Behavioral Health Among College Students: Substance Misuse

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Learning Objectives:

- Participants will learn about the scope of drug and alcohol use and mental health disorders in college students in the U.S. and specifically in Florida.
- Participants will understand the evidence for early identification and treatment in young adults.
- Participants will learn about best practices in college-age populations that could be utilized in Florida colleges and Universities.
History of Substance Use in College Populations

The Age of Exploration

- 1960-1975
- Exploration of the “therapeutic benefits” of LSD
- Drugs were a countercultural staple
- Research on creative or ‘spiritual’ enhancement began in 1960
- Amphetamine epidemic peaked around 1969
1975-1990
- The National Institute of Health’s Monitoring the Future Study (MTF) began in 1975
- Anti Drug Abuse Act of 1986, aka Len Bias Law
- By 1980, decline in hallucinogens but continued increase in cocaine and amphetamine use in colleges
- 1987 revision of the DSM allowed stimulant medications to be prescribed to schoolchildren
History of Substance Use in College Populations

'Better than coffee? The new wave of drugs in academia'

- 1990-Present
- New trend of illicitly diverting prescription drugs
- Millennials (born 1982-2000) aka ‘Generation Rx’
- ADHD epidemic of the 1990s
- State-by-state cannabis use exemptions
**Current Trends**

- From recreational to functional
- Marijuana is the most abused substance
2018 Monitoring the Future College Students and Young Adults Survey Results

**DAILY/NEAR DAILY USE** of marijuana twice as high among non-college group

One-in-nine non-college respondents reporting daily or near daily use of marijuana, compared to one-in-seventeen college students

*DUsed on 20 or more occasions in past 30-days*
Figure 1. College/non-college student past 30-Day drug use (2018)\textsuperscript{15}

Past month **NICOTINE VAPING** doubles among college students

2018 Monitoring the Future College Students and Young Adults Survey Results

**THIS JUMP IS AMONG THE GREATEST ONE-YEAR INCREASE SEEN FOR ANY SUBSTANCE IN THE HISTORY OF THE SURVEY**

<table>
<thead>
<tr>
<th>College</th>
<th>Non-College</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1%</td>
<td>7.9%</td>
</tr>
<tr>
<td>15.5%</td>
<td>12.5%</td>
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2017 | 2018 | 2017 | 2018
What could be possible contributing factors to this change?
Risk Factors

- Availability is widespread
- Decreased ability for parents to exert a direct protective effect
- Perception of the social norm
- Low to moderate perceived risk of consequences
Higher Risk Groups

- Fraternity and Sorority Students
- LGBTQ+ Students
  - Studies indicate it may be 20% to 30%, which is significantly higher than the general population at 9% (Redding, 2014).
- Student Athletes
  - Unrealistic expectations physically and with their education
- Students with certain mental health conditions
  - Co-morbidity
Enabling environment for drinking

$500,000: Estimated annual cost per university for alcohol-related emergency department visits (Mundt & Zakletsaia, 2012).

Alcohol consumption among undergraduate college students contributes annually to (Mundt & Zakletsaia, 2012):
- 600,000 alcohol-related unintentional injuries
- 700,000 assaults by another student who was drinking
- 1,500 alcohol-related student deaths
- 97,000 sexual assaults
- 400,000 acts of alcohol-related unprotected sex
- 100,000 incidences of being too intoxicated to know if sex was consensual
An alcohol-free fraternity was able to maintain its membership through focusing on recruitment, promoting the benefits of environmental factors, providing social alternatives, focusing on brotherhood and friendship, and enforcing alcohol-related rules (Brown-Rice, K., & Furr, S. 2015).

Fraternity consistently ranked in the top tier academically.

