Why is adolescent alcohol use a problem?

Alcohol is one of the largest contributors to the global burden of disease (1).

Internationally, population surveys report increasing levels of adolescent alcohol involvement.

Adolescent alcohol use is associated with a range of short- and long-term harms, such as adult drinking problems, (2) other substance use, (2) criminal activity, (3) suicide attempts, (2) physical fights, (4) injuries, (1) and unexplained and unexpected sex. (2)

Method

The current data refers to baseline data collected from an ongoing Australian longitudinal cohort.

Students (aged 14-15 years) were recruited via secondary school across NSW, TAS, and WA in 2010/11, to participate with one of their parents.

A total of 1,978 parent-child dyads opted in to the study, with 1,894 dyads completing baseline surveys either online or paper-based.

Youth Measures

Demographics – gender, age, family composition
Alcohol use – quantity and frequency, sources and context of supply and consumption
Alcohol-related harms
Alcohol-specific rules
Parenting styles and relationships
Parental monitoring
Peer substance use and approval
Delinquency and mental health

Parent Measures

Demographics – gender, country of birth, education, income
Religiosity
Parental alcohol use – quantity and frequency, family history
Parental alcohol supply - context, supervision, quantity-frequency
Home alcohol access
Child’s peer substance use
Family conflict and positive family relations
Parental rules
Parental monitoring
Child’s academic performance

Results: How many adolescents have tried alcohol?

Not as many as we may expect. Table 1 shows the proportion of adolescents who have ever tried alcohol in their lifetime. Most reported alcohol involvement in 11-13-year-olds was in fact confined to having only a sip of alcohol, with an increasing proportion of adolescents consuming a full drink with older age.

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Sex</th>
<th>Never tried alcohol</th>
<th>Have only ever had a sip of alcohol</th>
<th>Have consumed a whole glass of alcohol or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Male</td>
<td>36.8%</td>
<td>63.2%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>31.8%</td>
<td>68.2%</td>
<td>0%</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>25.8%</td>
<td>74.2%</td>
<td>0%</td>
</tr>
<tr>
<td>14</td>
<td>Male</td>
<td>21.8%</td>
<td>78.2%</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>Male</td>
<td>18.8%</td>
<td>81.2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

However, as per the Australian Secondary Schools Survey on Alcohol & Drugs (ASSAD), when adolescents who have only had a sip of alcohol and those who have had at least a full glass are combined into a single category, a different picture is evident. Specifically, lifetime alcohol use prevalence between the 2008 ASSAD and current sample are very similar (see Table 2).

Table 2: Comparison of lifetime history of alcohol involvement between the current sample and the ASSAD 2008, (1) by age and sex.

<table>
<thead>
<tr>
<th>Age (14-12 Surr)</th>
<th>Current Study</th>
<th>ASSAD 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 years</td>
<td>13 years</td>
</tr>
<tr>
<td>Male</td>
<td>70.7%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Female</td>
<td>63.6%</td>
<td>72.9%</td>
</tr>
<tr>
<td>Total</td>
<td>67.4%</td>
<td>74.7%</td>
</tr>
</tbody>
</table>

Are adolescents who have had only a sip different to those consuming full drinks?

Adolescents who have consumed at least a full glass of alcohol or more are indeed significantly different from adolescents who have only ever had a sip of alcohol on a range of domains (see Table 3).

Table 3: Estimated odds ratios from a logistic regression of adolescents having a lifetime history of consuming full drinks versus only a sip by demographic factors, parental education, peer factors, parenting style, family relationships, and child behaviour.

Conclusion

This study is consistent with previous work demonstrating the common nature of having a sip of alcohol in early adolescence. (4)

The current results suggest having a sip of alcohol and consuming at least a full drink indeed represent different alcohol behaviours.

This research emphasises the need to appropriately distinguish between such behaviours in measuring and reporting adolescent alcohol involvement. Not accounting for this distinction is likely to result in a significant overestimate of actual alcohol involvement in childhood adolescence. This has significant implications for international public health policies and future adolescent alcohol epidemiology and intervention research. To date, adolescent alcohol interventions demonstrate limited long-term success, (5) and in-depth distinction between different levels of adolescent alcohol involvement may provide important insight to this.

References


Acknowledgements

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