Prevalence of Mental Disorders in Children and Youth

A Research Update Prepared for the
British Columbia Ministry of Children and Family Development

October 2002

Charlotte Waddell

Cody Shepherd

Mental Health Evaluation & Community Consultation Unit
Department of Psychiatry, Faculty of Medicine
The University of British Columbia
2250 Wesbrook Mall, Vancouver, BC V6T 1W6

Copyright © The University of British Columbia
1. Overview

To improve child and youth mental health outcomes in British Columbia, the Ministry of Children and Family Development (MCFD) has undertaken a comprehensive planning process. The Mental Health Evaluation and Community Consultation Unit (MHECCU) at the University of British Columbia (UBC) is conducting ongoing research to support MCFD’s efforts. Two reports were prepared in April 2002 summarizing the best available research evidence on population health and clinical service considerations in child and youth mental health (Waddell, McEwan, Hua, & Shepherd, 2002; Waddell, Hua, & Shepherd, 2002). This report provides an update on the prevalence of mental disorders in children and youth, including new findings from recent epidemiological surveys.

2. Methodology

To provide an update of recent epidemiological research on the prevalence of child and youth mental disorders, the following approach was used. MEDLINE was searched using a standardized approach to identify all relevant original or review articles published in English over the past 20 years. Reference lists in key review articles were also searched by hand. To select studies that were large-scale, rigorously designed, and conducted in populations comparable to BC children and youth, the following criteria were used. Studies had to assess representative community samples of at least 1,000 children and youth from Canada, the United States, Great Britain, Australia, or New Zealand. They had to employ standardized assessment protocols for evaluating clinically important symptoms and impairment, incorporating reports from multiple informants such as children, parents, and teachers. Studies also had to report prevalence rates for two or more disorders. Decisions about which studies to include were reached by consensus between both authors.

3. Prevalence of Child and Youth Mental Disorders

Six studies met the criteria for inclusion in our review: the Ontario Child Health Study (Offord et al., 1987); the National Institute of Mental Health Methods for the Epidemiology of Child and Adolescent Mental Disorders Study (Shaffer et al., 1996); the Great Smoky Mountains Study (Costello et al., 1996); the Virginia Twin Study of Adolescent Behavioral Development (Simonoff et al., 1997); the Quebec Child Mental Health Survey (Breton et al., 1999); and the British Child Mental Health Survey (Meltzer, Gatward, Goodman, & Ford, 2000). Overall and disorder-specific prevalence rates compiled from these six studies are summarized in Table 1, along with the approximate number of children and youth in BC who may be affected.
TABLE 1. Prevalence of Mental Disorders in Children and Youth

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prevalence (%)</th>
<th>Approximate Number in BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any anxiety disorder</td>
<td>6.5</td>
<td>60,900</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>3.3</td>
<td>30,900</td>
</tr>
<tr>
<td>Attention-deficit/hyperactivity disorder</td>
<td>3.3</td>
<td>30,900</td>
</tr>
<tr>
<td>Any depressive disorder</td>
<td>2.1</td>
<td>19,700</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>0.8</td>
<td>7,500</td>
</tr>
<tr>
<td>Pervasive developmental disorder</td>
<td>0.3</td>
<td>2,800</td>
</tr>
<tr>
<td>Obsessive-compulsive disorder</td>
<td>0.2</td>
<td>1,900</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0.1</td>
<td>900</td>
</tr>
<tr>
<td>Tourette’s disorder</td>
<td>0.1</td>
<td>900</td>
</tr>
<tr>
<td>Any eating disorder</td>
<td>0.1</td>
<td>900</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>&lt; 0.1</td>
<td>&lt; 900</td>
</tr>
<tr>
<td>Any disorder</td>
<td>15</td>
<td>140,500</td>
</tr>
</tbody>
</table>

1 The approximate number who may be affected is based on a population estimate of 936,500 children and youth in BC (MCFD, 2002)

Table 1 shows that the average overall community prevalence rate for mental disorders in children and youth is 15%. Anxiety, conduct, attention, and depressive disorders are the most common. It is important to note that these prevalence rates refer to clinically important disorders that cause both significant symptoms and significant impairment. This means that in BC, approximately 140,000 children and youth experience mental disorders causing significant distress and impairing their functioning at home, at school, with peers, or in the community.

4. Discussion

The burden of suffering for any health problem may be characterized by its frequency, morbidity, and associated human and fiscal costs (Offord, Kraemer, Kazdin, Jensen, & Harrington, 1998). According to these criteria, child and youth mental disorders cause a large burden of suffering. In terms of frequency, studies over the past 20 years have indicated that approximately 20% of children and youth may experience mental disorders at any given time (Costello, 1989; Angold and Costello, 1995; Brandenburg, Friedman, & Silver, 1990; Roberts, Attkisson, & Rosenblatt, 1998). Recently, significant progress has been made in incorporating impairment into the thresholds for defining clinically important mental disorders, which has lead to somewhat lower overall prevalence rates. The findings of this research update indicate that 15% of children and youth have clinically important mental disorders if measures of impairment are included. Nevertheless, this prevalence rate is still high. Given that 140,000 children and youth in BC may be affected, it is unlikely that clinical services alone can achieve a marked reduction in the burden of suffering. Rather, a multi-faceted approach is required that includes universal programs to promote health for all children, targeted programs for children at risk, and clinical services for children with severe disorders (Offord et al., 1998).
Acknowledgements

Kimberley McEwan and Josephine Hua provided research assistance, and Dan Offord provided expert advice on methodology. Mental Health and Youth Services at the British Columbia Ministry of Children and Family Development provided an estimate of the current child and youth population in BC. This project is funded by Mental Health and Youth Services, British Columbia Ministry of Children and Family Development.

References


