Substance Use and Mental Health on College Campuses: Screening, Prevention, and Brief Interventions

Points for Consideration

- Substance use and mental health on campus
- Interplay of substance use and mental health issues
- Accessing services
- Prevention/intervention approaches
- Brief interventions: Alcohol
- Extensions to mental health: An example
- Issues/challenges to consider
- Implications for the college campus

Substance Use Data from Monitoring the Future Study

- Alcohol is still the primary drug of choice
  - Past year
    - 82% report any alcohol use
    - 67% report having been drunk
  - Past month
    - 69% report any alcohol use
    - 45% report having been drunk

College Student Drinking

Academic Year Drinking Pattern

Week in Academic Year

New Year’s Week

Thanksgiving

Spring Break Week

Mean Drinks per Week

Weeks 1-31

DelBoca et al., 2004

Trajectories of “Binge Drinking” During College

Mean score for 5+ drinks in a row in past two weeks by frequent heavy drinking trajectory group

Source: Schulenberg & Maggs (2002), Journal of Studies on Alcohol

Alcohol-Related Consequences

- Within the past 12 months as a consequence of drinking...
  - 22.3% did something they later regretted
  - 19.0% forgot where they were/what they did
  - 10.8% had unprotected sex
  - 10.7% physically injured themselves

n=34,208 from 57 colleges/universities
American College Health Association, 2010
Alcohol-Related Consequences (continued)

- Within the past 12 months as a consequence of drinking...
  - 2.6% got in trouble with the police
  - 1.8% physically injured another person
  - 1.5% had sex with someone without giving your consent
  - 1.2% seriously considered suicide
  - 0.3% had sex with someone without getting their consent

American College Health Association, 2010

Substance Use Data from Monitoring the Future Study

- Any illicit drug
  - 35% report past year use
- Marijuana
  - 32% report past year use
- Any illicit drug other than marijuana
  - 15% report past year use
    - 6.7% Vicodin
    - 6.5% Narcotics other than heroin
    - 5.7% Amphetamines
    - 5.1% Hallucinogens
    - 5.0% Tranquilizers


Mental Health Issues and Academics

- Health issues impact academic success
  - 92% of depressed students show signs of academic impairment (Heiligenstein, et al., 1996)
  - 70% of students seeking counseling reported personal problems affected academics (Turner, 2000)
Health and Mental Health

- Factors affecting academic performance:
  - 27.8% Stress
  - 20.0% Sleep difficulties
  - 19.0% Cold/Flu/Sore throat
  - 18.6% Anxiety
  - 13.6% Work
  - 12.6% Internet use/computer games
  - 11.1% Depression
  - 10.4% Concern for a troubled friend/family member

31 unique categories listed, the above were the 8 with prevalence greater than 10%

American College Health Association, 2010

Mental Health: Prevalence

- Blanco and colleagues compared NESARC data from college (n=2188) & non-college (n=2904) young adults
- 45.8% of college students met past year prevalence of any Axis I Psychiatric Disorder, Personality Disorder, or Substance Use Disorder
  - 20.4% substance use disorder
  - 17.7% personality disorder
  - 11.9% anxiety disorder
  - 10.6% mood disorder

Source: Blanco, et al. (2008)

Issues Experienced in the Past Month from ACHA-NCHA II (Fall 2009)

Stress/Anxiety
- 69.5% overwhelmed by all they had to do
- 29.9% have felt overwhelming anxiety

Anger
- 20.1% felt overwhelming anger

American College Health Association, 2010
Issues Experienced in the Past Month from ACHA-NCHA II (Fall 2009)

Depressed/Sadness/Physical
- 65.8% felt exhausted \textit{(not from physical activity)}
- 37.5% felt very sad
- 36.1% felt very lonely
- 25.9% felt things were hopeless
- 15.8% felt so depressed it was difficult to function

American College Health Association, 2010

Issues Identified in the Past Year as “Traumatic or Very Difficult To Handle”

- 44.2% identified academics
- 35.6% identified finances
- 30.3% identified intimate relationships
- 27.1% identified family problems
- 24.3% identified sleep difficulties

American College Health Association, 2010

Psychiatric Comorbidity

- 17.0% of college students report lifetime depression diagnosis (ACHA, 2010)
  - 20% of women
  - 12% of men
- Diagnosis of depression carries increased risk for co-occurring substance abuse or anxiety disorder (Weissman, et al., 1996)
- Co-occurrence of depression and AOD use increases the risk of suicide (Ross, 2004)
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Example:
Impact on judgment and decision making

