Ask the Editor

What is the prevalence of Asperger disorder?

In 1944, Asperger described a syndrome which has subsequently been given his name, although there is evidence from the earlier European literature that clinical descriptions matching this disorder were available in the 1920s (Wolff, 1996). However, it was largely ignored up to the seminal article by Wing (1981) and finally only introduced as a separate diagnostic category in the latest revisions of ICD-10 (WHO, 1992) and DSM-IV (American Psychiatric Association, 1994). Therefore, epidemiological research on this disorder has only started in recent years and data are still very scarce on the prevalence of this syndrome.

Two surveys conducted in Sweden have investigated the prevalence of Asperger syndrome in relatively small samples of children attending normal schools (Ehlers & Gillberg, 1993; Kadesjö et al., 1999). In the first study, 1,519 children ages 7–16 years were included and 4 definite cases of Asperger syndrome according to ICD-10 were identified, yielding a prevalence rate of 28.5 per 10,000 (95%CI: 0.6–56.5). In the second study, the sample size was even smaller and included 826 children, age 7 years, of whom 4 met criteria for Asperger syndrome according to ICD-10 were identified, yielding a prevalence rate of 48.4 per 10,000 (95%CI 1.1–95.8). Although the prevalence estimates are high in these two studies, the wide confidence intervals indicate the extreme lack of precision of these estimates. Therefore, no robust inference can be made from these surveys.

Another stream of information derives from epidemiological surveys which have simultaneously assessed the presence of autistic disorder and Asperger disorder. It is possible to compare directly within surveys the prevalence of Asperger syndrome relative to that of autistic disorder. Six such informative studies are summarized in Table I.

The prevalence rates for Asperger syndrome range from 0.3 to 48.4 per 10,000, a huge variation which reflects methodological differences across studies. However, it is noteworthy that in all studies the rate of Asperger disorder was consistently lower than that of autistic disorder as indicated by the prevalence rate ratio of autism to Asperger disorder which is uniformly above 1 (right column). How much lower is more difficult to establish. However, when we pooled the data together of these six surveys, the number of children with autism was on average five times higher than that for Asperger disorder. Thus, with a conservative prevalence estimate of 10 per 10,000 children with autistic disorder (Fombonne, 2001), these figures suggest that the prevalence of Asperger disorder might be in the neighborhood of 2 per 10,000.

These figures are indirect and are therefore bound to change. Estimates will become more accurate as new epidemiological research accumulates in the years ahead. In order to obtain more valid estimates, it will be important to focus on rates applying to slightly older age groups (i.e., children ages 8–12 years) since children with Asperger disorder are identified and diagnosed much later than children with typical autism and, as a consequence, estimates obtained in younger samples might underestimate the prevalence of Asperger syndrome.

Eric Fombonne
Assistant Editor

Table I. Asperger Syndrome (AS) in Recent Autism Surveys

<table>
<thead>
<tr>
<th>Study</th>
<th>Autism/10,000</th>
<th>N</th>
<th>Asperger syndrome/10,000</th>
<th>N</th>
<th>Ratio</th>
</tr>
</thead>
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<tr>
<td>Sponheim &amp; Skjeldal, 1998</td>
<td>4.9</td>
<td>32</td>
<td>0.3</td>
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<td>16.0</td>
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<tr>
<td>Taylor et al., 1999</td>
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<td>427</td>
<td>1.4</td>
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<td>Kadesjö et al., 1999</td>
<td>72.6</td>
<td>6</td>
<td>48.4</td>
<td>4</td>
<td>1.5</td>
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<tr>
<td>Powell et al., 2000</td>
<td>—</td>
<td>54</td>
<td>—</td>
<td>16</td>
<td>3.4</td>
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<tr>
<td>Baird et al., 2000</td>
<td>27.7</td>
<td>45</td>
<td>3.1</td>
<td>5</td>
<td>9.0</td>
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<tr>
<td>Chakrabarti &amp; Fombonne, in press</td>
<td>16.8</td>
<td>26</td>
<td>8.4</td>
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<tr>
<td>Overall</td>
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<td>111</td>
<td>111</td>
<td>53</td>
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REFERENCES


