An evaluation of the proposed DSM-5 alcohol use disorder criteria using Australian national data

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BACKGROUND

DSM-5 is due for release in May 2013. Four major revisions have been proposed for the DSM-5 alcohol use disorder (AUD) criteria:

Revision 1: Alcohol abuse and dependence have been combined into a single disorder

Revision 2: The criterion reflecting alcohol-related legal problems has been removed

Revision 3: A new criterion reflecting craving has been included

Revision 4: New thresholds for a moderate (2+ criteria) and a severe (4+ criteria) alcohol use disorder have been proposed

**Aim:** The current study evaluated each of these revisions using Australian national data

METHODS

Data came from the 1997 Australian National Survey of Mental Health and Well-Being (NSMHWB):

- N = 10641
- Response Rate = 78.1%
- Instrument = Composite International Diagnostic Interview 2.0
- Alcohol use disorders were assessed in those who had consumed at least 12 alcoholic drinks in the previous 12 months (‘current drinkers’ = 7746)

**Statistical Analysis:**

- Prevalence rates were calculated using SUDAAN 10.0
- Confirmatory factor analysis (CFA) was performed using Mplus 5.1
- Item response theory (IRT) analyses were conducted using MULTILOG 7.0
- Differential item functioning (DIF) within an IRT framework was assessed with IRTLRDIF 2.0

RESULTS

**Revision 1:** Confirmatory factor analysis supported the combination of alcohol abuse and dependence into a single disorder (see Figure 1)

**Revision 2:** IRT and CFA indicated the alcohol-related legal problems criterion performed poorly

**Revision 3:** IRT and CFA supported the inclusion of a craving criterion. However, this criterion performed differently in males and females (i.e., DIF was detected)

**Revision 4:** The proposed 2+ criteria threshold would increase the prevalence of alcohol use disorders from 6.0% under DSM-IV to 9.7% in DSM-5. This represents a 61.7% increase in the prevalence of alcohol use disorders under DSM-5. Much of this increase is the result of DSM-IV “diagnostic orphans” now being diagnosed with a moderate disorder under DSM-5 (see Table 1)

**Table 1:** Categorisation of specific DSM-IV AUD diagnostic subgroups in the proposed DSM-5 criteria

<table>
<thead>
<tr>
<th>DSM-IV</th>
<th>No criteria</th>
<th>Diagnostic Orphans</th>
<th>Abuse</th>
<th>Dependence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>No criteria</td>
<td>8581</td>
<td>99.8</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>1 criterion</td>
<td>17</td>
<td>0.2</td>
<td>939</td>
<td>67.0</td>
<td>59</td>
</tr>
<tr>
<td>Moderate AUD (2+ criteria)</td>
<td>0</td>
<td>0</td>
<td>464</td>
<td>33.1</td>
<td>114</td>
</tr>
<tr>
<td>Severe AUD (4+ criteria)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>8598</td>
<td>1403</td>
<td>203</td>
<td>437</td>
<td>10641</td>
</tr>
</tbody>
</table>

CONCLUSIONS

The proposed criteria for DSM-5 will lead to a substantial increase in the diagnosis of alcohol use disorders in the Australian population (>60% increase)

This study supported the combination of alcohol abuse and dependence and the removal of the alcohol-related legal problems criterion.

This study raised doubts about the inclusion of a new craving criterion and the value of the 2+ criteria threshold proposed for DSM-5.

This represents a 61.7% increase in the prevalence of alcohol use disorders under DSM-5. Much of this increase is the result of DSM-IV “diagnostic orphans” now being diagnosed with a moderate disorder under DSM-5 (see Table 1)

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