Alcohol Myopia
Example:
Impact on mood and memory
Example:
Impact on sleep

Time to get back to .000%

- .08%?
  - 5 hours
    (.080%....064%....048%....032%....016%....000%)
- .16%?
  - 10 hours
    (.160%....144%....128%....112%....096%....080%...
      .064%....048%....032%....016%....000%)
- .24%?
  - 15 hours
    (.240%....224%....208%....192%....176%....160%...
      .144%....128%....112%....096%....080%....064%...
      .048%....032%....016%....000%)
Next day, increase in:

- Anxiety
- Irritability
- Jumpiness
Next day, increase in:
- Anxiety
- Irritability
- Jumpiness

Next day, feel:
- Fatigue
Example: Impacts on feelings associated with anxiety and/or attention

Marijuana’s impact on the body...
- Effects on heart rate and blood pressure
  - Increases heart rate
  - Raises blood pressure
- Effects on the brain
  - Throws off sleep
  - Impaired learning, attention, memory

Points for Consideration
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Depression

• 72% of college students who screened positive for major depression felt they needed help
• Only 36% of these received medication or therapy of any kind


Depression

• Factors related to access:
  ▫ Unaware of or unfamiliar with service options
  ▫ Questioned helpfulness of therapy or medication
  ▫ Uncertainty about insurance coverage for mental health visits
  ▫ Less use by students who reported growing up in “poor family”
  ▫ Less use by those identifying as Asian or Pacific Islander


Depression

• Factors related to access:
  ▫ Reasons identified by students:
    ▪ Lack of perceived need
    ▪ Belief that stress is normal
    ▪ Lack of time

Alcohol and Drug Use Disorders

- Past year prevalence:
  - Alcohol abuse: 12.5%
  - Alcohol dependence: 8.1%
  - Any drug abuse: 2.3%
  - Any drug dependence: 5.6%


Alcohol and Drug Use Disorders

- Only 3.9% of full-time college students with an alcohol use disorder received any alcohol services in the past year
- Only 2.4% of those who screen positive and did not receive services perceived a need for services


Points for Consideration

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What is Harm Reduction?

- The optimal outcome after a harm reduction intervention is abstinence.
- However, harm reduction approaches acknowledge that any steps toward reduced risk are steps in the right direction
How are these principles implemented in an intervention with college students?

- Legal issues are acknowledged.
- Skills and strategies for abstinence are offered.
- However, if one makes the choice to drink, skills are described on ways to do so in a less dangerous and less risky way.
- A clinician or program provider must elicit personally relevant reasons for changing.
  - This is done using the Stages of Change model and Motivational Interviewing.

The Stages of Change Model

- Precontemplation
- Contemplation
- Preparation/Determination
- Action
- Maintenance

Stages of Change in Substance Abuse and Dependence: Intervention Strategies
Motivational Interviewing
Basic Principles
(Miller and Rollnick, 1991, 2002)

1. Express Empathy
2. Develop Discrepancy
3. Roll with Resistance
4. Support Self-Efficacy

The Basics on BASICS
Brief Alcohol Screening and Intervention For College Students

- Assessment
- Self-Monitoring
- Feedback Sheet
- Review of Information and Skills Training Content

(Dimeff, Baer, Kivlahan, & Marlatt, 1999)
### EXPECT

<table>
<thead>
<tr>
<th>Alcohol</th>
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### GET

- Lifestyle
- Graphic Feedback
- 1990 - 1991
- Alcohol-related Problems (RAPI)
- Family History
- Alcohol Dependency
- Beliefs about Alcohol
- Concern about Drinking Habits
- Perceived Risk
The 3-in-1 Framework

- Individuals, Including At-Risk or Alcohol-Dependent Drinkers
- Student Body as a Whole
- College and the Surrounding Community

From: "A Call to Action: Changing the Culture of Drinking at U.S. Colleges," NIAAA Task Force
1) Evidence of effectiveness among college students

From: “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force

2) Evidence of success with general populations that could be applied to college environments

From: “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force

3) Evidence of logical and theoretical promise, but require more comprehensive evaluation

From: “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force
4) Evidence of ineffectiveness

From: “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force

Tier 1: Evidence of Effectiveness Among College Students

- Combining cognitive-behavioral skills with norms clarification and motivational enhancement interventions.
- Offering brief motivational enhancement interventions.
- Challenging alcohol expectancies.

