Underage Alcohol Use in The Context of Mental Health Decline in The United States

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Past month alcohol use by adolescents 12-17

Source: NSDUH
Past month alcohol use by young adults 18-25

Source: NSDUH
Disappearing gender differences in adolescent drinking

- Drank in past month
  - Males: 30%
  - Females: 30%

- Drunk in past month
  - Males: 19%
  - Females: 16%
Disappearing Gender Differences In Young Adult Drinking

For young adults in college, females are now more likely to drink and binge drink than males. For those not in college, males remain slightly higher than females.
Teens have less face time with their friends — and are lonelier than ever

Teens aren’t necessarily less social, but the contours of their social lives have changed

By JEAN TWENGE  PUBLISHED MARCH 24, 2019 8:00PM (EDT)

Teens who meet up with their friends 'almost every day'

The percentage has declined through the years, with the decline accelerating after 2010.

8th-graders 10th-graders 12th-graders

Chart: The Conversation, CC-BY-ND • Source: Monitoring the Future • Get the data
Teens have less face time with their friends — and are lonelier than ever

Teens aren’t necessarily less social, but the contours of their social lives have changed

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Loneliness rates among teens

The percentage who agreed or mostly agreed with the statement "A lot of times I feel lonely" has shot up in recent years.

8th-graders  10th-graders  12th-graders

Chart: The Conversation CC-BY-ND  Source: Monitoring the Future  Get the data
Mental health among our kids is declining

74% increase in past year MDE among adolescents aged 12-17 between 2004 (9%) and 2019 (15.7%)

MDE = Major Depressive Episode

Does not include anxiety disorders and other mental health conditions
More young adults are struggling

Percentage of young adults 18-25 with past year episode of major depression **DOUBLED** between 2009 (5.2%) and 2019 (10.3%)

**Note:** Nearly 1 in 3 (29.4%) young adults reach criteria for any past year mental illness now!
Mental health and substance use disorders overlap in kids – Depression as an example

1 in 3 (36%) adolescents 12 to 17 with an SUD had a past year Major Depressive Episode (MDE)

- 682,000 had SUD and MDE
- 397,000 had SUD but not MDE
- 3.8 Million had MDE but not SUD
- 1.1 Million had SUD

Note: Youth respondents with unknown MDE data were excluded. Does not include anxiety disorders and other mental health conditions.
Half of people 18+ with an SUD also had a mental illness

- 19.3 Million Adults Had SUD
- 9.7 Million Adults Had SUD but Not AMI
- 9.5 Million Adults Had AMI but Not SUD
- 42.0 Million Adults Had AMI
- 51.5 Million Adults Had SUD

61.2 Million Adults Had Either SUD or AMI
“What do [humans] demand of life and wish to achieve in it? The answer to this can hardly be in doubt. They strive after happiness; they want to become happy and to remain so. This endeavor has two sides, a positive and a negative aim. It aims, on the one hand, at an absence of pain and unpleasure, and, on the other, at the experiencing of strong feelings of pleasure.”

- Freud (1930, p 21)
More underage drinkers aged 12-20 drinking alone

Our kids are socializing less which contributes to the declines in alcohol use but more adolescents are drinking alone.

NSDUH – online analysis through SAMHDA
Drinking alone is associated with poorer mental health

From a study by Creswell et al (2014) – “Results indicate that drinking alone is an important type of alcohol-use behavior that increases risk for the escalation of alcohol use and the development of alcohol problems.”

Among drinkers 12-17, prevalence of past year MDE is 29.2%
- For those who drank alone on the last occasion it’s 41.5%
- For those who drank with at least one other person last time it’s 27.5%

Among drinkers 18-20, prevalence of past year MDE is 19.3%
- For those who drank alone on the last occasion it’s 28.4%
- For those who drank with at least one other person last time it’s 18.6%.
“Coping motives are directly, prospectively associated with several unique consequence domains, whereas enhancement motives predict consequences only by way of higher levels of drinking over the course of one year.”

“Students who endorse coping motives may have a tendency toward worsening drinking problems independent of consumption.”


“Our findings are consistent with the notion that DTC motivation confers a unique vulnerability for emotion dysregulation, and that drinking for such reasons possibly prolongs or exacerbates negative affective states.”

Source: Arneli et al.. J Stud Alcohol Drugs. 2015 Jul;76(4):578-84
Possible sex differences in alcohol reinforcement

Fig. 1. Schematic summarizing findings from the present review that the general population of women is more likely to drink for negative reinforcement (e.g., stress and negative affect), and the general population of men is more likely to drink for positive reinforcement (e.g., stimulation), which reflects sex differences in the neurobiological underpinnings of drinking behavior. However, as also indicated in Fig. 1, these populations overlap, and some women may drink primarily for positive reinforcement and some men may drink primarily for negative reinforcement. This line of evidence suggests that probing stress pathophysiology may be an important direction to develop tailored treatments for women. (Peltier et al 2019 Neurobiology of Stress)
Women and Cumulative Stress

- Women are more likely to experience trauma (e.g., 1 in 3 women sexually assaulted)
- Women are more likely to be neglected or abused in childhood and to experience domestic violence as adults
- About 12% of households are run by single parents and the vast majority of those single parents (82%) are women
- Even in two parent homes, women do more chores/child rearing
- Women exposed to more discrimination in and out of workplace
- Women are paid 82 cents on the dollar compared to men
- Physiological differences emerge during adolescence and lead women’s bodies to react more strongly to stressors
- For almost every stress related psychiatric condition, including major depression, generalized anxiety disorder and PTSD, the prevalence is twice or more for women than men, and these deviations begin early in adolescence.
Enhanced learning potential during adolescence might help explain the impact of early alcohol use on future problems with alcohol.

