Contents lists available at ScienceDirect

# EClinicalMedicine

journal homepage: https://www.journals.elsevier.com/eclinicalmedicine

## Commentary Treating self-harm in young people

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Over the past decade, the extent of disease burden associated with self-harm in young people has become strikingly clear. Across the globe, self-inflicted injuries result in the deaths of more girls aged 15–19 years than any other cause [1]. For many young people, their self-harming behaviour resolves spontaneously [2], yet for others, self-harm can dominate their lives and impose a considerable strain on family and peer relationships. The longer-term consequences of adolescent self-harm cannot be underestimated. In a recent population-based cohort study of young Australians, adolescent self-harm was linked to social disadvantage, anxiety, and substance use up to 20 years later [3]. The imperative to effectively help young people who self-harm, and their families, has never been clearer. Yet, the evidence base for effective interventions designed to reduce adolescent self-harm remains extremely limited [4].

In this context, the article by David Cottrell and colleagues [5] is a welcome addition to the literature. Family factors have long been recognised as playing an important role in the development of self-harm in young people, and intervening at the family level therefore represents an entirely sensible strategy. In a recently published pragmatic randomised controlled trial (the Self-Harm Intervention: Family Therapy [SHIFT] trial), Cottrell et al. [6] evaluated the effectiveness of a brief manualised family therapy versus treatment-as-usual in reducing repeated self-harm leading to hospital attendance in the UK. In the original trial – the largest evaluation of a self-harm intervention to date - 832 participants aged 11-17 years who had selfharmed at least twice and been referred to child and adolescent mental health services were randomised to the intervention or control arm. At 18 months post-randomisation, there was no significant difference in the proportion of participants presenting to hospital for repeated self-harm between the intervention group (28%) and the control group (25%). Trials of adolescent mental health treatments often lack long-term follow-up data and it is possible that the effects of family therapy may emerge over longer periods of time. Thus, in this issue, Cottrell et al. [5] report the results of an extended followup of participants from their original SHIFT trial.

Using hospital episode statistics to extend the follow-up period to 36 months, the authors again found no difference between the proportion of participants attending hospital following self-harm in the intervention group (40.5%) and the control group (39.8%). Rates of self-harm continued from 18–36 months at much the same rate as they did over the first 18 months. Younger girls and participants whose index episode combined self-injury and poisoning were at greater risk of repetition, suggesting that clinicians should exercise particular caution with these groups of patients. Furthermore, over the 36-month follow-up, almost one in three participants (31.3%) were admitted to hospital for an adversity-related injury – including self-harm, violence, or substance abuse – as opposed to only 4% of the general population of young people [5], highlighting the broader vulnerability of young people who self-harm.

The extended follow-up period, use of linked hospital data, and minimal attrition (97% of participants were followed up) are clear strengths of the study. The authors acknowledge that the 'dose' of family therapy may have been insufficient to produce meaningful change and, given that the causes and functions of self-harm are so often multi-faceted, effectively reducing self-harm in young people may require longer, more intense treatment. Additionally, as most young people who selfharm do not seek medical attention [7], the true proportion of participants from either trial arm who engaged in further self-harm cannot be established using linked medical records alone. Self-harm is notoriously difficult to assess accurately and the most comprehensive method of capturing self-harm episodes involves triangulating multiple data sources, including self-report, clinician/informant interviews, and linked administrative datasets. Furthermore, the longer-term impact of the intervention on the quality of life of young people is unclear.

Self-harm is intimately linked to problems with emotion regulation, problem-solving, and interpersonal communication and so, along with mobilising the support of family and caregivers, these domains remain the focus for therapeutic interventions in this sphere [8]. However, in order to deliver effective treatments in the first place, we need to overcome the stigma and fear associated with talking about self-harm, and offer treatment at the right time and in the right place for young

https://doi.org/10.1016/j.eclinm.2020.100259

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DOI of original article: http://dx.doi.org/10.1016/j.eclinm.2019.100246.

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people. In this respect, school-based initiatives [9] hold promise, and monitoring for periods when young people are experiencing higherthan-usual stress [10] could lead to the delivery of more effective adaptive interventions. Ultimately, improving the lives of the millions of young people around the world who engage in self-harm will require coordinated and sustained action across multiple sectors (including health, education, and welfare), greater research funding, and adequately powered and rigorously-conducted multi-site trials. The field is still in its infancy and we have much to learn.

#### **Declaration of competing interest**

The authors report no conflicts.

#### Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.eclinm.2020.100259.

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