From: “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force

Mailed feedback...

Motivating Campus Change (MC^2)

- Participants in the feedback condition drank less at follow-up than controls ($F(1,872) = 7.18, p<.01$)
  - Composite score consisting of peak BAC, past month frequency, past year frequency, and total drinks per week

Source: Larimer, et al. (2007)
Points for Consideration

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Depression

• Several efficacious treatments for depression
• However, between 30-40% of depressed individuals do not seek treatment
• Only half of those who do seek treatment are offered effective interventions
• 44% of those who seek treatment attend 3 or fewer session, with 34% attending 1 or 2

Source: Geisner, Neighbors, and Larimer (2006)

Brief, Mailed Personalized Feedback Intervention
(Geisner, Neighbors, & Larimer, 2006)

• Intervention Condition (89 students)
  • Received personalized feedback
    • Included section with:
      • Validating, empathic statement about the prevalence of depression
      • Feedback regarding symptoms the student was experiencing as problematic
      • Coping strategies they indicated they had used or were willing to use
Brief, Mailed Personalized Feedback Intervention (Geisner, Neighbors, & Larimer, 2006)

- Intervention Condition (89 students)
  - Received brochure listing strategies for coping with depressive symptoms
  - Both came by mail one-week post-baseline

Change Thoughts/Problem Solve

- Break large tasks into small ones, set priorities, do what you can as you can
- Set realistic goals in light of the depression and don’t try to do too much too fast
- Expect your mood to improve gradually; feeling better takes time
- Replace negative thinking with positive thinking—try to look at situations in a more positive light
- Postpone important decisions until depressed mood has lifted
- Write in a journal about your thoughts, feelings, and what you feel good about

Psychotherapy

- Consider seeking an evaluation and/or one-on-one therapy/counseling
- Several types of “talk therapy” shown to improve depressed mood: Cognitive Behavioral, Interpersonal, Rational Emotive Therapy, Psychodynamic
- Many are low cost or sliding fee based on income (see Resources section)

Pleasant Activities

- Do mild exercise such as walking (indoors or out), swimming, or weights
- Join an intramural team or league
- Attend yoga class or rent a yoga video

Exercise

- Be with and confide in others; it is usually better than being alone and isolated, even if you don’t feel like doing anything
- Let your family and friends help you
- Call or email people you used to talk to but have not spoken to in a while

Social Support

- Participate in religious services if you used to; talk to a clergy person
- Meditate, do deep focused breathing or progressive relaxation

Meditation/Spirituality

- The following books have been found to be helpful with depressed mood and are available at most book stores and libraries.
  - Feeling Good: The New Mood Therapy, (1999) by David D. Burns

Self-help Literature

- You must consult a health care provider before taking medication!

Medication

- Consider a medication evaluation as many antidepressants have been shown to be helpful, including: selective serotonin reuptake inhibitors (SSRIs), the tricyclics (TCAs), and the monoamine oxidase inhibitors (MAOIs)
- Antidepressants may cause mild and usually temporary side effects
- Avoid alcohol/street drugs as they may reduce effectiveness of antidepressants
- Herbal supplements may be helpful. Consult with a health care provider BEFORE taking any prescription or non-prescription (over the counter) medication.
Brief, Mailed Personalized Feedback Intervention  
(Geisner, Neighbors, & Larimer, 2006)

• Control Condition (88 students)
  ▫ Received brief letter thanking them for participation
  ▫ Paragraph identical to the depression statement received by intervention group
  ▫ Received community resources list

• “Strong Control Group”
  ▫ Simple letters mailed to patients after discharge reduced suicidal behavior in treatment sample (Motto & Bostrom, 2001)
  ▫ Design could test additional benefits of the intervention materials

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**DSM-IV-Based Depression Scale (DDS)**

![Graph showing depression scale over time for Control and Intervention groups. The graph indicates a significant interaction effect, p < .05.](image-url)
Main effect for time, no significant time x group interaction

Sign. Time x Group Interaction, p < .05

Brief, Mailed Personalized Feedback Intervention
(Geisner, Neighbors, & Larimer, 2006)

- Factors
  - Loss of pleasure and interest
    - Not significant over time
  - Negative self-thinking
    - Trend toward significant interaction
  - Fatigue
    - Fatigue improved significantly more among intervention than control (p<.05)
  - Concentration difficulties
    - Concentration difficulties improved significantly more among intervention (p<.001)
**Brief, Mailed Personalized Feedback Intervention**  
*Geisner, Neighbors, & Larimer, 2006*

