Paediatric Project ECHO® for Obesity Management: Evaluation of a Virtual Education Model to Support Community-Based Care of Children Living with Obesity

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What is Project ECHO®?
“Extensions for Community Healthcare Outcomes”
Project ECHO® is an innovative model for health professional education that expands access and capacity to provide evidence-informed care to remote and rural communities.

Click here for more information about Project ECHO®.

Paediatric Project ECHO® for Obesity Management

Background

Study Objective
To evaluate performance-related outcomes of TeleECHO Clinics:
• Acceptability and satisfaction;
• Changes in healthcare provider knowledge and self-efficacy; and
• Practice impact.

Methods
• Prospective, mixed-method study with repeated measures at baseline, 6M and 12M.
• Data collection managed via REDCap.
• Study approved by local Research Ethics Board.

Results

Acceptability and Satisfaction, 6M

<table>
<thead>
<tr>
<th># Item</th>
<th>Mean</th>
<th>SD</th>
<th>Min, Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Involvement in the Paediatric Project ECHO® Program is a worthwhile experience for me.</td>
<td>6.1</td>
<td>1.0</td>
<td>3, 7</td>
</tr>
<tr>
<td>2. I would recommend involvement in the Paediatric Project ECHO® Program to my colleagues.</td>
<td>6.4</td>
<td>0.7</td>
<td>5, 7</td>
</tr>
<tr>
<td>3. The Paediatric Project ECHO® Program has connected me with peers and diminished my professional isolation.</td>
<td>5.6</td>
<td>0.9</td>
<td>4, 7</td>
</tr>
<tr>
<td>4. Paediatric Project ECHO® has created a supportive community of practice.</td>
<td>5.8</td>
<td>0.6</td>
<td>5, 7</td>
</tr>
<tr>
<td>5. The Paediatric Project ECHO® Program is an effective way for me to learn.</td>
<td>5.8</td>
<td>1.3</td>
<td>2, 7</td>
</tr>
<tr>
<td>6. I have learned new information through the Paediatric Project ECHO® Program.</td>
<td>6.2</td>
<td>0.8</td>
<td>4, 7</td>
</tr>
<tr>
<td>7. I have learned best practice care through the Paediatric Project ECHO® Program.</td>
<td>6.0</td>
<td>0.8</td>
<td>4, 7</td>
</tr>
<tr>
<td>8. I respect the knowledge of the facilitators involved in the Paediatric Project ECHO® Program.</td>
<td>6.6</td>
<td>0.6</td>
<td>5, 7</td>
</tr>
</tbody>
</table>

Table 1. Program acceptability and satisfaction at 6M (n = 20), using a 7-point Likert scale where 1 = “Strongly disagree” and 7 = “Strongly agree”.

Overall Knowledge Change, 6M

![Overall Knowledge Change, 6M](image)

Change in Self-Efficacy, 6M

For my scope of practice, I feel confident in my ability to...

Assess pathologic obesity in children.
Assess for metabolic comorbidities in a child with obesity.
Manage psychosocial comorbidities in a child with obesity.
Manage medical conditions in a child with obesity.
Utilize pharmacotherapy in the medical management of a child with obesity.
Assess a child with obesity for bariatric surgery.

Table 3. Self-efficacy related to clinical skills in obesity management at baseline (n = 69), 6M (n = 20), and 12M (n = 19). Error bars represent standard deviation.

Practice Impact, 6M

The sharing of resources has been so helpful. Encouragement to try new approaches and the acknowledgement that it’s tough going sometimes, I really find this helpful.

Conclusions
• The Paediatric Project ECHO® for Obesity Management program is highly acceptable and is associated with improvements in knowledge and self-efficacy among interprofessional healthcare providers.

Acknowledgements
• Project funded by the Ontario Ministry of Health.
• Thank you to all Paediatric Project ECHO® participants!