Variations in the prevalence of long-term health conditions in children: The importance of definitions
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Background: Definitions of long-term health conditions in childhood are notoriously imprecise, which limits the opportunity to measure accurate population prevalence estimates.

Aim: To explore the impact of various definitions of long-term health conditions on the resulting prevalence estimates.

Dataset: Millennium Cohort Study.

Participants: Children & adolescents.

Measures:
- Long-term health conditions
- Chronicity criteria
- Special educational needs

Informant: Parent/carer via interviews.

Statistical analysis:
- Estimated the prevalence of long-term health conditions over time
- Examined agreement with chronicity criteria and alternate reports

How long-term health conditions are defined drastically alters their estimated population prevalence.

Improved clarity and consistency in the definition of long-term health conditions is urgently needed to underpin policy and commissioning of services.

INTRODUCTION

RESULTS

Variations in weighted prevalence estimates of long-term health conditions; comparison limited by changing definitions

<table>
<thead>
<tr>
<th>Age 3</th>
<th>Age 5</th>
<th>Age 7</th>
<th>Age 11</th>
<th>Age 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>% LTC</td>
<td>15.8</td>
<td>19.6</td>
<td>19.1</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>N = 15542</td>
<td>N = 15523</td>
<td>N = 13770</td>
<td>N = 13143</td>
</tr>
</tbody>
</table>

% LTC for 12 months AND limits activities AND personalised care plan

Kappa value (% agreement)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Kappa (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight problems</td>
<td>0.32 (99)</td>
</tr>
<tr>
<td>Hearing problems</td>
<td>0.38 (99)</td>
</tr>
<tr>
<td>ADHD and/or ASD</td>
<td>0.56 (98)</td>
</tr>
<tr>
<td>Mental illness</td>
<td>0.07 (99)</td>
</tr>
<tr>
<td>Communication problems</td>
<td>0.07 (99)</td>
</tr>
<tr>
<td>Dyslexia</td>
<td>0.02 (97)</td>
</tr>
</tbody>
</table>

Agreement between reason for SEN and type of LTC (age 11). All p values are < 0.001.

LTC = long-term health condition; SEN = special educational needs.

CONCLUSION

How long-term health conditions are defined drastically alters their estimated population prevalence.

Improved clarity and consistency in the definition of long-term health conditions is urgently needed to underpin policy and commissioning of services.

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