Perceptions and Experiences of Children Living with Type 1 Diabetes in a School Environment: An Integrative Literature Review

Michelle Gandhi
mgandhi205@gmail.com

Follow this and additional works at: https://via.library.depaul.edu/nursing-colloquium

Part of the Pediatric Nursing Commons


This Event is brought to you for free and open access by the School of Nursing at Via Sapientiae. It has been accepted for inclusion in Grace Peterson Nursing Research Colloquium by an authorized administrator of Via Sapientiae. For more information, please contact digitalservices@depaul.edu.
Experiences of Children Living with Type 1 Diabetes in Schools: An Integrative Literature Review

Michelle Gandhi, B.S.
DePaul University School of Nursing

Background & Significance
An estimate of 1.25 million Americans have type 1 diabetes, and 400,000 will be newly diagnosed each year (American Diabetes Association, 2017).

Having a diagnosis of type 1 diabetes can be an emotional experience for many school aged children as they must learn how to monitor their condition.

These children must learn how to manage their diabetes in order to effectively participate in school, however there are barriers to this such as lack of staff knowledge.

Purpose of Research
The purpose of this literature review is to explore children’s experiences living with type 1 diabetes. By examining these experiences, this can help better guide schools and their staff in creating an environment that would meet the child’s needs.

Conceptual Framework
Amer’s conceptual framework identifies concepts of adaptation, adjustment, stress, and coping (1999).

There are risk and resistance variables that determine the child’s overall adaptation to their chronic illness.

The conceptual model has the following variables:
• Social support
• Developmental level
• Sex, age
• Depression & anxiety
• Knowledge of disease
• Self perception & self esteem
• Type & duration of illness

Methods
An integrative literature review was conducted and used both quantitative and qualitative studies.

Cumulative Index to Nursing and Health Literature (CINAHL) and Academic Search Complete were used as databases to gather articles.

Key words used during research: type 1 diabetes, children, experiences, environment, perceptions, adaptation, school, and social.

Results
A total of 6 studies were selected and then grouped based on their underlying concepts:

<table>
<thead>
<tr>
<th>Common Concept</th>
<th>Number of Studies Concept Found In</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having a source of support</td>
<td>3</td>
</tr>
<tr>
<td>Improving education in school staff</td>
<td>5</td>
</tr>
<tr>
<td>Receiving negative comments from peers</td>
<td>2</td>
</tr>
<tr>
<td>Having diabetic friendly food options</td>
<td>3</td>
</tr>
<tr>
<td>Positive feedback</td>
<td>2</td>
</tr>
<tr>
<td>Negative feedback</td>
<td>1</td>
</tr>
<tr>
<td>Feeling different than peers</td>
<td>3</td>
</tr>
<tr>
<td>Self-management difficulties</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1: Synthesis Table of Common Concepts

Research Questions
The following research questions were used as a guideline in this integrative literature review:
1. What are the perceptions and experiences of children living with type 1 diabetes when they are in a school environment?
2. What factors are involved in a child’s adaptation to type 1 diabetes?
3. How does a school and its staff effectively manage their children who have type 1 diabetes?

Limitations
This integrative literature review did not differentiate between public and private schools.

No specific geographical location was included.

Only studies within the past 10 years were included with the exception of Amer’s article (1999) of her theoretical framework.

Discussion
Source of support: Receiving support from teachers, friends, and health care staff (school nurses) is important for better management of diabetes since the children are at school most of the day.

Improving education in school staff: How to take care of a child if they become hypoglycemic; having educational sessions, written information, and updated online resources.

Receiving negative comments: Improving education can help prevent bullying among peers.

Diabetic friendly food: The importance of having diabetic friendly food options in order for the child to follow their food plans.

Feeling different: Type 1 diabetes can interfere with social activities and not being able to eat the same things other peers can.

Self-management difficulties: An umbrella term that encompasses the above findings.

Nursing Implications
School nurses play a huge role in providing high quality care to children at school.

School nurses can help educate the rest of the school staff on type 1 diabetes and what important interventions are needed. (see Figure 1)

By having school nurses educate the school staff and other students, this can help create more positive experiences for type 1 diabetic students.

Further research should be conducted on the impact school nurses make with students living with type 1 diabetes.

Acknowledgement
The conceptual model was provided by Kim S. Amer, PhD, RN.

Figure 1: Example of an educational pamphlet for school staff of recognizing signs and symptoms of hypo- and hyperglycemia.