Systematic review of school-based prevention and early intervention programs for depression
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CRD summary
The review concluded there was some support for the implementation of depression prevention and early intervention programmes in schools, with indicated approaches appearing to produce the strongest results. Limitations of the search for studies, coupled with uncertainties of the review processes, means the authors’ conclusions should be interpreted with caution.

Authors’ objectives
To evaluate the effectiveness of school-based prevention and early intervention programs for reducing depressive symptoms.

Searching
The Cochrane Library, PsycINFO, and PubMed were searched between 1998 and March 2008 for peer-reviewed studies in English; search terms were reported.

Study selection
Randomised controlled trials (RCTs) of school-based interventions to reduce or prevent symptoms of depression, or to build resilience, in children (aged five to 12 years) or adolescents (aged 13 to 19 years), were eligible for inclusion. The primary outcome had to be depressive symptomatology or diagnosis.

Included trials used three types of preventative programme: universal (including all students); selective (targeting students at risk of developing a depressive disorder); and indicated (targeting students with mild or early symptoms of depression). Over half the included trials were universal trials. Most trials used cognitive behavioural therapy as the intervention, and used usual care or no intervention for the control group (treatments were typically given over eight to 12 sessions, each of 40 to 90 minutes duration). The most commonly used symptom scales were the Children's Depression Inventory, the Center for Epidemiological Studies Depression Scale and the Reynolds Adolescent Depression Scale.

The authors did not state how many reviewers selected studies for inclusion.

Assessment of study quality
Trial quality was assessed using the Jadad scale, evaluating randomisation, blinding, and withdrawals and drop-outs. Trials were awarded a score between 0 and 5 points.

The authors did not state how many reviewers assessed study quality.

Data extraction
Data were extracted in order to calculate effect size (Cohen's d).

The authors did not state how many reviewers extracted data.

Methods of synthesis
A narrative synthesis was presented. Differences between trials were discussed with respect to target population, programme content, programme leader, intervention duration, control group, follow-up, and study quality.

Results of the review
Forty-two RCTs were included in the review (n=14,705 participants). Sample sizes ranged from 16 to 2,664 participants. Jadad scores ranged from 1 to 3 out of 5 points (over half the RCTs scored 2). Follow-up periods ranged from post-test assessment only to two years.

Effect sizes for all trials ranged between -0.54 and 1.40, with 23 trials reporting statistically significant reductions following intervention, mostly at post-test (effect size range 0.21 to 1.40).

Eleven of the 24 trials of adolescents and six of 14 trials delivered to children reported a significant reduction of depression symptoms (effect sizes ranged from 0.31 to 1.40 in adolescents and 0.48 to 1.05 in children).

Nine of the 23 universal trials and six of the 10 indicated trials showed significant symptom reductions at post-test (effect size range: 0.30 to 1.40 for universal trials and 0.25 to 1.35 for indicated trials).

Further results were reported.

**Authors’ conclusions**

There was some support for the implementation of depression prevention and early intervention programmes in schools, with indicated approaches appearing to produce the strongest results.

**CRD commentary**

The review addressed a clear question, supported by appropriate eligibility criteria. Three database were searched for relevant studies, but the restriction to published English articles meant that some relevant trials may have been missed. No details were provided on whether any methods (e.g. independent, duplicate procedures) were used to reduce the risk of reviewer error and bias throughout the review process.

Trial quality was adequately assessed and was used in interpreting the results of the review. A narrative synthesis of standardised mean differences was presented, without confidence intervals, which made assessment of the reliability of individual results difficult; the lack of pooling, with appropriate weightings, also made interpretation of the review results problematic.

In light of this, the restricted search, the limited quality of the included trials, and the possible reviewer error and bias during the review process, the authors’ conclusions should be interpreted with caution.

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

**Practice**: The authors did not state any implications for practice.

**Research**: The authors stated that further school-based research is required that involves the use of attention controls, long-term follow-ups and which focuses on the training and evaluation of sustainable programme leaders, such as teachers. They added that methods used for randomisation should be clearly reported, and cost-effectiveness should be evaluated.

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