add free text qualitative feedback.

Data analysis

The sign test was used to compare the total pre- and post-training median scores, as well as pre- and post-training scores for individual topics. This non-parametric test was used as the data did not meet normality assumptions for the T-test, nor the symmetrical distribution of differences assumption that the non-parametric Wilcoxon signed-rank test requires. The sign test determines if there is a median difference of the same participants between two time points. Descriptive statistics and brief thematic analysis were used to analyse the free text from the evaluation form.

Ethics

Ethics approval was granted by the London Riverside Research Ethics Committee (REC reference number: 16/LO/1915).

Results

The training elicited a statistically significant increase in participants' total understanding of the seven topics post-training ($M = 33.62$, $SD = 1.76$) compared to total understanding pre-training ($(M = 24.77$, $SD = 6.13)$, $p < .05$). Additionally, scores on six of the topics had significantly higher median scores post-training compared with pre-training ($p < 0.05$; guided self-help, information gathering, challenging behaviour, anxiety, depression, signposting). Pre- and post-training scores did not statistically increase participants' understanding of goals ($p > 0.05$).

Feedback from the anonymous evaluation form demonstrated very high levels of satisfaction with the training. Attendees found the training very useful ($M = 3.64$, $SD = 0.50$), very interesting ($M = 3.90$, $SD = 0.32$), very useful in their work ($M = 3.55$, $SD = 0.69$) and were very satisfied with the delivery of the training ($M = 3.00$, $SD = 0.63$). In the free text responses, attendees commented that the content of the presentation was "explained clearly", "extremely useful" and "touched upon all the most important aspects". They noted that the delivery was "well-tailored to those that have different learning styles", "enjoyable and interactive" and "taught at a good pace". Attendees also shared how "I've learnt so much and can really see this being implemented and benefiting patients in the long run". Another added "I can already see how it can work for patients I work with". Some attendees also commented on how to improve the training in future. Two attendees commented that it would be useful to have more information about how to "practically implement" offering LICBT in their specific work settings and suggested "follow-up support".

Discussion

This study found that two days of hybrid training was effective in increasing self-reported understanding of LICBT to a range of staff across a variety of healthcare settings. Analysis found that participants were satisfied with the training, with feedback illustrating how they felt it was very useful for their work and they felt very prepared in delivering LICBT for anxiety, depression and challenging behaviour to young people. With regard to the specific subjects covered in the training, only understanding of goal setting did not statistically significantly increase.

It is important to highlight the terminology used in the training. The subject "challenging behaviour" refers to behaviours that cause persistent or severe difficulties, interfere with quality of life, violate societal norms, and cause distress to the child and/or caregiver or another child. (Bennett et al., 2022). There is ongoing discussion around this terminology and other terms such as "behaviours of

concern” have been put forward as replacements (Chan, 2012). However the current evidence-based training interventions for these children and young people (such as The Incredible Years Programme, and Triple P), as well as the Talking Therapies workforce curriculums continue to use the term “challenging behaviour”, so this term is used for consistency within this training.

Hybrid training can be particularly difficult as it requires the trainer to engage both participants in the room and those joining remotely. The training days involved various components that may have led to its effectiveness and ability to engage all participants. Training utilised both didactic and interactive learning methods that are suggested to be effective including PowerPoints, sharing knowledge through discussion, patient vignettes and video examples. These methods are all conducive to the hybrid training format. Furthermore, there were two trainers which enabled one trainer to be in the room and the other to be online ensuring inclusion of all participants.

Implications

Training a new workforce to deliver LICBT interventions for mental health disorders is a necessary step in increasing access to psychological support for young people with LTCs. It is possible that the mental health needs of CYPs are identified earlier if hospital staff who are already working with families with specific LTCs are trained in LICBT. These staff, e.g. clinical nurse specialists, are already well placed to identify and deliver LICBT to families as part of routine practice. This can be an effective use of staff resources and has potential implications for cost-effectiveness. There is potential to fill the gap within hospital provision and develop workforces similar to that for adults with LTCs (NHS England, 2018).

Limitations

The results of the two-day training are promising however should be viewed with caution. This training was intended to be an introduction to LICBT for use in a research project evaluating LICBT for mental health disorders in young people with LTCs. The training signposted attendees to existing resources for ongoing learning and development with the intention of receiving further training and supervision. It is important that attendees continue to develop their clinical skills and knowledge through ongoing training and supervision to ensure fidelity to model, clinical effectiveness and patient safety.

Another limitation is the small sample size of the training and selection bias as participants chose to attend this training. Further research should study the effectiveness of the training on a larger sample size. Our sample size was too small to conduct meaningful sub-analysis of those who attended in person or remotely, and the different clinical roles.

