Adolescents and Treatment of Alcohol Use Disorders

NIAAA Social Work Education Module 10 A

(revised 3/04)
Outline

• Prevalence
• Criteria issues
• Risk factors
• Assessment
• Treatment & prevention concerns
Prevalence (8th graders) Monitoring the Future 2000

- 51.7% have tried alcohol
- 43.1% have had an alcoholic drink in past year
- 25.1% have been drunk
- 15.2% report 1 or more binge drinking episodes
- 40.5% have tried cigarettes
- 3.3% smoke ½ pack or more of cigarettes/day
- 26.8% have tried at least one illicit drug
- 1.4% report using marijuana daily for at least one month at some point in their life
Prevalence (10th graders)  
Monitoring the Future 2000

• 70.6% have tried alcohol  
• 63.7% have had an alcoholic drink in past year  
• 48.9% have been drunk  
• 25.6% report 1 or more binge drinking episodes  
• 1.9% report daily drinking for at least one month at some point in their lives  
• 46.2% have tried at least one illicit drug  
• 57.6% have tried cigarettes  
• 7.6% smoke ½ pack or more of cigarettes/day
Prevalence (10th graders)
Monitoring the Future 2000

• 80% have tried alcohol
• 64.6% have tried cigarettes
• 62.3% have been drunk
• 54.7% have tried at least one illicit drug
Prevalence (10th graders)  
Monitoring the Future 2000

- 73.8% used alcohol in the past year
- 30.8% report 1 or more binge drinking episodes
- 29.7% binge drank in the past 2 weeks
- 3.6% reported using alcohol daily
- 13.2% reported smoking ½ pack or more of cigarettes per day
- 41.4% used illicit drugs in the past year
- 5.8% used marijuana daily for at least one month at some point in their life
Psychoactive Substance Use Disorders: Oregon (Lewinsohn et al 1993)

- Lifetime prevalence: 8.30%
- Point prevalence: 2.34%
- Annual incidence rate: 4.00%

DSM-IV Criteria Met- Substance Use Problems in Past Year: Minnesota (Harrison et al 1998)

- 13.8% of ninth graders
- 22.7% of twelfth graders
Criteria (continued)

Limitations of DSM-IV Alcohol Use Disorders (AUDs) Criteria with Adolescents…

• Little is known about the validity of criteria
  - Several symptoms are atypical of adolescent problem drinkers
  - Some symptoms have low specificity

Source: Martin & Winters, 1998
Criteria (continued)

Limitations of DSM-IV
Alcohol Use Disorders (AUDs)
Criteria with Adolescents…

- “One symptom’ threshold for abuse produces diagnostic heterogeneity and “diagnostic orphans”
- Some symptoms tend to occur only in particular subgroups
- Sequencing onset of alcohol abuse and alcohol dependence symptoms

Source: Martin & Winters, 1998
Limitations of DSM-IV Alcohol Use Disorders (AUDs) Criteria with Adolescents…

- Adult criteria may not apply to adolescents
- Less likely to suffer from progressive nature, medical complications, other consequences of protracted use
- More likely to have polysubstance use complicating the picture
- Difficult to separate effects from developmental changes/problems
Criteria (continued)

Nonuser
Experimenter
Recreational User
Regular User
Abuser
Dependent User

Increasing Clinician Concern
Risk Factors

A risk factor is defined as:
• Occurring before the criterion behavior (temporally precedes it)
• Statistically associated with increased probability of the criterion behavior occurring

Risk factors are not necessarily:
• “Causes” or determinants of the behavior/problem
• Specific or unique to the behavior/problem
• Always associated with the behavior/problem
Risk Factor Typology

Individual

Social / Interpersonal

Contextual / Cultural

Source: Hawkins et al., 1992; Petraitis et al., 1995
**Risk Factors: Individual**

- **Physiological factors**
  - Genetic predisposition
  - Alcohol sensitivity
  - Neurochemistry
  - Prenatal environment
- **Cognitive impairment, learning difficulties, school failure**
- **Temperament/personality**
- **Negative mood states**
- **Irritability**
- **Tantrums**
- **Social withdrawal**

**Type T**

- Aggressiveness
- Emotional distress
- Extraversion and sociability
- Tendencies toward risk taking and thrill seeking
<table>
<thead>
<tr>
<th>Disengaged Risk Factors: Individual (continued)</th>
</tr>
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<tbody>
<tr>
<td>• External locus of control</td>
</tr>
<tr>
<td>• Low self-esteem</td>
</tr>
<tr>
<td>• Poor coping skills</td>
</tr>
<tr>
<td>• Deficient social interaction skills</td>
</tr>
<tr>
<td>• Alcohol-specific self-efficacy</td>
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<tr>
<td>• Early &amp; persistent problem behaviors</td>
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<tr>
<td>• Low commitment to school, society, and/or religion</td>
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<tr>
<td>• Oriented toward short-term goals and hedonistic gratification</td>
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## Risk Factors: Individual (continued)

