Efficacy of suicide prevention programs for children and youth

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Authors’ objectives
The authors’ aim was to present the findings from primary research that assessed the efficacy and/or effectiveness of suicide prevention programmes, including those based in the school or community, on school-aged children and youth.

Searching
PubMed, EMBASE, HealthSTAR, CINAHL, PsycINFO, ERIC, Sociological Abstracts, EBM Reviews: Best Evidence, the Science Citation Index, the Social Sciences Citation Index, Arts and Humanities Citation Index, and the Cochrane Library were searched. An unspecified selection of websites was also searched. A full list of the search terms and the dates over which each database was searched was provided in the report.

Only studies in English, Chinese or German, published from 1991, were considered for the review.

Study selection
Study designs of evaluations included in the review
Only controlled primary studies were eligible for inclusion. The actual studies included were cohort studies and randomised controlled trials (RCTs). Relevant systematic reviews with clearly defined questions published within 10 years of the current review, and which had a comprehensive search strategy and critically assessed the included studies, were also eligible.

Specific interventions included in the review
Studies were eligible for inclusion if they evaluated the efficacy or effectiveness of suicide prevention programmes for children and young people. The included studies assessed curriculum-based and elective suicide prevention programmes for high-risk or special-needs children, curriculum-based suicide prevention or awareness programmes, curriculum-based programmes for the promotion of behavioural change and coping strategies, and counselling of friends of the deceased within 7 days of a suicide. Studies were excluded if they focused on treatment rather than prevention strategies, or on educational programmes for parents of children and adolescents.

Participants included in the review
Studies were eligible for inclusion if they assessed programmes aimed at children and/or adolescents of school age (defined as between 5 and 19 years of age). No research was found that assessed the prevention of suicide in elementary (i.e. primary) school children. All studies were conducted either in junior high or high schools. The participants in the studies were from a wide range of ethnic backgrounds (including Black, Caucasian and Hispanic), attended schools (grade 8 to grade 12) in urban or rural areas, and were from families with different socioeconomic status. They were aged from 12 to 19 years.

Outcomes assessed in the review
Studies were eligible for inclusion if they assessed the outcomes of the programmes in terms of suicide-related outcomes such as change in the awareness of suicide-related knowledge, suicide protective factors, suicide-risk factors, and the reduction in suicidal ideation and attempt rates or suicide rates.

How were decisions on the relevance of primary studies made?
Two reviewers read all abstracts. The authors did not state how reviewers made decisions on the relevance of the full reports of included studies.

Assessment of study quality
The quality of the included studies was assessed using an assessment tool with six criteria:
selection bias (representativeness of the sample and percentage of selected individuals who agree to participate);
study design;
control for confounders;
blinding (of the outcome assessors and study participants);
validity and reliability of the data collection methods; and
withdrawals and drop-outs.

Two reviewers completed an independent critical appraisal of the quality of the primary studies. Any disagreements were resolved by discussion.

**Data extraction**
The authors used a predefined form to extract the data, but did not state how many reviewers performed the data extraction.

**Methods of synthesis**
How were the studies combined?
The studies were grouped according to the aims of the intervention and were combined in a narrative.

How were differences between studies investigated?
Differences between the studies were discussed within the text.

**Results of the review**
Ten primary studies were included in the review: 7 cohort studies and 3 RCTs. The authors of two of the studies presented initial and long-term results in separate publications, resulting in 12 included publications. The total number of children included was 4,449.

Only 10 primary studies were located. Most of these were conducted in the USA, whilst one was conducted in Australia and the other two in Israel.

The suicide prevention programmes varied considerably in content, frequency, duration and delivery. Most of the interventions were curriculum-based, while one was group counselling provided as part of a programme following the suicide of a friend of the individual being counselled.

Most of the studies focused on the general student population, while a few studies first categorised students as 'at-risk' or 'in need' before the intervention. Some studies provided consistent and encouraging evidence on the effects of indicated suicide prevention programmes targeting youth at higher than average risk.

Only one study reported assessing the adverse events of the programmes.

**Authors' conclusions**
The overall findings of this review suggest that there is insufficient evidence to either support or refute curriculum-based suicide prevention programmes in schools.

**CRD commentary**
The authors provided a clear research question and explained their search strategy well. They did not provide full details of how the studies were selected for the review. In addition, they may have missed studies by limiting the review to
English, German and Chinese publications. The authors reported that they were unable to locate any Canadian research, but their attempts to do so may have been hindered by the exclusion of publications in French.

The authors fully reported the studies included in the review and provided an excellent assessment of their validity. An overview of the research within each group of studies was provided. The authors’ overall conclusion reflects the studies found. Their finding that future research was required was particularly justified.

It is unclear how this research would transfer to the UK context.

**Implications of the review for practice and research**

Practice: The authors stated that their results may suggest that the frequency and duration of the prevention programmes may not be the only variables to consider, and that where a programme does not contain a therapeutic element even sufficient exposure might not produce the desired effect. They also reported that programmes should be addressed to the general population, as well as the ‘at-risk’ populations, for maximal benefit.

Research: The authors stated that an opportunity for the conduct of a good-quality Canadian study in the area of suicide prevention programmes for children and youth exists. The authors called for an investigation of the association and causality of suicidal behaviours, an international epidemiological database of prevalence and incidence of youth suicide, and a full assessment of ‘gold’-standard prevention programmes.

**Bibliographic details**


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This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.