Conclusion

These findings support the acceptability and effectiveness of two-day hybrid training as a pragmatic introduction for paediatric hospital staff to identify and offer evidence-based treatment to CYP with mental health disorders in the context of LTCs. Future implementation could consider this training format to help overcome barriers to successful implementation. This work highlights the opportunity a new workforce could hold in delivering evidence-based interventions in a resource constrained environment. The potential benefits and wider implications should be further explored. Delivering NICE-recommended psychological therapies that are integrated into physical healthcare pathways are likely to lead to more coordinated care, ensuring equitable access to support for young people, irrespective of their LTCs. This is in line with NICE guidance and the UK Government’s ambitions for mental health and physical health care to be integrated at every level, and will help to ensure that young people with multimorbidities receive evidence-based interventions in a timely way.

Acknowledgements

This work was supported by the Beryl Alexander Charity and Great Ormond Street Hospital Children's Charity (Project grant number: 16HN11). All research at Great Ormond Street Hospital NHS Foundation Trust and UCL Great Ormond Street Institute of Child Health is made possible by the NIHR Great Ormond Street Hospital Biomedical Research Centre. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

Conflict of interest statement

The authors have no potential conflicts of interest

References

- Batchelor, R., Catanzano, M., Kerry, E., Bennett, S. D., Coughtrey, A. E., Liang, H., Curry, V., Heyman, I., Shafran, R. (2020). Debate: Lessons learned in lockdown—a one-day remotely delivered training on low-intensity psychological interventions for common mental health conditions. *Child and Adolescent Mental Health, 25*(3), 175-177. <https://doi.org/10.1111/camh.12402>
- Bennett, S., Myles-Hooton, P., Schleider, J., & Shafran, R. (Eds.). (2022). *Oxford Guide to Brief and Low Intensity Interventions for Children and Young People*. Oxford University Press.
- Butler, A., Van Lieshout, R. J., Lipman, E. L., MacMillan, H. L., Gonzalez, A., Gorter, J. W., Georgiades, K., Speechley, K. N., Boyle, M. H., Ferro, M. A. (2018). Mental disorder in children with physical conditions: a pilot study. *BMJ open, 8*(1), e019011. <http://dx.doi.org/10.1136/bmjopen-2017-019011>
- Catanzano, M., Bennett, S. D., Kerry, E., Liang, H., Heyman, I., Coughtrey, A. E., Fifield, K., Taylor, C., Dalgeish, T., Xu, L., Shafran, R. (2021). Evaluation of a mental health drop-in centre offering brief transdiagnostic psychological assessment and treatment for CYP and adolescents with long-term physical conditions and their families: a single-arm, open, non-randomised trial. *Evidence-based mental health, 24*(1), 25-32. <http://dx.doi.org/10.1136/ebmental-2020-300197>
- Catanzano, M., Bennett, S. D., Sanderson, C., Patel, M., Manzotti, G., Kerry, E., Coughtrey, A. E., Liang, H., Heyman, I., Shafran, R. (2020). Brief psychological interventions for psychiatric disorders in young people with long term physical health conditions: a systematic review and meta-analysis. *Journal of Psychosomatic Research, 136*, 110187. <https://doi.org/10.1016/j.jpsychores.2020.110187>
- Chan, J., Arnold, S., Webber, L., Riches, V., Parmenter, T., & Stancliffe, R. (2012). Is it time to drop the term 'challenging behaviour'? *Learning Disability Practice, 15*(5).
- Children's Commissioner. (2016). Lightning review: access to child and adolescent mental health services. <https://www.childrenscommissioner.gov.uk/report/lightning-review-access-to-child-and-adolescent-mental-health-services/>
- Linder, K. E. (2017). Fundamentals of hybrid teaching and learning. *New directions for teaching and learning, 2017*(149), 11-18.
- Moore DA, Nunns M, Shaw L, Rogers M, Walker E, Ford T, et al. (2019) Interventions to improve the mental health of children and young people with long-term physical conditions: linked evidence syntheses. *Health Technol Assess 23*(22). <https://doi.org/10.3310/hta23220>
- NHS England. (2018). National Collaborating Centre for Mental Health. The Improving Access to Psychological Therapies Manual. <https://www.england.nhs.uk/publication/the-improving-access-to-psychological-therapies-manual/>
- Roach, A., Cullinan, S., Shafran, R., Heyman, I., & Bennett, S. (2023). Implementing brief and low-intensity psychological interventions for children and young people with internalizing disorders: a rapid realist review. *British Medical Bulletin, 145*(1), 120-131.
- Shafran, R., Myles-Hooton, P., Bennett, S., & Öst, L. G. (2021). The concept and definition of low intensity cognitive behaviour therapy. *Behaviour Research and Therapy, 138*, 103803. <https://doi.org/10.1016/j.brat.2021.103803>