Addressing marijuana use on campus: improving interactions and interventions with students

Lisa Laitman MSED, LCADC
Rutgers University
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The Hash Marijuana Hemp Museum in Amsterdam
Amsterdam Marijuana Grow Shop
An Amsterdam marijuana shop, known as “coffee shops”
Incidence and Prevalence of Marijuana Use in the College Population
30 Day Use, Student Characteristics

- Fraternity/sorority member
- Off Campus w/ Parents
- Off Campus w/o Parents
- Fraternity / Sorority Residence
- Substance free residence hall
- Residence hall
- Senior
- Junior
- Sophomore
- Freshman
- Age > 23
- Age 21-23
- Age < 21
- Asian/Pacific Islander
- Black/African American
- White
- Hispanic

30 Day Use, School Characteristics

## Monitoring the Future Study: College Marijuana data 2008

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Annual</td>
<td>37</td>
<td>29.1</td>
<td>32.3</td>
</tr>
<tr>
<td>30-Day</td>
<td>22.1</td>
<td>13.6</td>
<td>17</td>
</tr>
<tr>
<td>Daily</td>
<td>7.3</td>
<td>1.7</td>
<td>3.9</td>
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</table>

*Approximate Weighted N = 1,270*
Ever used
Past year
Past month
Daily use

Source: MTF (2009)
# Why do Students Use Marijuana?

<table>
<thead>
<tr>
<th>Predicting Use:</th>
<th>Predicting Problems:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enjoyment</td>
<td>• Conformity</td>
</tr>
<tr>
<td>• Coping</td>
<td>• Coping</td>
</tr>
<tr>
<td>• Experimentation</td>
<td>• Boredom</td>
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<tr>
<td>• Boredom</td>
<td>• Alcohol use</td>
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<tr>
<td>• Celebration</td>
<td>• Celebration</td>
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<tr>
<td>• Altered perception</td>
<td>• Altered perception</td>
</tr>
<tr>
<td>• Relative low risk</td>
<td>• Social anxiety</td>
</tr>
<tr>
<td>• Sleep/rest</td>
<td>• Relative low risk</td>
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</table>

Source: Lee, et al. (2009)
Why not Lump Marijuana With Alcohol?

- Marijuana is different than alcohol—assessment, patterns of use, motives, consequences.
- Different culture of use, assumptions of use, means that students think differently about marijuana.
- Need to address legality and policy around use, e.g., feasibility of harm reduction or use with a prescription.
- Marijuana users need a different approach.
“It’s a natural herb…..”
In this prospective longitudinal study, the authors investigated the association between marijuana use over a period of 13 years and subsequent health problems at age 27. A community sample of 749 participants from upstate New York was interviewed at mean ages of 14, 16, 22, and 27 years. Marijuana use over time was significantly associated with increased health problems by the late twenties, including: respiratory problems, general malaise, neurocognitive problems, and lower academic achievement and functioning.

Effective prevention and intervention programs should consider the wide range of adverse physiological and psychosocial outcomes associated with marijuana use over time.

The Association Between Earlier Marijuana Use and Subsequent Academic Achievement and Health Problems: A Longitudinal Study
Judith S. Brook, EdD, Matthew A. Stimmel, MA, Chenshu Zhang, PhD, David W. Brook, MD
Department of Psychiatry, New York University School of Medicine, New York, New York
(Am J Addict 2008;17:155–160)
Increased Vulnerability to Psychosis and Non-Affective Psychosis

- "The longer people use cannabis or marijuana, the more likely they are to experience hallucinations or delusions or to suffer psychosis, according to a study released Saturday.

- The study found that people who first used cannabis when they were aged 15 or younger were twice as likely to develop a "non-affective psychosis" — which can include schizophrenia — than those who had never used the drug.”

Association Between Cannabis Use and Psychosis-Related Outcomes Using Sibling Pair Analysis in a Cohort of Young Adults
John McGrath, MD, PhD, FRANZCP; Joy Welham, MAPs; James Scott, MBBS, FRANZCP; Daniel Varghese, MBBS, FRANZCP; Louisa Degenhardt, PhD; Mohammad Reza Hayatbakhsh, MD, PhD; Rosa Alati, PhD; Gail M. Williams, PhD; William Bor, MBBS, DPM, FRANZCP; Jake M. Najman, PhD
Potency of Marijuana

- The increased potency of marijuana available in the U.S. corresponds with other troubling research showing links between marijuana use and mental health problems.
- Higher-potency marijuana may be contributing to a substantial increase in the number of Americans in treatment for marijuana dependence.

Anxiety Symptoms and Relapse

- More frequent marijuana use at intake predicted more anxiety symptoms at discharge. Anxiety symptoms at discharge predicted relapse to marijuana use at 12-month follow-up.