<table>
<thead>
<tr>
<th>Early Onset</th>
<th>Early Onset of alcohol use</th>
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<tbody>
<tr>
<td>- Positive attitudes toward deviant behavior</td>
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<tr>
<td>- Little interest in success/achievement</td>
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<tr>
<td>- Alienation and rebelliousness</td>
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<tr>
<td>- Attitudes favorable to alcohol use</td>
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### Early Onset
- Early onset of alcohol use
- Beliefs about alcohol use as normative
- Alcohol expectancies
- Co-morbid psychiatric problems
- Absence of resiliency factors
<table>
<thead>
<tr>
<th>Risk Factors: Social/Interpersonal Conflict</th>
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<tbody>
<tr>
<td>• Family alcohol &amp; drug behaviors/attitudes</td>
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<tr>
<td>• Poor/inconsistent family management</td>
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<td>• Limited parental monitoring</td>
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<td>• Family conflict/home strain</td>
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<tr>
<td>• Peer rejection in elementary grades</td>
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<tr>
<td>• Low bonding to family</td>
</tr>
<tr>
<td>• Association with alcohol-involved peers</td>
</tr>
<tr>
<td>• Negative evaluations from parents</td>
</tr>
<tr>
<td>• Parent divorce or separation</td>
</tr>
<tr>
<td>• Absence of risk reduction/resiliency promotion</td>
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</tbody>
</table>
### Risk Factors: Contextual/Cultural

<table>
<thead>
<tr>
<th>Access</th>
<th>Risk Factors</th>
</tr>
</thead>
</table>
| • Laws and norms favorable (or ambivalent) toward alcohol use; non-enforcement of laws/policies | • Extreme economic deprivation  
• Neighborhood disorganization  
• Absence of risk reduction/protective factors? |
| • Availability of alcohol                                             |                                                                              |
**Risk Factors: Contextual/Cultural**

### Adolescent Substance Use

<table>
<thead>
<tr>
<th>Current state of knowledge:</th>
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<tr>
<td>• Few data regarding relative importance &amp; interactions of various risk factors in etiology of alcohol use problems</td>
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</tbody>
</table>

<table>
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<tr>
<th>Do not know which risk factors or combinations are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Most virulent</td>
</tr>
<tr>
<td>• Modifiable</td>
</tr>
<tr>
<td>• Specific to alcohol use problems</td>
</tr>
</tbody>
</table>
Adolescent assessment for alcohol use disorders should include:

- Developmental factors
- Biological factors
- Psychological factors
- Social factors
- Multiple information sources
Critical domains/content of assessment:
• Actual alcohol/substance use behavior
• Type, severity, and temporal sequencing of psychiatric morbidity that may be present
• Cognitive processes, neuropsychological functioning
• Family organization and interaction patterns
• Social skills
Critical domains/content of assessment:
• School and/or vocational adjustment
• Recreation and leisure activities
• Temperament/personality characteristics
• Peer affiliations
• Legal status
• Physical health
Assessment Instruments

Advantages of a valid, standardized, clinically relevant assessment:

• Efficiently and accurately determines treatment needs
• Builds client motivation
• Supports clinical decision-making as an ongoing process
• Reduces clinician bias and inconsistencies
• Affords common language among professionals
Assessment Instruments (continued)

Adolescent Validated Examples:
- **Personal Experiences Inventory** (Winters et al., 1999)
- **Drug Use Screening Inventory** (Tarter & Hegedus, 1991)
- **Customary Drinking and Drug Use Record** (Brown et al., 1998)
- **Teen Addiction Severity Index** (Kaminer et al., 1993)
Assessment (continued)

Developmental appropriateness of content, language, and format is essential!
Assessment Feedback

- Avoid trying to “prove” things to the adolescent and family
- Describe each result and its meaning
- Avoid a “scare tactics” tone
- Solicit and reflect reactions to assessment information
- Remain open to feedback
- Be prepared for strong emotional reactions

Source: Miller & Rollnick, 1991
Assessment Feedback (continued)

Summary content:
• Risks and problems that emerged in the assessment findings
• Reactions to feedback, emphasis on readiness to change
• Invitation to correct the summary
• Assurance of successful treatment availability
Limited data exist to address treatment effectiveness with adolescents:

“Surprisingly, few clinical studies have investigated the effectiveness of treatment programs for adolescents”

Source: Schinke, Botvin, & Orlandi, 1991; p. 49)
“There is evidence that treatment is superior to no treatment, but insufficient evidence to compare the effectiveness of treatment types. The exception to this is that outpatient family therapy appears superior to other forms of outpatient therapy.”

Source: Williams, Chang, & Addiction Centre Adolescent Research Group, 2000
“...multiple psychosocial intervention approaches have been developed during the past two decades. Unfortunately, little is currently known about which of these many approaches is most effective for which individuals.”

