

The Impact of Family-Based Interventions on Adolescent Glycemic Control: A Systematic Review of the Literature

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Objective: Glycemic control is a major source of family conflict among adolescents with type 1 diabetes and their parents. Family conflict is a determinant of how well adolescents will maintain glycemic control throughout adolescence; thus, family conflict resolution is a crucial step to managing their diagnosis. The purpose of this systematic review is to evaluate the effectiveness of family-based interventions on glycemic control of adolescents with type 1 diabetes. **Methods:** Databases utilized were Medline Ovid, PsycINFO, and Web of Science. Inclusion criteria for the studies selected included: peer-reviewed studies conducted in the United States; published between January 1994 to December 2014; and evaluated a family-based intervention's effectiveness on adolescent diabetic glycemic control. **Results:** 11 studies met the criteria. Methods used to resolve family conflict included teamwork interventions, tailored interventions, behavioral family systems therapy, and family problem-solving management. Six studies did not show any significant influence on glycemic control. The only significant results on lowering glycemic control were found when a 12-month follow-up was completed. Behavioral family systems therapy and family problem-solving management were found to be significant in improving adolescent glycemic control. **Conclusion:** It is crucial for healthcare providers to be aware of effective family-based interventions to help resolve family conflict and promote healthy glycemic control among adolescents with type 1 diabetes. Interventions specifically designed to address family conflict will not only foster healthy family relationships, but will target adolescents struggling to maintain adequate glycemic control. Results from this review shows that interventions based on family systems therapy and problem-solving management seem to be most effective. Future research is needed to replicate these findings in larger, more diverse samples.

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