**Conclusions**

- Intervention appears to affect “milder” depressive domains or general distress
- Mailed intervention reduced numerous barriers with comparable effect sizes while being inexpensive and flexible
- Raising awareness of mood, normalizing experience, and emphasizing ways to change may help

**Substance use and mental health on campus**

**Interplay of substance use and mental health issues**

**Accessing services**

**Prevention/intervention approaches**

**Brief interventions: Alcohol**

**Extensions to mental health: An example**

**Issues/challenges to consider**

**Implications for the college campus**

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**Are problems with college students becoming more severe?**

- 94% of counseling center directors perceive growing concern and/or increase in students with more severe psychological problems *(Gallagher, 2009; Barr, 2010)*
- 67.3% stayed the same size or lost staff positions *(Barr, 2010)*
- Over the past 5 years, percentage of directors noting increases in the following problems *(Gallagher, 2009):*
  - 75.9% Psychiatric medication issues
  - 70.6% Crisis issues requiring immediate response
  - 57.7% Learning disabilities
  - 55.7% Self-injury issues
  - 46.5% Illicit drug use (other than alcohol)
  - 45.0% Alcohol abuse
**Self-injury data from ACHA-NCHA II**

- **Past year...**
  - 6.1% have seriously considered suicide
  - 5.2% have intentionally cut, burned, bruised, or otherwise injured themselves
  - 1.3% have attempted suicide
- **Past month...**
  - 2.3% have seriously considered suicide
  - 2.2% have intentionally cut, burned, bruised, or otherwise injured themselves
  - 0.5% have attempted suicide

  *American College Health Association, 2010*

**Factors related to self-injury**

- Students were asked (n=5689, 69.6% undergraduate):
  "about ways you may have hurt yourself on purpose, without intending to kill yourself. In the past year, have you ever done any of the following intentionally?"

  - Cut myself
  - Burned myself
  - Banged my head or other body part
  - Scratched myself
  - Punched myself
  - Pulled my hair
  - Bit myself
  - Interfered with wound healing
  - Carved words or symbols into skin
  - Rubbed sharp objects into skin
  - Punched or banged an object to hurt myself
  - Other

  *Source: Serras, et al. (2010)*
Factors related to self-injury

- Past year, 14.3% of students (n=5689, 69.6% undergraduate) reported they hurt themselves without the intent of killing themselves.
- Among undergrads only, 15.8% reported past year SIB (with 19.1% of these reporting cutting).
- Drug use associated with higher rates of all forms of self-injury.
- Highest rate of SIB were grad students who smoked and used illicit drugs (62%).

Source: Serras, et al. (2010)

Factors related to self-injury

- Factors associated with increased odds of SIB:
  - Drug use
  - Cigarette smoking
  - Gambling
  - Depression
  - Sexual orientation
  - Undergraduate student status
- Past two-week binge drinking was not a significant predictor on its own, but frequent binge drinking was.
- Authors suggested schools target frequent binge drinking and those using other drugs.

Source: Serras, et al. (2010)

Not much evidence from empirical studies suggesting severity is actually increasing

- No general trend but centers may be seeing clients with more complex problems or multiple diagnoses.
  - Small rise in extremely distressed students (Cornish, et al., 2000).
  - Students highly stressful to manage tripled (Benton, et al., 2003).
- Consistent increased service demand coupled with loss of staff positions.
- Some individual campuses might actually have this problem.

Kettman, et al., 2007
**Possible reasons behind perceived increase in severity of psychological problems**

- Greater availability of meds could allow students to attend college who otherwise might not have done so (CASA, 2003)
  - Hunt and Eisenberg (2010) suggest youth access of effective treatments during adolescence may help function at a level that allows college attendance.
- Lesser stigma attached to mental illness may have led to an increase in seeking psychological services (CASA, 2003)

**On student mental health...**

“The solution lies in being aware of it, intervening earlier and providing support with adequate and appropriate services.”