Based off students residing in Greek housing at a Midwestern university during the 2012–2013 academic year.
Psychiatric Disorders in College Populations

- Peak onset during young adulthood
- By the age of 25, 75% of those that will have a mental health disorder have already had their first onset (Pedrelli, Nyer, Yeung, Zulauf, & Wilens, 2014).
- College students suffering from a mental health disorder (Pedrelli, Nyer, Yeung, Zulauf, & Wilens, 2014):
  - Anxiety disorder: 11.9%
  - Depression: 7-9%
  - Bipolar Disorder: 3.2%
  - ADHD: Between 2 and 8%
- On a survey of 8,155 students, 6.7% reported suicidal ideation, 1.6% reported having a suicide plan, and 0.5% reported making a suicide attempt in the past year
Psychiatric Disorders in College Populations

- Prevalence of psychiatric medication prescribing
- Diversion of controlled prescriptions
  - 28.1 percent of college-aged young adults report having misused some type of prescription psychotherapeutic drug at least once in their lifetime (SAMHSA, 2013).
Amphetamine Use

Rx DRUG MISUSE has mixed results

2018 Monitoring the Future College Students and Young Adults Survey Results

ADDERALL® MISUSE: SIGNIFICANT GENDER DIFFERENCES

PAST YEAR MISUSE 2018

College Males: 14.6%
College Females: 8.8%
Non-College Males: 5.3%
Non-College Females: 10.1%
What could have led to the gender differences as well as the differences between the college and non-college populations?

15.3% of 16-24-year-old women reported drug use for weight-control purposes (Bruening, Perez, & Ohrt, 2018).
**Rx DRUG MISUSE** has mixed results

2018 Monitoring the Future College Students and Young Adults Survey Results

**Rx OPIOID MISUSE:** SIGNIFICANT FIVE-YEAR DROP IN BOTH GROUPS*

**PAST YEAR MISUSE**

<table>
<thead>
<tr>
<th></th>
<th>College</th>
<th>Non-College</th>
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</thead>
<tbody>
<tr>
<td>2013</td>
<td>5.4%</td>
<td>9.6%</td>
</tr>
<tr>
<td>2018</td>
<td>2.7%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

*Called “Narcotics other than heroin” in the survey
Nonmedical use of each prescription medication class were generally greater among males, Whites, members of social fraternities and sororities, and those with a lifetime history of medical use of prescription medications or a past-year history of being approached to divert their prescription medications.
Effect of Substances on College Performance and Social Functioning

- Learning and Substance Use
  - Undergraduate students (18-22) had significantly higher rates of marijuana use and binge drinking than graduate students (23 and older) (SAMHSA, 2019).

- Peer Pressure

- Risk-taking behaviors
  - Students who misused pain medications were more likely to have a lower grade point average.
Outcomes of Substance Use in College

- Delayed College Completion
- Diminished performance
  - Those who used prescription stimulants and anxiolytics reported use of other substances and risky driving behaviors (Palmer, Mcmahon, Moreggi, Rounsaville, & Ball 2012).
Outcomes of Substance Use in College Cont’d.

  - Graduation rate 61.85%
  - Transfer out rate 13.56%
- National
  - Public colleges and universities
    - 4-year graduation rate is 33.3%
    - 6-year rate is 57.6%
  - Private colleges and universities
    - 4-year graduation rate is 52.8%
    - 6-year graduation rate is 65.4%
Consequences

- Unplanned pregnancy
- STIs
- Risky Sexual Behaviors
- Safety risks
  - “Sorority members who binge drink are significantly more likely to be injured, drive under the influence of alcohol, be sexually victimized and engage in unwanted sex than non-Greek female binge drinkers”

(Ragsdale et al., 2012)
Prevention and Early Identification
Evidence for Need

- Strategies for Early Identification
  - Identifying risk factors: individual level, interpersonal level and community level

- Residential Education
  - Implementing mandatory courses in orientation
  - Counseling centers on campus
Interview with Missy Pollack, University of Florida graduate whose addiction to Adderall began in the first semester of her freshman year. Audio can be found here.

“Missy’s drug of choice was Adderall. She used it to get ahead. She started using it to study and she just couldn’t stop once she started. In her mind Missy didn’t think she was a drug addict she thought she was just doing what everyone else did. She had reached a point where she couldn’t function in life without Adderall. She had hit a cycle where she was working just to pay for her addiction. She had also created a cycle where she was alone and miserable and taking uppers to come up, downers to come down and drank during the times in-between.
No one knew about Missy’s secret. She was scared that if people found out that she’d have to stop. She had believed that Adderall had made her perfect. Missy believes that it was divine grace that led to Missy’s family intervening and asking her to get help. She was willing. She was ready to be done.

