Healthy Siblings of Children Living with Chronic Diseases: A Systematic Review

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background

- Approximately 26% of children in the United States live with a chronic disease or condition and this number is rising. What is not clear, however, are the physical and psychosocial effects of healthy siblings who are in a family with a sibling who has a chronic disease or condition and what interventions are needed, if any, for this group.
- To date, most of the research on healthy siblings has been about the perceptions and experiences around end of life and bereavement after a death. 1-4

purpose

The purpose of this systematic review was to examine the scientific literature in regard to any physical and psychosocial effects on the healthy siblings.

methods

- Using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, two reviewers (one a librarian) independently performed a literature search in CINAHL, PubMed, and Google Scholar.
- Keywords used were: siblings, sibling burden, healthy sibling, sibling survivor, sibling guilt, neurotypical sibling, chronic disease, chronic illness
- Limits for the search included:
  1) Peer-reviewed research reports, systematic review or meta-analyses;
  2) Published past 10 years;
  3) Self-report by healthy sibling;
  4) Healthy sibling a child or adolescent
- A total of 137 abstracts were found.
- Two reviewers examined the abstracts for inclusion in the review.
- After discarding duplicates and abstracts that didn’t meet the inclusion criteria, a total of 36 articles representing different symptoms scales were examined. Seven were included in the final analysis (Figure 1).
- Data were extracted related to the review aims.
- Intertar reliability was above 90% at each level of review.

result

- Table 1: Diagnostic Terms and Abbreviations Used in Presentation

<table>
<thead>
<tr>
<th>Diagnostic Term</th>
<th>Abbreviation</th>
</tr>
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<tbody>
<tr>
<td>Cancer</td>
<td>CA</td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>CF</td>
</tr>
<tr>
<td>Congenital Heart Disease</td>
<td>CHD</td>
</tr>
<tr>
<td>Diabetes Mellitus Type I</td>
<td>DM</td>
</tr>
<tr>
<td>Duchenne Muscular Dystrophy</td>
<td>DMD</td>
</tr>
<tr>
<td>Juvenile idiopathic Arthritis</td>
<td>JIA</td>
</tr>
<tr>
<td>Spina Bifida</td>
<td>SB</td>
</tr>
</tbody>
</table>

- Table 2: Articles in Review, Sample Characteristics and Major Findings

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Variables/Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Qualitative Descriptive</td>
<td>Av=15 Children, Male/Girls</td>
<td>SB</td>
</tr>
<tr>
<td>7</td>
<td>Qualitative Descriptive</td>
<td>Av=121 Children, Disease groups: DM, Cancer</td>
<td>CHD</td>
</tr>
<tr>
<td>8</td>
<td>Systematic Review</td>
<td>Qualitative</td>
<td>Av=100 Children</td>
</tr>
<tr>
<td>9</td>
<td>Qualitative Descriptive</td>
<td>Av=35 Children, Male/Girls</td>
<td>SB</td>
</tr>
<tr>
<td>10</td>
<td>Systematic Review</td>
<td>Qualitative</td>
<td>Av=48 Children, Male/Girls</td>
</tr>
</tbody>
</table>

discussion

- No conclusive evidence about sibling experience
- Experiences may differ by type of chronic disease
- Future research needs to focus on extent of stressors and coping mechanisms

references


Note: Only results regarding healthy siblings reported from each article.