Clinical management of deliberate self-harm in young people: the need for evidence-based approaches to reduce repetition

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CRD summary
This review assessed clinical interventions for reducing the recurrence of deliberate self-harm in adolescents and young people. The authors concluded that there was limited evidence and that further good-quality research is required. The evidence presented appears to support the conclusions, but the insufficient reporting of the review methods makes it difficult to confirm the robustness of these conclusions.

Authors' objectives
To assess the effectiveness of clinical interventions aimed at reducing the recurrence of deliberate self-harm in adolescents and young people.

Searching
MEDLINE, PsycINFO, EMBASE, ERIC, CINAHL, the Cochrane Database of Systematic Reviews and the Cochrane Controlled Trials Register were searched. The search terms were reported to be available from the authors of the review. Internationally and nationally important investigators were contacted for details of published and unpublished studies. Reference lists were checked. Only studies reported in English were included.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs), controlled clinical trials and quasi-experimental trials were eligible for inclusion. Where reported, the included studies followed up patients for 2 to 24 months.

Specific interventions included in the review
Studies that compared interventions with standard aftercare were eligible for inclusion. The included studies compared problem-solving therapy, intense management with outreach, readmission on demand, enhanced family intervention and group therapy with 'standard care'.

Participants included in the review
Studies of adolescents and young adults who had presented at hospital with self-harm, or who had been identified as engaging in self-harm, were eligible for inclusion.

Outcomes assessed in the review
The outcomes of interest were repetition of self-harm, adherence to treatment, reduction in suicidal ideation and hospitalisation.

How were decisions on the relevance of primary studies made?
The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
The authors did not state that they formally assessed validity, but some methodological limitations were discussed in the text.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data
extraction. For each study, the number of patients with each outcome was extracted for each treatment arm and relative risks with 95% confidence intervals were extracted or calculated.

**Methods of synthesis**

How were the studies combined?
The studies were combined in a narrative.

How were differences between studies investigated?
The studies were grouped by type of intervention. Any differences between the studies were discussed in the text, with additional information presented in tabular format.

**Results of the review**

Ten controlled studies (n at least 1,664) were included: 3 RCTs (n at least 225), 4 clinical trials (n=645) and 3 quasi-experimental studies (n at least 794).

In terms of study quality, methodological flaws included selection bias, lack of blinding, low rates of participation, treatment groups not comparable at baseline, and ascertainment bias.

Group therapy (1 RCT): this was the only intervention that significantly reduced repetition of self-harm. The RCT found significantly fewer adolescents had two or more episodes of self-harm at 7 months with the intervention than with standard care. The intervention group was found to attend fewer psychotherapy appointments than the control group, but there was no significant difference between treatments in suicidal ideation.

Problem-solving therapy (1 controlled clinical trial): there were no statistically significant differences between treatments for any outcomes at the 3-month follow-up.

Intense management with outreach: 1 RCT, 2 quasi-experimental studies with historical controls, and one 3-arm quasi-experimental study with historical and contemporary controls were identified. The RCT found that the intervention reduced self-harm over 1 year, but found no difference between treatments for depression, hopelessness and suicidal ideation. Flaws included a lack of raw data, treatment groups dissimilar at baseline, and limited generalisability of the results. The other 3 studies found mixed results: two found that patients receiving the intervention had reduced rates of hospitalisation at 3 years (1 study) and reduced readmission rates for suicide attempt at 12 months (1 study), while the third found no significant difference between the interventions for repeat suicide attempts.

Readmission on demand (1 controlled trial): this study found no significant difference in readmission or suicidal behaviour at 12 months.

Enhanced family therapy: 1 RCT, 1 quasi-experimental study with medical and community control groups, and 1 quasi-experimental study with historical control were identified. The RCT found no significant differences between treatments for repetition of self-harm, adherence to psychotherapy, or in suicidal ideation at 2 and 6 months. Neither of the other studies reported suicidal behaviour or repeat self-harm. One of the studies found the intervention was not associated with greater attendance at follow-up appointments, but it was associated with reduced suicidal ideation when compared with the historical control.

**Authors’ conclusions**

There was limited evidence about the effects of treatments designed to reduce recurrence of self-harm in adolescents and young adults. Intensive interventions appeared to be no more effective than standard care. Further good-quality research is required.

**CRD commentary**

The review addressed a clear question that was defined in terms of the participants, intervention, outcomes and study design. Several sources were searched and attempts were made to locate unpublished studies, thus reducing the potential
for publication bias. The restriction to English language studies might, as the authors acknowledged, have resulted in language bias. The methods used to select studies and extract the data were not described, so it is not known whether any efforts were made to reduce errors and bias. Validity was not formally assessed, but methodological problems in the primary studies were discussed. Adequate information on the included studies was presented. Given the differences between the studies, a narrative synthesis was appropriate and the authors took account of study quality in the synthesis.

The evidence presented appears to support the conclusions about the limitations of the evidence and the need for more research but, owing to the lack of reporting of review methods, it is difficult to confirm the robustness of the authors' conclusions.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.

Research: The authors stated that research should be aimed at understanding and identifying the intervention components that improve outcomes, and at determining which prognostic factors to include in the study design. They also stated that the process of service delivery in clinical settings should be evaluated.

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