When Missy first went into treatment, she felt like a reporter doing a story while undercover. She couldn’t accept that she was actually there. Over time and by putting her heart into it she realized that she was just like everybody else. It didn’t matter what drug you were on — Heroin or Adderall. They were all the same.
Now with a second chance on life Missy is humble. She was able to realize that her actions got her to a point of self-destruction. Today the biggest change for her is doing what makes her happy — doing it from the heart and not her head.” (American Addiction Centers, 2018).
Intervention Strategies

- Multi-level Approach
  - Wet Schools vs Dry Schools
  - (29.1% abstainers at dry schools versus 16.1% abstainers at wet schools)
  - But when examining only those students who report drinking while attending colleges that ban alcohol, their drinking patterns do not differ from drinkers at non-ban schools.

(Wechsler, Lee, Gledhill-Hoyt, & Nelson, 2001)
Mandatory participation in orientations for colleges and universities

University of South Florida

Course addressing mental health, suicide prevention and substance abuse

“Choose your own adventure”
Students who started alcohol and marijuana use prior to college entry are more likely to become regular marijuana users and use other illicit drugs during college.
Intervention Strategies Cont’d.

- Education about impact of substance use
  - Challenging stigma
  - Identifying and listing appropriate resources on university and college websites

- Greek life
  - Intervening to prevent dangerous incidences
  - Andrew Coffey, a 20-year-old fraternity pledge at Florida State University, died at an off-campus party in November 2017 following a night of heavy drinking

“A new normal”
Parental Engagement

- Discussion about their family history of addiction and mental health
干预策略，继续。

- 同伴支持 (12 步会议，庆祝复原，复原道)
- 大学复原计划成员 (138)
SBIRT Process:

- **Screening**
  - No or Low Risk → No Further Intervention
  - Moderate Risk → Brief Intervention
  - Moderate to High Risk → Brief Treatment (onsite or via referral)
  - Severe Risk, Dependence → Referral to Specialty Treatment
Screening assessments:
- Alcohol Use Disorders Identification Test (AUDIT)
- Drug Abuse Screening Test (DAST)
- Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)
- Cut Down, Annoyed, Guilty, Eye-Opener (CAGE)
- National Institute on Drug Abuse (NIDA) Drug Use Screening Tool
SBIRT Cont’d.

- Brief Intervention
  - Single or multiple sessions
Brief Treatment (or Brief Intensive Intervention)

- Assessment

- Limited number (typically 6 to 20) of evidence-based, highly focused, and structured clinical sessions to help address unhealthy cognitions and behaviors associated with current use patterns and adopt change strategies

