Systematic review exploring experiences of adolescents with Type 1 diabetes in retrospective review of glucose data

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Aims

Multiple biological, physiological and psychosocial changes occur during adolescence. This phase of life is typically associated with reduced adherence to the basics of self-management of Type 1 diabetes (T1D) and an increase in HbA1c.

Some studies suggest that retrospectively reviewing glycaemic data regularly can support a lower HbA1c.

The aim of this literature review was to explore themes around the retrospective analysis of glucose data by adolescents with T1D, and broader factors relating to self-care of diabetes.
Methods

A systematic search was carried out using three electronic databases in order to highlight themes pertaining to the retrospective review of glucose data, and broader factors relating glucose monitoring.

Selected articles were appraised using the Critical Appraisal Skills Programme tool and themes identified.
Results

538 articles were retrieved
Four key themes were identified from five included papers:

- Input/attitudes/knowledge of others
- Knowledge and building confidence
- Normalising diabetes
- Practical aspects of diabetes management
Conclusions

The review highlighted studies which give a broad insight into factors affecting self-care efficacy in adolescents with T1D which can contribute to addressing some aspects of the research question.

However, there is very little data relating specifically to experiences of adolescents in retrospective review of their own glucose data, and so further research is needed regarding the mediators and barriers to this.