*Marijuana discontinuation, anxiety symptoms, and relapse to marijuana
Marcel O. Bonn-Miller, Rudolf H. Moos Center for Health Care Evaluation, Veterans Affairs Palo Alto Health Care System, United States Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, United States
Depression

“Teen Marijuana Use Worsens Depression: An Analysis of Recent Data Shows ‘Self-Medicating’ Could Actually Make Things Worse,”

• Some teens are using drugs to alleviate feelings of depression, when in fact using marijuana can compound these mental health problems.

• The report indicates that a staggering 2 million teens felt depressed at some point during the past year, and depressed teens are more than twice as likely as non-depressed teens to have used marijuana during that same period.

• They are also more than twice as likely as their peers to abuse or become dependent on marijuana.

(see Mental Health Weekly, May 26, 2008)
Both acute and chronic exposure to cannabis are associated with dose-related cognitive impairments, most consistently in attention, working memory, verbal learning, and memory functions.

These impairments are not completely reversible upon cessation of marijuana use.

Residual cognitive impairment may interfere with the treatment of marijuana addiction.

Targeting cognitive impairment associated with chronic marijuana use may be a promising novel strategy for the treatment of marijuana addiction.

*Cognitive Function as an Emerging Treatment Target for Marijuana Addiction*
Mehmet Sofuoglu, Dawn E. Sugarman, and Kathleen M. Carroll
Yale University School of Medicine and VA Connecticut Healthcare System, West Haven, CT
Experimental and Clinical Psychopharmacology © 2010
2010, Vol. 18, No. 2, 109–119
Intervention Approaches: Motivational Feedback and Motivational Interviewing (MI)
Motivational Feedback

- Confidential profile based on individual responses.
- Content may include summary of use, risk factors, related problems, financial cost, normative comparisons.
- Good evidence in college drinking literature showing changes to at least 6 months. Less well tested for college mj use.
- Used in a stand-alone format or combined with MI (i.e. MET format).
Rutgers BMI study of mandated students: marijuana use in the sample

- BMI data set: 348
  (Only eligible subjects):
  - 50% ever used marijuana
  - 38% used marijuana in last year
  - 24% used marijuana in last month

- Last year users vs. not used in last year:
  - Mean Beck 2.4 vs. 1.9 (difference is not statistically significant)
  - Mean GPA 2.8 vs. 3.0 (difference is significant at p<.05)
  - 4 month follow up decreased marijuana use and consequences but at 1 year use back up.

- Mean number of Drug RAPI problems last year 1.8

*Long-Term Effects of Brief Substance Use Interventions for Mandated College Students*. White, HR; Mun, EY; Pugh, L.; Morgan, TJ. Alcoholism: Clinical and Experimental Research Vol.31, No.8 August 2007
Marijuana Feedback: What’s Available?

- No materials from published studies are commercially available.
- Infosoft feedback for use with BASICS intervention (www.basicsfeedback.com).
- Marijuana e-CHECKUP TO GO, aka e-toke (www.echeckuptogo.com)
- No outcome studies, but content similar to other Check-Up interventions. Used solo or combined with in-person approaches.
MARIJUANA USE

Please tell us about your TYPICAL PATTERN of marijuana use.

1. How long has it been since you last used marijuana in any form?

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<tr>
<td>0 Months</td>
<td>0 Weeks</td>
<td>5 Days</td>
<td>1 Hours</td>
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Not Applicable / I don't use Marijuana

2. For the past month, please describe your marijuana use during a TYPICAL WEEK:

A. Please place a check mark next to the time(s) of day you smoked marijuana or were under the influence of marijuana.

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<td>Afternoon (12pm-6pm)</td>
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<tr>
<td>Evening (6pm-12am)</td>
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B. Please enter the number of HOURS you were under the influence of marijuana each day.

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<td>4</td>
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<td>6</td>
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YOUR PATTERN OF USE IN A TYPICAL MONTH

In a typical month:
- You use marijuana on 13 days.
- You drink 60 standard alcoholic drinks.
- You don't typically smoke cigarettes.

How much do you use?

The graph to the right shows your pattern of use over the past month and what time of the day you were most likely to use.

Research shows that people who use marijuana more than one time during the day tend to have more social and physical problems than those who only use in the evenings. Those who use at multiple times may also be more likely to be smoking to avoid problems they feel unable to confront.

A person who uses marijuana in addition to alcohol or other drugs can be at additional risk. The effects of some drugs become exponentially greater when taken together. In addition, the physical tolerance that one drug produces can sometimes affect another drug, and lead to dependence on multiple substances.

How do you spend your time?

In a typical month:
- You spend 60 hours using marijuana.
- You spend 43 hours studying.
- You spend 60 hours in class.
- You spend 9 hours exercising or playing sports.

This graph shows you what percent of the total hours in a month you
THE COST TO YOU

In a typical month:

- You reported that you spend about $215 (108%) on marijuana,
  and that you spend about $215 (108%) on alcohol.

You spend about $5160 per year on marijuana and/or alcohol.

That means you spent 216% of your spending money on marijuana and alcohol.

If you had that money you would have the down payment for a new car!