- A potential challenge to implementation is that substance use disorder (SUD) clinicians trained in traditional long-term approaches are sometimes resistant to or not well trained in structured brief approaches
Referral to Treatment
- provides for services on a full continuum of substance involvement
- targets people who do not yet meet criteria for an SUD
- Provides effective strategies for early intervention before the need develops for more extensive or specialized treatment
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<tr>
<th>Instrument</th>
<th>Population(s)</th>
<th>Description</th>
<th>Access/More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)</td>
<td>Adults, Adolescents</td>
<td>An 8-item screening tool developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect and manage substance use and related problems in primary and general medical care settings. Includes a patient feedback report card. Available in several languages.</td>
<td><a href="http://www.who.int/substance">http://www.who.int/substance</a> Abuse/activities/assist/en</td>
</tr>
<tr>
<td>Alcohol Use Disorders Identification Test (AUDIT)</td>
<td>Adults, Adolescents</td>
<td>A 10-item screening tool developed by WHO to identify persons whose alcohol consumption has become hazardous or harmful to their health. Available in English-, Spanish-, and Slovenian-language versions.</td>
<td><a href="http://www.who.int/substance">http://www.who.int/substance</a> Abuse/activities/sbi/en/index.html</td>
</tr>
<tr>
<td>AUDIT-C</td>
<td>Adults</td>
<td>The first 3 questions of AUDIT (those that focus on alcohol consumption).</td>
<td><a href="http://www.hepatitis.va.gov/provider/tools/audit-c.asp#S1X">http://www.hepatitis.va.gov/provider/tools/audit-c.asp#S1X</a></td>
</tr>
<tr>
<td>CAGE (Cut down, Annoyed, Guilty, Eye-opener)</td>
<td>Adults (people older than age 16)</td>
<td>A 4-item, nonconfrontational questionnaire for detecting alcohol problems. Questions are usually phrased as “have you ever” but may also focus on present alcohol problems.</td>
<td><a href="http://pubs.niaaa.nih.gov/publications/inscage.htm">http://pubs.niaaa.nih.gov/publications/inscage.htm</a></td>
</tr>
<tr>
<td>CRAFFT (Car, Relax, Alone, Forget, Family or Friends, Trouble)</td>
<td>Adolescents</td>
<td>A 6-item screening instrument. Test covers alcohol and drugs and situations that are relevant to adolescents.</td>
<td><a href="http://www.projectcork.org/clinical">http://www.projectcork.org/clinical</a> tools/pdf/CRAFFT.pdf</td>
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| Drug Abuse Screening Test (DAST) | Adults | A 20- and 28-item adaptation of the Michigan Alcohol Screening Test (MAST) to detect consequences related to drug abuse without being specific about the drug, thus alleviating the necessity of using different instruments specific to each drug. | 20-item instrument: http://adai.washington.edu/instruments/pdf/Drug_Abuse_Screening_Test_105.pdf
28-item instrument: http://www.projectcork.org/clinical_tools/html/DAST.html |
| Fagerstrom Test for Nicotine Dependence | Adults | A 6-item test evaluating cigarette consumption, the compulsion to use, and dependence. Screens for nicotine dependence. Severity rating can be used for treatment planning. | http://www.tobaccofree.org/facts_figures/documents/Fagerstrom-Nicotine-Dependence-Test.pdf |
| Michigan Alcohol Screening Test (MAST) | Adults, Adolescents, Seniors | A 25-item instrument providing a general measure of lifetime alcohol problem severity that can be used for choosing treatment intensity and guiding inquiry into alcohol-related problems. A 13-item version (Short MAST) and geriatric version (MAST-G) are available. | Original MAST (Selzer, 1971)
13-item Short MAST: http://www.projectcork.org/clinical_tools/html/ShortMAST.html
MAST-G: http://www.ssc.wisc.edu/wlsresearch/pilot/P01-R01_info/aging_mind/Aging_AppB5_MAST-G.pdf |
| NIDA Drug Use Screening Tool | Adults | A 1- to 7-question screening tool adapted by the National Institute on Drug Abuse from the WHO's ASSIST. | http://www.drugabuse.gov/nidamed/nmassist |
Brief behavioral counseling interventions (with follow-up) can lead to small to moderate reductions in alcohol consumption. Reductions are sustained for 1 year or longer.

Effective in various settings including primary care, emergency departments, community health centers and schools and colleges.

While being used in a primary care setting, between 8 and 18 percent of patients screen positive for abuse.

"Promising results" in reducing risky drug use.
Application Strategy

SBIRT Model Matrix

Service Component
- Screening
- Brief Intervention
- Brief Treatment
- Referral to Treatment
- Hospital Inpatient
- Emergency/Trauma
- Ambulatory Clinic/Hospital

Settings
- Implementation Model
- In-House Generalist
- In-House Specialist
- Contracted Specialist

Risk Factors & Severity
- Alcohol Use
- Drug Use
- Tobacco Use
- ATOD Use
- ATOD Use +

Note: “ATOD Use” refers to combined alcohol, tobacco, and drug use. “ATOD Use +” refers to alcohol, tobacco, drug use, and other behavioral risk factors (e.g., poor diet, physical inactivity).

Collaboration is critical, no matter the size of a system
- Need to develop relationships between public and private collaborators

Treatment Center and School Partnerships

Public Grant Resources
- Identify potential Federal, State, and private funding resources
- Fully understand public and private insurance reimbursement procedures and issues
Medical Organizational Readiness for Change (MORC) scale

Includes multiple scales, comprising 18 content domains in four key areas:

- Motivation for change (e.g., perceptions of current functioning, needs for improvement)
- Institutional resources (e.g., adequacy of office space, staffing)
- Attributes of staff members (e.g., confidence in counseling abilities, adaptability)
- Organizational climate (e.g., clarity of mission, staff cohesiveness)
Evaluation focuses on differences in readiness to change between clinical staff and administrative staff and between EDs and community healthcare clinics.
Maintaining the Program

Florida BRITE, grantee, developed a sustainability guide for its partner agencies that offers the following suggestions for achieving financial sustainability (Florida Brief Intervention and Treatment for Elders [BRITE], 2009):

- Check SAMHSA and Department of Health and Human Services funding announcements.
- Explore State substance abuse program funding (both prevention and treatment).
Maintaining the Program Cont’d.

