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
- Modifiable
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

<table>
<thead>
<tr>
<th>Participants</th>
<th>• Parent/ primary caregiver of children with type 1 diabetes in the age range of 2-10 years</th>
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<tbody>
<tr>
<td>Interventions</td>
<td>• Any type of intervention with a primary focus on improving parenting practices/styles. Only RCT’s were considered.</td>
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<tr>
<td>Comparisons</td>
<td>• Attention control, active treatment, waitlist control or treatment as usual group</td>
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<tr>
<td>Knowledge</td>
<td>Cooperation</td>
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<td>-----------------</td>
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<tr>
<td>Efficacy</td>
<td>Communication</td>
</tr>
<tr>
<td>Management</td>
<td>Conflict</td>
</tr>
<tr>
<td>Diabetes-specific parenting stress</td>
<td>Emotional expressiveness</td>
</tr>
<tr>
<td>Parent mental health</td>
<td>HRQOL</td>
</tr>
<tr>
<td>Attributions</td>
<td>Child behavior and adjustment</td>
</tr>
<tr>
<td>Parenting styles</td>
<td>Metabolic control</td>
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<td>QOL</td>
<td></td>
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### 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
279 retrieved

Screened and excluded (240)

Full-text articles assessed (39)

Excluded with reasons (33)

Reference list search (37)

Included (2)

Maybe (4)
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<tbody>
<tr>
<td>Participants</td>
<td>Parents of children newly diagnosed with T1D (last 6 months)</td>
<td>Parents and children with T1D</td>
</tr>
<tr>
<td>Sample size</td>
<td>46 families</td>
<td>390 families</td>
</tr>
<tr>
<td>Age range</td>
<td>2-18 yrs</td>
<td>9-14.9 yrs</td>
</tr>
<tr>
<td>Intervention duration</td>
<td>2.5 hrs each, at consecutive weekends</td>
<td>21 months</td>
</tr>
<tr>
<td>No. of sessions</td>
<td>2 sessions</td>
<td>Approx. 4 sessions each year (30 mins), integrated with clinic visits</td>
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<tr>
<td>Outcomes assessed</td>
<td>Parent perception of illness uncertainty, psychological distress, child behavior problems</td>
<td>Adherence to treatment regimen and glycemic control</td>
</tr>
<tr>
<td>Reported effectiveness</td>
<td>No effect on perceived levels of uncertainty, reduced distress, reduced maternal ratings of child behavior problems</td>
<td>No intervention effect on adherence, sig. effect on glycemic control for 12-14 yr olds, not for 9-11 age range</td>
</tr>
</tbody>
</table>
## 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

1. Search replicability
2. Extraction of detailed data
3. Critical review
4. Integrate findings
5. Areas for future development
REFERENCES


