

Parenting interventions for parents of children with type 1 diabetes: A review

OVERVIEW

- What is diabetes?
- What does management involve?
- Why parenting interventions?
- Need for a review
- Inclusion criteria
- Search strategy and search results
- Concerns, challenges and practical issues
- Future plan of action

ACKNOWLEDGMENTS

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WHAT IS DIABETES?

It is a lifelong disease in which there are high levels of sugar/ glucose in the blood.

Why does this happen?

Pancreas → Insulin → moves glucose into blood cells (to be used as body fuel)

Too little insulin

Resistance to insulin

WHAT DOES MANAGEMENT INVOLVE?

- a) Insulin intake
- b) Blood glucose monitoring
- c) Diet
- d) Exercise



WHY PARENTING INTERVENTIONS?



Involves immediate transfer of responsibility

Impacts every aspect of family life: dietary habits, finances, time





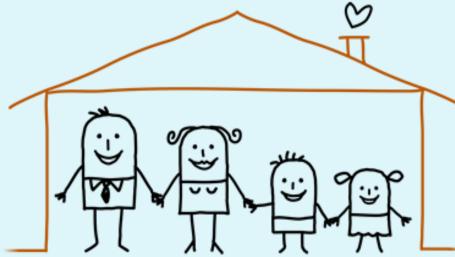


NEED FOR A REVIEW

To provide an insight into the nature and effectiveness of current intervention research and provide a model for future intervention development

WHAT ARE PARENTING INTERVENTIONS?

- ❖ Includes parents or primary caregivers of children with type 1 diabetes
- ❖ With a focus on improving general parenting skills and practices, through teaching active problem solving and social learning principles
- ❖ That may result in improvements in child, parent and family outcomes



INCLUSION CRITERIA

Participants

 Parent/ primary caregiver of children with type 1 diabetes in the age range of 2-10 years

Interventions

 Any type of intervention with a primary focus on improving parenting practices/ styles. Only RCT's were considered.

Comparisons

 Attention control, active treatment, waitlist control or treatment as usual group



- Knowledge
- Efficacy
- Management
- Diabetes-specific parenting stress
- Parent mental health
- Attributions
- Parenting styles
- QOL



- Cooperation
- Communication
- Conflict
- Emotional expressiveness



- HRQOL
- Child behavior and adjustment
- Metabolic control

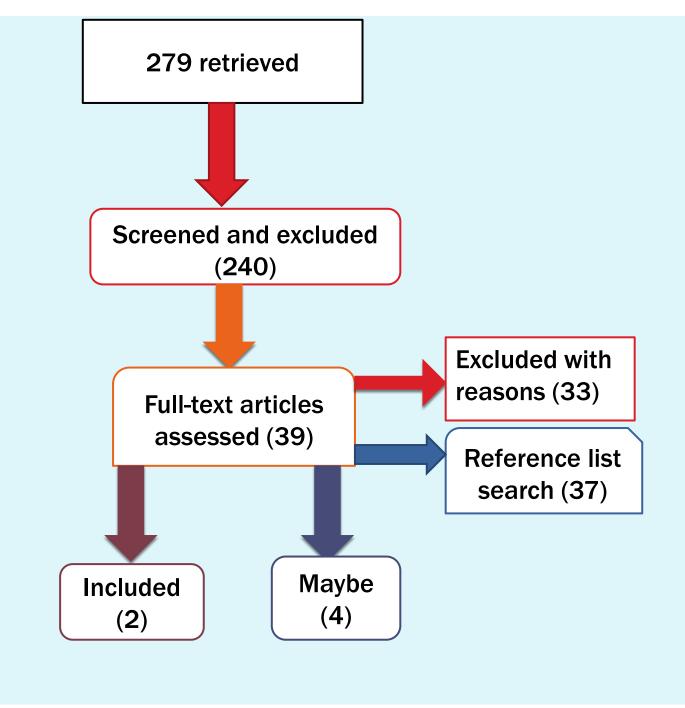
SEARCH STRATEGY

Databases searched:

- CINAHL
- Psycinfo
- Web of Science
- Pubmed
- Medline
- CENTRAL
- Scopus

Search terms:

- diabetes/ type 1 diabetes
- randomized controlled trial/ control trial
- child*
- parent*
- parenting intervention/ program/ training/ education



Intervention type	Illness uncertainty management (Hoff 2004, 2005)	Clinic-integrated behavioral intervention (Nansel 2009, 2012)
Participants	Parents of children newly diagnosed with T1D (last 6 months)	Parents and children with T1D
Sample size	46 families	390 families
Age range	2-18 yrs	9-14.9 yrs
Intervention duration	2.5 hrs each, at consecutive weekends	21 months
No. of sessions	2 sessions	Apprx. 4 sessions each year (30 mins), integrated with clinic visits
Outcomes assessed	Parent perception of illness uncertainty, psychological distress, child behavior problems	Adherence to treatment regimen and glycemic control
Reported effectiveness	No effect on perceived levels of uncertainty, reduced distress, reduced maternal ratings of child behavior problems	No intervention effect on adherence, sig. effect on glycemic control for 12-14 yr olds, not for 9-11 age range

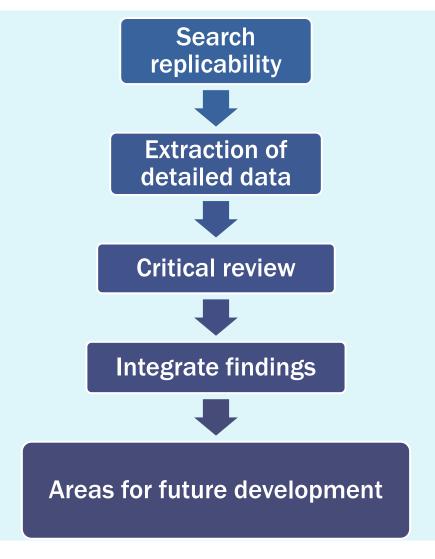
CONCERNS AND CHALLENGES

- Small number of studies
- Insufficient description of interventions
- Sample size, homogeneous sample (ethnicity & SES)
- Outcomes
- Difficult to identify mechanisms of change
- Differential intervention for mothers and fathers

PRACTICAL ISSUES

- Group vs individual
- Time since diagnosis
- Duration, no. of sessions?
- Setting—clinic vs some other setting?
- Retention
- Economic evaluation

FUTURE PLAN OF ACTION



REFERENCES

- * Hoff, A. L. (2004). An intervention to decrease illness uncertainty and psychological distress among parents of children newly diagnosed with type 1 diabetes: A randomized clinical trial. (65), ProQuest Information & Learning, US.
- * Hoff, A. L., Mullins, L. L., Gillaspy, S. R., Page, M. C., Van Pelt, J. C., & Chaney, J. M. (2005). An intervention to decrease uncertainly and distress among parents of children newly diagnosed with diabetes: A pilot study. Families, Systems and Health, 23(3), 329-342.
- Nansel, T. R., Anderson, B. J., Laffel, L. M. B., Simons-Morton, B. G., Weissberg-Benchell, J., Wysocki, T., Lochrie, A. S. (2009). A multisite trial of a clinic-integrated intervention for promoting family management of pediatric type 1 diabetes: Feasibility and design. *Pediatric Diabetes*, 10(2), 105-115.
- Nansel, T. R., Iannotti, R. J., & Liu, A. (2012). Clinic-integrated behavioral intervention for families of youth with type 1 diabetes: Randomized clinical trial. *Pediatrics*, 129(4), e866-e873.