- Be aware of funding available through local departments of health, education, justice, and corrections.
- Check the Foundation Directory on the Foundation Center Web site
- Ask stakeholders for donations and annuities.
- Obtain external fundraising expertise.
- Start a related for-profit or not-for-profit business entity or product line that contributes to programming.
BRITE Sites Included

- Lakeview Center, Inc. Baptist Hospital Emergency Room, Pensacola
- Urban Jacksonville/Shands Jacksonville Medical Center - Level I Trauma Center
- Urban Jacksonville Aging Services
- Shands Jacksonville Level 1 Trauma Center
- Shands Ambulatory Care Center
- Lake Regional Urgent Care - Leesburg
- Lake Regional Urgent Care – The Villages
- The Center For Drug Free Living Inc. (Orange County, Osceola County)
- Aloma Urgent Care
- Clermont Walk-In Clinic
- Longwood Walk-In Clinic
- Florida Hospital Heartland Division Sebring – Emergency Department
- Florida Hospital Heartland - Lake Placid
- Winter Haven Hospital
- Jackson Memorial Hospital (Miami)

- Jackson North Community Mental Health Center (Miami)
- Catholic Charities of the Archdiocese of Miami
- Miami Veterans Health Care System - Bruce W. Carter VA Medical Center
- Coastal Behavioral Healthcare, Inc. (Sarasota area)
- Gulf Coast Jewish Family Services
- Centre for Women
- Drug Abuse Comprehensive Coordinating Office, Inc.
- Palm Beach County Division of Senior Services
- Hanley Center- Lakeside Hospital (West Palm Beach)
- Broward County Elderly and Veterans Services Division (2 sites)
- Broward County VA Outpatient Center (Miami VA Healthcare System)
- Southwest Florida Addiction Services
Kratom: It acts as a stimulant at low doses, opioid-like at moderate doses and causes sedation at high doses.

On November 14, 2017, the FDA issued a public health advisory related to the Agency’s mounting concerns regarding risks associated with the use of kratom (Office of the Commissioner, 2017).

FDA conducted a scientific analysis using a computational model, which provided “stronger evidence of kratom compounds’ opioid properties.” (Office of the Commissioner, 2018).
Items to Consider for the Future Cont’d.

- Kava: used as a supplement for anxiety and has a relaxing, euphoric effect
- Linked to a risk of severe liver disease
- Long-term use of high doses of kava has been associated with dry, scaly skin or yellowing of the skin
- Heavy consumption of kava has been associated with heart problems and eye irritation

A slippery slope:

“My friend was addicted to Kratom, a substance that’s marketed to those who have a history of substance use disorder as not really a drug. Kratom is a plant; much like cocaine. It’s a relative of the coffee family; just like the eggplant is a relative of deadly nightshade. It’s touted for pain relief; so is fentanyl. And it’s thought of as a miracle cure for opioid addiction.” (Rush, 2019)
- CBD (Cannabidiol): This is a chemical compound that is derived from the cannabis plant.
- Reasons for CBD use

Items to Consider for the Future

Conclusion

- Need for continued discussion in an open forum
- Increased resource availability for students
- Support for sober options on college campuses
- Developing “A New Normal”
Discussion and Questions

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Resources

- Florida BRITE Project: [http://brite.fmhi.usf.edu/](http://brite.fmhi.usf.edu/)
- “Check the Foundation Directory on the Foundation Center Web site”: [https://fconline.foundationcenter.org/](https://fconline.foundationcenter.org/)
References


- CBD for University Students – Can it be Beneficial? (2019, August 29). Retrieved from https://campuspress.yale.edu/tribune/cbd-for-university-students-can-it-be-beneficial/


- Substance Abuse and Mental Health Services Administration, Behavioral Health Among College Students Information & Resource Kit. HHS Publication No. (SMA) 19-5052. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2019.


References Cont’d.