



- Title** Effects of Education and Psychosocial Interventions for Adolescents with Diabetes Mellitus: A Systematic Review.
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- Reference** Health Technol Assess 2001;5(10) (April 2001); www.ncchta.org/execsumm/summ510.htm

Aim

To examine the effectiveness of educational and psychosocial interventions for adolescents with type 1 diabetes, designed to improve their diabetes management. Research questions addressed were: Do educational and psychosocial interventions for adolescents with type 1 diabetes have beneficial effects on biological and psychosocial outcomes? Are there types or features of interventions that are shown to be more effective than others? What evidence exists on the cost-effectiveness of interventions?

Results and Conclusions

- This systematic review found that educational and psychosocial interventions have small to medium beneficial effects on various diabetes management outcomes. Interventions are likely to be effective if they demonstrate the interrelatedness of the various aspects of diabetes management. However, well-designed trials are needed in the UK.
- It is not known whether interventions should be targeted (eg, modified for different disease stages, different types of diabetes management problems, or different age groups of adolescents).
- To obtain economic returns, interventions must show favorable, long-lasting effects on behavior and metabolic control, but we lack cost-effectiveness studies that fully address the resource implications and long-term consequences of educational interventions for adolescents with type 1 diabetes.

Recommendations

This review recommends undertaking a phase program of primary research involving a consultation process in adolescents with type 1 diabetes, their families, doctors, nurses, health economists, and health psychologists to identify possible interventions seen as plausible and potentially effective by patients and their parents, feasible and practical in the context of the NHS diabetes services, and understood and accepted by doctors and nurses as key and integral parts of diabetes care.

Methods

A search strategy was formulated, piloted, and refined. Three journals were handsearched, 11 electronic databases were searched, and personal contacts, flyers, conferences, and websites were used to notify the research community of the review to access further literature. This process generated 10 535 abstracts, which, after screening, resulted in 367 articles identified for retrieval. This number was augmented by hand-searching, personal contact, and exploding references, and a final total of 457 articles were scrutinized. Of these, 64 reports describing 62 studies were identified as empirical papers evaluating educational or psychosocial interventions. The relevant data were extracted from the papers and summary tables for each study were prepared. Where possible, effect sizes were computed for outcomes from studies that included a randomized control group (CG) and other relevant information.

Further research/reviews required

Primary research of interventions based on sound behavioral principles that are acceptable to patients and have the potential to be cost-effective.

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