Source: Wagner, Brown, Monti, Myers, & Waldron, 1999
Treatment (continued)

- Intervention can succeed with adolescents
- Outcomes with adolescents are similar to those with adults
- Improvement varies across domains
“…some treatment is better than none; no particular treatment method has emerged as superior to any other.”

Source: Catalano, Hawkins, Wells et al., 1990-1991
Treatment as Adolescents

• Many existing treatment approaches mirror adult-centered strategies
• Adolescent alcohol and substance use problems may be markedly different from those experienced by adults in terms of:
  - Behavioral manifestations
  - Underlying motivations
  - Associated factors
Treatment as Adolescents (continued)

Compared to adult substance abusers, adolescent substance abusers:
• Have a briefer history of substance use
• Are more likely to demonstrate episodic consumption. Chronic, daily use is less likely
• Are less likely to have consequences of protracted use
• Use a greater number and types of substances
• Are undergoing rapid developmental changes that may mimic or exacerbate substance effects
Compared to adult substance abusers, adolescent substance abusers:

- Are more likely to have co-occurring problems (e.g., depression, family disruption, academic problems, problem behavior/deviance, low level conventionality, peer drug use)
- “Outgrow” patterns of use/abuse without intervention more often
- May be less amenable to confrontation-of-denial approaches (due to developmental independence and autonomy issues)
• Heterogeneity of population:
  - Individual differences
  - Amenability to treatment
  - Matching factors
Treatment Approaches

Evidence-based, developmentally sensitive:
- Family system approaches
- Brief motivational interventions
- Guided personal change programs
- Cognitive-behavioral skills building
- Assertive aftercare programs
- Community-based treatment models
- Pharmacological agents
Treatment Approaches (continued)

- Cautions about treatment (group, AA)
- Need for interventions suited to range of settings, contexts where adolescents are encountered
Diversity Concerns

• Inadequate research attention directed to issues of ethnicity, culture, discrimination, mistrust, and acculturation in adolescent treatment effectiveness studies
• Need for culturally specific programs?
• Effects of cultural sensitivity, appropriateness, competence?
Motivation to Change

- Pretreatment motivation predicts treatment success among adolescents
- Choices, self-selection bolster commitment
- Problem Recognition Questionnaire measures readiness to change, problem recognition
Prevention & Early Intervention

Goal = Reduce number of new cases and enhance positive functioning by:
- Reducing vulnerability and risk factors
- Promoting protective and resilience factors

Most effective when:
- Contexts support the intervention messages
- Interventions are developmentally appropriate
- Multiple “boosters” are delivered over a long time frame
- Multiple contexts/domains are engaged
- Begin young
Summary Issues

- Controlled use of substances?
- What is success?
- Coexisting problems
- Family estrangement
- Matching
- “Outgrowing” problems
- Diagnostic criteria
Summary (continued)

What we know….

• Majority try alcohol/drugs by 12th grade
• Some develop diagnosable problems
• Vulnerability, risk, resilience, protective factors are known
• Intervention is usually better than no intervention
Summary (continued)

What we don’t know…….

Which factors are most important and how do they interact with one another?
Which interventions are best for which adolescents?
How does the interaction between individual and treatment factors affect outcomes?
What diagnostic criteria and instruments are most appropriate for adolescents?
Appendices

Comparisons with Russia
## Prevalence (continued)

### Project HOPE (May, 1997) Northern Moscow

<table>
<thead>
<tr>
<th>Substances</th>
<th>5th (n=422)</th>
<th>7th (n=324)</th>
<th>9th (n=353)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>31.8%</td>
<td>69.4%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Tabacco</td>
<td>22.1%</td>
<td>49.3%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Inhalants</td>
<td>6.6%</td>
<td>8.3%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>2.1%</td>
<td>3.3%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Been Drunk</td>
<td>-</td>
<td>-</td>
<td>54.1%</td>
</tr>
</tbody>
</table>
**Prevalence (continued)**

<table>
<thead>
<tr>
<th>Event</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have tried alcohol</td>
<td>32%</td>
</tr>
<tr>
<td>Have had an alcoholic drink in the past year</td>
<td>21%</td>
</tr>
<tr>
<td>Have had an alcoholic drink in the past month</td>
<td>11%</td>
</tr>
<tr>
<td>Have tried inhalants</td>
<td>6.6%</td>
</tr>
<tr>
<td>Have tried marijuana</td>
<td>2%</td>
</tr>
<tr>
<td>Have tried cigarettes</td>
<td>22%</td>
</tr>
</tbody>
</table>
### Project HOPE, 1997 – 7th graders

- 69% have tried alcohol
- 49% have had an alcoholic drink in the past year
- 25% have had an alcoholic drink in the past month
- 8% have tried inhalants
- 3% have tried marijuana
- 49% have tried cigarettes
Project HOPE, 1997 – 9th graders

- 91% have tried alcohol
- 81% have had an alcoholic drink in the past year
- 50% have had an alcoholic drink in the past month
- 54% have been drunk
- 12.8% have tried inhalants
- 17% have tried marijuana
- 71% have tried cigarettes