School-based prevention programs for eating disorders: achievements and opportunities

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CRD summary
This review concluded that school-based eating disorder prevention programmes do not have harmful effects on student attitudes and behaviours, and that targeted prevention programmes have obtained promising results in high-risk individuals. The review methodology was open to various sources of bias and there was insufficient information on the included studies. The author's conclusions should therefore be interpreted with caution.

Authors' objectives
To study the effectiveness of school-based eating-disorder prevention programmes on short-term outcomes.

Searching
MEDLINE and PsycINFO were searched from 1985 to 2002; the search terms were reported. The author also contacted experts in the field and requested copies of previous review articles. Only research published in scientific journals or books was eligible for inclusion. The author did not state whether language restrictions were applied.

Study selection

Study designs of evaluations included in the review
Randomised controlled trials (RCTs) were eligible for inclusion. The duration of follow-up ranged from 0 to 24 months.

Specific interventions included in the review
Studies of school-based eating-disorder prevention programmes were eligible for inclusion in the review. Eleven of the included studies had a didactic focus, whilst 18 had an interactive focus. The duration of the programmes ranged from 0.3 to 33 hours.

Participants included in the review
Studies of students were eligible for inclusion. Nineteen of the included studies assessed universal programmes, whilst 10 assessed programmes targeted at a high-risk population. The mean age of the participants ranged from 9 to 21 years and the majority of the participants were female. Most of the studies were based in the USA.

Outcomes assessed in the review
The review included studies that assessed the short-term outcomes of improvements in knowledge of eating disorders and related topics, improvements in attitudes, and improvements in behaviours.

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

Assessment of study quality
The author did not state that they assessed validity.

Data extraction
The author did not state how the data were extracted for the review, or how many reviewers performed the data extraction. Data were extracted on the country of origin of the study, the number of participants and their mean ages, the duration of the programme and its focus (didactic or interactive), the length of follow-up and outcomes.
Methods of synthesis
How were the studies combined?
A narrative synthesis of the studies was undertaken.

How were differences between studies investigated?
Differences between the studies in terms of the type of programme (universal or targeted) and mode of delivery (interactive or didactic) were highlighted and their effect on the outcomes was explored.

Results of the review
Twenty-nine RCTs were included in the review: 19 universal programmes (5,997 participants) and 10 targeted programmes (576 participants).

Improvements in knowledge.
Nine of the 19 studies of universal programmes assessed improvements in knowledge; all nine reported a significant improvement compared with the control group. Only one of the 10 studies of targeted programmes assessed improvements in knowledge; no significant improvement was found compared with the control group.

Improvements in at least one attitude.
Six of the 18 studies of universal programmes that assessed improvements in attitude reported a significant improvement compared with the control group. Nine of the 10 studies of targeted programmes that assessed improvements in attitude reported a significant improvement compared with the control group.

Improvements in at least one behaviour.
Two of the 17 studies of universal programmes that assessed improvements in behaviour reported a significant improvement compared with the control group. Five of the 7 studies of targeted programmes that assessed improvements in behaviour reported a significant improvement compared with the control group.

Authors' conclusions
School-based eating-disorder prevention programmes do not have harmful effects on student attitudes and behaviours. Targeted prevention programmes have obtained promising results in high-risk individuals. Positive effects have been achieved using an interactive approach. However, universal prevention programmes have had disappointing results.

CRD commentary
Inclusion criteria were reported in relation to the study designs, participants and interventions of interest. Two electronic databases were searched and experts in the field were contacted to identify previous review articles. However, since only research published in scientific journals or books was eligible for inclusion in the review, publication bias might have been present. The author did not state whether language restrictions were applied, thus the potential for language bias cannot be assessed. The methods used to select the studies and extract the data were not reported; therefore, the potential for reviewer error or bias cannot be assessed. The validity of the primary studies was not assessed.

Very few details of the interventions investigated by the primary studies were reported, making it difficult to assess the impact of the intervention type on the outcomes. Heterogeneity was not formally assessed. Owing to the lack of detail relating to the interventions studied, it is not possible to assess whether a meta-analysis would have been appropriate. The author's conclusion in relation to the harmful effects of eating-disorder prevention programmes is not supported by the review, as harmful effects were not reported in the table or narrative synthesis. Bearing in mind the methodological limitations of the review, the author draws out practical implications from the research and design of intervention programmes in this area.
Implications of the review for practice and research
Practice: The author stated that the promising results from targeted eating-disorder prevention programmes for high-risk individuals may encourage stakeholders in the health care sector to promote targeted prevention programmes for middle-to-late adolescents at risk for eating disorders. He also stated that the poor results from universal eating-disorder prevention programmes should not discourage stakeholders in the health care sector from promoting universal prevention programmes. The author stressed the importance of including parents, teachers, school administrators and advertisers in efforts to challenge the cultural pressure of thinness in adolescents. Recommendations for implementing school-based eating-disorder prevention programmes were made.

Research: The author stated that research on eating-disorder prevention programmes should continue. He recommended that future prevention programmes should be designed to target established risk factors and new instruments should be developed for defining and detecting high-risk individuals. Future research should use RCT methods, appropriate outcome assessment instruments and appropriate statistical techniques, and assess longer term outcomes including the prevalence and incidence of eating disorders. The author also stated that more research is needed to understand the strengths and weaknesses of the two principal paradigms (the Disease-Specific Pathways model and the Non-Specific Vulnerability Stressor model) used in eating-disorder prevention programmes, and to validate the effectiveness of new ideas and theories on eating-disorder prevention. Areas for future research are trials targeting the offspring of parents with eating disorders, and trials of integrated eating-disorder and obesity prevention programmes.

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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.