Source: Grant and Dawson, 1997

FHP = Family History Positive; FHN = Family History Negative for AUD

~ 1 in 5 drinkers starts here

"13 or less" age group is highlighted.
Growing up in a home with a parent with AUD is associated with poorer outcomes

- Children of parents with an alcohol use disorder are at greater risk for depression, anxiety disorders, problems with cognitive and verbal skills, and abuse or neglect. (Lipari et al., 2017)

- They are 4 times more likely than other children to develop an alcohol use disorder themselves.

- The effects are related to the impact of alcohol use on parenting behavior (e.g., lower involvement, poor parent-child communication, rule setting) (Su et al., 2018)

Article

Adverse Childhood Experiences are Associated with High-Intensity Binge Drinking Behavior in Adulthood and Mediated by Psychiatric Disorders

Jeesun Jung†, Daniel B. Rosoff†, Christine Muench, Audrey Luo, Martha Longley, Jisoo Lee, Katrin Charlet, and Falk W. Lohoff∗

Conclusion: ACEs were associated with significantly increased odds of HIBD and the relationship may be mediated by psychiatric disorders.
“Studies have shown that resilience, defined as the adaptive well-being process of individuals after experiencing changes or stress, has psychological protective effects when facing adverse events... Previous research found that factors including social connections, religiosity, hardiness, and personal competence are linked to psychological resilience.. Positive experiences in childhood or adolescence may improve personal strengths and competencies that help facilitate remission of mental disorders in adulthood.. Resilience may also protect against adolescents’ risks of using substances..”
How many people report being asked about their alcohol use and given advice or additional information during a healthcare visit (2018-2019 NSDUH)

<table>
<thead>
<tr>
<th>Category</th>
<th>12-17</th>
<th>18+</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past year health care visit</td>
<td>84.4%</td>
<td>83.6%</td>
<td>95.2%</td>
</tr>
<tr>
<td>Did they ask about alcohol?</td>
<td>46.6%</td>
<td>75.2%</td>
<td>65.6%</td>
</tr>
<tr>
<td>-- Ask how much?</td>
<td>19.2%</td>
<td>44.3%</td>
<td>36.5%</td>
</tr>
<tr>
<td>-- Ask how often?</td>
<td>13.8%</td>
<td>39.5%</td>
<td>25.6%</td>
</tr>
<tr>
<td>-- Ask about problems with alcohol?</td>
<td>4.5%</td>
<td>7.5%</td>
<td>3.3%</td>
</tr>
<tr>
<td>-- Advise you to cut down?</td>
<td>1.9%</td>
<td>3.3%</td>
<td>2.1%</td>
</tr>
<tr>
<td>-- Offer more information?</td>
<td>3.6%</td>
<td>1.6%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
Why does it matter whether clinicians screen for alcohol?

1. Only 1 in 10 people with AUD receive treatment each year including self-help groups

2. Clinicians can help reduce stigma and other perceived barriers to treatment

3. Answers to questions about alcohol can provide clues about other health risks

A few correlates of alcohol use in 2019 NSDUH

<table>
<thead>
<tr>
<th></th>
<th>12-17</th>
<th>18+</th>
<th>18-25</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serious thoughts about suicide past year?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No past year alcohol</td>
<td>--</td>
<td>3.4</td>
<td>8.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Past year alcohol</td>
<td>--</td>
<td>4.4</td>
<td>12.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Past month but no binge</td>
<td>--</td>
<td>3.8</td>
<td>13.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Past month binge (4/5)</td>
<td>--</td>
<td>6.3</td>
<td>12.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>

| **Past year episode of major depression?** |       |      |       |      |
| No past year alcohol            | 12.2  | 6.2  | 9.8   | 3.6  |
| Past year alcohol               | 25.6  | 7.4  | 16.0  | 2.5  |
| Past month but no binge          | 26.5  | 6.5  | 16.2  | 2.1  |
| Past month binge (4/5)           | 27.5  | 9.2  | 16.4  | 4.0  |

| **Past year pain medication misuse?** |       |      |       |      |
| No past year alcohol            | 1.3   | 2.2  | 2.3   | 1.3  |
| Past year alcohol               | 5.5   | 3.2  | 4.7   | 1.4  |
| Past month but no binge          | 5.3   | 2.7  | 4.1   | 1.3  |
| Past month binge (4/5)           | 11.9  | 6.3  | 8.7   | 2.3  |
Thank You!

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