Lessons From A Pilot Strengths-Based Intervention Delivered In Outpatient Diabetes Care

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BACKGROUND

- Adolescents with type 1 diabetes (T1D) are at risk for suboptimal treatment adherence and health outcomes.
- Integrating brief behavioral interventions with routine medical encounters may help support optimal diabetes management and prevent health deterioration.
- Strategies that facilitate behavioral intervention delivery in healthcare settings are needed.
- The purpose of this study was to describe the process of conducting a pilot strengths-based adherence-promotion intervention delivered by medical providers, present challenges encountered, and propose solutions for effective implementation.

METHODS

Diabetes Strengths Intervention:
- Four diabetes care providers (DCPs) trained to deliver a semi-structured, brief intervention to families of adolescents with T1D
- Teen & parent complete one questionnaire each online, assessing the teen’s T1D strengths and adherence to T1D regimen
- “Diabetes Strengths Profile” automatically generated from scores and given to DCP
- DCP reviews profile with family, praises adolescent strengths, models supportive communication, and engages the family in strengths-based behavioral goal-setting
- Conducted at two consecutive clinic visits

Measures:
- Diabetes Strengths and Resilience: 12-item youth self-report of adaptive T1D related behaviors & attitudes
- Diabetes Self-Management Profile Self-Report: 24-item parent-report measure of adherence to T1D regimen
- Problem Areas in Diabetes – Adolescent & Parent Report: 26 & 18 item assessments of diabetes related burden
- Diabetes Family Conflict Scale Revised: 19-item measure of family conflict related to T1D
- PedsQL-Healthcare Satisfaction Generic Module: 13-item assessment of parent satisfaction with healthcare provider

DCP Training:
- 1 endocrinologist and 3 nurse practitioners at 4 hospital locations
- Consecutive clinic visits

Participants & providers largely enjoyed strengths intervention delivered by medical providers, present challenges encountered, and propose solutions for effective implementation.

STUDY PROGRESS

Enrollment

Screened for eligibility (n=212)

Consented Families (n=84)

Visit 1
Months since enrollment
M=3.78±2.91

Baseline Data & Intervention Session 1 (n=64)

Withdrawn before 1st study visit (n=20)
- Transferred care to DCP not trained to deliver intervention (n=9)
- DCP retired, insufficient time to receive intervention from another study DCP (n=10)
- Time constraints/Death in family (n=1)

Session 2 scheduled in August 2016 (n=3)

Withdrawn before 2nd study visit (n=2)
- Transitioned to adult care (n=1)
- Time constraints (n=1)

Intervention Session 2 (n=52)

No Intervention Session 2 Completed (n=7)
- DCP retired, insufficient time to receive intervention from another study (n=3)
- Unable to schedule 2nd visit before end of study (n=4)

Follow-Up Data
- Completed 2 interventions & follow up data (n=52)
- Completed 1 intervention & follow up data (n=5)
- Pending upcoming study visit (n=3)

Follow-up data to be collected from participants w/o 2nd intervention (n=3)

Follow-Up

Months since enrollment
M=8.14±3.52

Participant Feedback

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<thead>
<tr>
<th>Intervention</th>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>DCP focused more on what the teen was doing well than previous visits</td>
<td>Some teens felt awkward discussing strengths with their provider</td>
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<tr>
<td>Facilitated more communication about other diabetes related domains of life, such peer groups</td>
<td>Some participants reported no improvement in patient-provider relationships</td>
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<table>
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<tr>
<th>Study Design</th>
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<tbody>
<tr>
<td>Intervention integrated into regular diabetes care visits, no additional study visits required</td>
<td>Outcome battery length &amp; complexity (5 surveys)</td>
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<td>Convenience of completing questionnaires online</td>
<td>Inconvenient to see same DCP for two consecutive clinic visits</td>
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CONCLUSIONS

- New clinic-integrated behavioral intervention was successfully delivered to a majority of enrolled families.
- Participants & providers largely enjoyed strengths-based focus of intervention as complement to usual care.
- Training more DCPs and allowing participants to receive the intervention from different DCPs at each visit could increase implementation flexibility and decrease scheduling conflicts.
- These lessons learned may strengthen future behavioral intervention research to support effective, integrated multidisciplinary care of youth with T1D in outpatient medical clinic settings.

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