Amphetamine-Type Substance (ATS) Use among Young Women in the Sex & Entertainment Industry in Phnom Penh, Cambodia

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Background
Amphetamine-type substance (ATS) use increases sexual risk-taking among many groups, however little research as focused on women and HIV infection. HIV prevalence is high among female sex workers (FSW) including brothel-based and those working in the entertainment sector, and substantive anecdotal reports exist regarding high use of ATS. However, no studies have quantified ATS substance use and associations with HIV in this group. The Young Women’s Health Study (YWHS) is a prospective study of young women in Phnom Penh who work as FSW or in the ‘entertainment’ sector.

Methods
• 160 Women aged 15-29 who reported multiple (>2) sexual partners or engaged in transactional sex in the past month, were recruited and followed prospectively with quarterly visits between April-August 2007.
• Structured risk assessment interviews, HIV counseling and testing, and STD testing were conducted.
• Social, medical and community support were provided

Results
• 23% were HIV infected, median age was 25 years; almost half (42.5%) reported any ATS use, including Yama (41%) or Crystal/Ice (23%); 32% reported ATS use before or during sex.
• 44% of ATS users had ≥ 10 or more sex partners in the past week vs. 28% of non-ATS users (OR 2.0 (95% CI, 0.9,4.2; p=0.05).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>HIV + N (%)</th>
<th>OR (95% CI)</th>
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<tbody>
<tr>
<td>Job in last 30 days</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Entertainment/ non-brothel based CSW</td>
<td>59</td>
<td>5 (8.5)</td>
<td>1.0</td>
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<tr>
<td>- Brothel-based or freelance CSW</td>
<td>81</td>
<td>26 (32.1)</td>
<td>15.1 (1.82, 14.27)</td>
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<tr>
<td>- Other sex work</td>
<td>14</td>
<td>4 (28.6)</td>
<td>4.3 (0.99, 18.94)</td>
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<tr>
<td>No. of sex partners (past 30 days)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>≤10</td>
<td>45</td>
<td>6 (13.3)</td>
<td>1.2 (0.94, 1.3)</td>
</tr>
<tr>
<td>&gt;10</td>
<td>114</td>
<td>31 (27.2)</td>
<td>4.3 (3.0, 6.3)</td>
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<tr>
<td>Ever use any drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td>90</td>
<td>19 (21.1)</td>
<td>1.3 (0.62, 2.7)</td>
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<tr>
<td>- Yes</td>
<td>70</td>
<td>16 (25.7)</td>
<td></td>
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<tr>
<td>Yama, or crystal use ever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td>92</td>
<td>25 (26.0)</td>
<td>1.4 (0.77, 2.6)</td>
</tr>
<tr>
<td>- Yes</td>
<td>68</td>
<td>12 (19.1)</td>
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</tbody>
</table>

Conclusions
This data is the first to quantify lifetime exposure to ATS and examine associations with HIV infection in young Cambodian women. In addition to a very high prevalence of HIV, a significant proportion report ATS use and associated high sexual risk. Researchers and community partners are working with participants to address drug prevention in the context of limited opportunities, poverty, and lack of treatment services.