*Nuran Bayram and Nazan Bilgel*

*Uludag University, Bursa, Turkey*

Source: Bayram & Bilgel (2008), p. 671

**Early identification of students and coordination of care**

- 65% of counseling centers have no relationship with the college health center (Schuchman, 2007)
- Only 32.5% of Health Centers routinely screen for alcohol problems
  - Of these, only 17% use standardized instruments as part of screening (Foote, et al., 2004)
**Early identification of students and coordination of care**

- **Routine Screening for depression**
  - Of 103 suicides reported by Counseling Center directors, 19% were current or former center clients (Gallagher, 2009)
  - **Example: College Depression Partnership (Klein & Chung, 2008)**
    - Screened over 58,000 students in Health Centers at 8 schools
    - Identified 801 students
    - Over 35% self-identified as racial/ethnic minority students
    - Improved clinical outcomes for at-risk, underserved college students by early detection, coordinated proactive follow up, and better adherence to outcomes-based treatment

- **Routine screening for alcohol problems**
  - **Example: Use of AUDIT and referral to BASICS (Martens, et al., 2007)**
    - Decreased alcohol use, correction of norm misperception, increased use of protective behaviors

**Access to services**

- Consider outreach, education, campaigns, or initiatives to address not knowing about:
  - Availability
  - Potential effectiveness
  - Insurance coverage of options
- Also attend to other issues that may impede access to services
  - Address any attitudes about quality of services, lack of awareness of symptom severity, availability of services
- Can only be successful if resources are prepared to support demand for services

Source: Eisenberg, et al. (2007)
Case Example: Health & Wellness at the University of Washington

- Housed within Office of Vice Provost and Vice President for Student Life
- Reaches out to students who are on our radar due to:
  - Police report
  - Report from R.A. or R.D.
  - Faculty
  - Health care providers
- Offer meeting with students to check in

Case Example: Health & Wellness at the University of Washington

- Once students meet with us, can determine how things are going, what’s going well, what’s going less well, and what services could be available to them
- Different from judicial
- Can provide outreach in ways Counseling Center may not be able to
- Can be used to facilitate referrals to Counseling

Counseling can impact retention

- Turner and Berry (2000) demonstrated that retention rates are higher for college students who get counseling than for those who do not
Counseling can impact retention

- Wilson, Mason, & Ewing (1997) followed 562 students who requested counseling
  - Excluding those who specifically request counseling for retention-related concerns
- 79% of those seen in 1-12 sessions were retained or graduated 2 years since their counseling request
- Only 65% of those who requested services but had not received them were retained or graduated at 2 years

Points for Consideration

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Implications for college campuses

- Utilize each other across the state for consultation, professional development, and support
- Utilize community partners
- If not already doing so, implement "Tier 1" strategies
- Consider strategies to address overlap of mental health issues and substance use
- Early identification through screening
- Outreach as a part of prevention efforts
- Consider approaches as part of overall strategic plan
- Reduce barriers to implementation and access
Implications for the college campus

• Meet student interests (possible “foot in the door”)

Student access to information

• 61.4% (n=34,208) reported that they had received information on alcohol and other drug use from their college or university
  ▪ 27.9% say they are interested in receiving information about alcohol and other drug use
  ▪ So...consider the “hook”:
    ▪ 62.9% want interest in stress reduction
    ▪ 59.6% want information on nutrition
    ▪ 52.1% want information in sleep difficulties
    ▪ 52.1% want information on how to help others in distress

American College Health Association, 2010

Implications for the college campus

• Meet student interests (possible “foot in the door”)
• Consider where students get (or could get) health information
Believability of health information and where students get information

- 68.1% of college students see faculty/coursework as believable source of health information
  - This was 3rd of 14 categories, behind...
    - Health Center Medical Staff (89.9%)
    - Health Educators (89.8%)
- Only 40.2% get their information from faculty/coursework
  - This was 10th of 14 categories

American College Health Association, 2008

Believability of health information and where students get information

- 78.2% of college students get their health information from the Internet/World Wide Web
  - 1st of 14 categories
- 24.9% of college students see Internet/World Wide Web as a believable source of health information
  - 9th of 14 categories
- Evaluate variability in “believability” (e.g., websites linked from the college)

American College Health Association, 2008

Believability of health information and where students get information

- 75.5% of students get their information from parents
  - This was 2nd of 14 categories
- 65.2% of college students see parents as believable source of health information
  - This was 4th of 14 categories

American College Health Association, 2008
Implications for the college campus

- Meet student interests (possible “foot in the door”)
- Consider where students get (or could get) health information
- Consider the role of other delivery options (e.g., peers, computer-delivered, etc.)
- Continue to evaluate strategies targeting other health issues (including drugs)
- Consider and evaluate environmental, campus-wide prevention approaches
- Build bridges between research and practice on campus

Thank you!

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