What are the Physical Costs?
LIFESTYLE FACTORS

During the past three months, you reported that your use of marijuana frequently contributed to:

- Feeling tired, groggy, or unmotivated
- Going to work under the influence of marijuana
- Missing classes

During the past three months, you reported that your use of marijuana occasionally contributed to:

- Getting sick or feeling unhealthy
- Coughing or breathing problems
- Unhealthy eating
- Not dealing with your problems or responsibilities

You also indicated you would like to spend more time:

- Going to the gym/Playing Sports/Exercising
- Studying
- Spending time with friends who don’t smoke marijuana
- Spending time with family
- Going to a concert, sports event, opera, play, ballet
HOW DO YOU COMPARE

94% of US college students use marijuana less than you.

Only 22% of US college students who use marijuana use marijuana more than you.

This tells you what percent of US college students use less marijuana than you. The first number tells you how you compare to other college students in general. Since the majority of US college students don't use marijuana, you will fall in the minority if you've used at all. The second number shows how you compare to other students who reported using marijuana in the past month. Because this comparison is only with other students who used marijuana, you can see how you compared with other people who used marijuana.

The Norms for Marijuana Use

What percent of US college students use more marijuana than you?

You said: 50%  
Survey results indicate: 4%

What percent of SDSU students use marijuana AT LEAST ONE A MONTH?

You said: 40%  
Survey results indicate: 22.6%

What percent of SDSU students DO NOT USE marijuana at all IN A TYPICAL MONTH?

You said: 20%  
Survey results indicate: 77.4%
Motivational Interviewing

- Brief, nonconfrontational counseling style targeting ambivalence around change.
- Key elements: Empathy, Discrepancy, Rolling with Resistance, Supporting Self Efficacy
- Support in >150 studies, including many targeting college alcohol/drug.
- Motivational Enhancement Therapy (MET) combines MI + feedback (similar to BASICS, Marijuana Check-Up formats). 1-4 sessions.
- MET format well suited to less motivated users.
Differences in MI between Marijuana and Alcohol

- **Patterns of use:** Fewer assessment/feedback helps. Mj use may be more sporadic.
- **Consequences:** Mj users may have fewer acute consequences, defend use as non-problematic.
- **Legal status:** 14 states allow medical mj. Users may be committed to legalization subculture (and perhaps even have permission to use).
- **Harm reduction, protective behaviors more difficult to talk about.**
- **Alcohol effects a badge of honor, vs. marijuana effects connected to subculture, perceived ↓ harm.**
Case Discussions
Discussion points:

- Review the presenting problem(s) in this case.
- Identify how you would proceed with this student.
- Points to highlight in conversations.
- Areas of concern in order of priority.
- What ways might you want to engage this student? How will you address his concerns?
- What are the risk factors?
- List what you would want to understand about friends, possible supports for change.
- What are some other environmental concerns for this student in making changes?
Intervention and Treatment Considerations:

- A diagnosis of past alcohol abuse or dependence significantly moderated the alcohol increase from baseline to marijuana abstinence \((p < 0.01)\), such that individuals with this diagnosis significantly increased alcohol use (52% increase) but those without this history did not (3% increase).

- Short screening scales to assess dependence and other problems related to the use of cannabis seem to be a time and cost saving opportunity to estimate overall prevalence's of cannabis-related negative consequences and to identify at-risk persons prior to using more extensive diagnostic instruments.
Intervention Strategies

- Students with marijuana problems expect professionals to tell them to quit, they are often defensive when they walk in just because of that expectation.
- Talk first to address fears of labeling, assure them that you are not there to “make them“ do anything they do not want to do, talk about how people change and that change is a process.
- Then start listening to them. Learn what they have accomplished or not accomplished. Learn about their substance use, values, expectations.
- Use a brief screening measure or motivational feedback instrument to collect information in a more objective, non-threatening manner about consequences of use.
- Be reflective and always check to see if the student is with you, if you see or hear defensive words or expressions take a step back or be reassuring.
Intervention Strategies continued..

- Support their willingness to have the conversation and let them know that you know this is hard to talk about.
- Almost never began talking about quitting completely.
- Ask them if they have thoughts about making changes and what they might be and how they would start. Talk about obstacles or challenges but also talk about rewards to making changes.
Stages of Change and Intervention

- Where a person is in a Stage of Change model is a critical factor in the ability to intervene.
- The number or severity of negative consequences a student may experience may not be as significant as the stage of change to identify readiness to change.
- Have a “toolbox” of intervention strategies not a one size fits all process.
From the Field

- Yeshiva University: midnight harm reduction group, drop in, anonymous
- University of Massachusetts Amherst: Group effort organized between Health Education and Counseling to assist marijuana users cut down or quit. Spring 2010.
- Rutgers: group through alcohol/drug counseling to reduce or quit: Fall 2010.
“Planting Seeds”

- Use evidence based interventions, read the research, pay attention to pop culture, read about new drugs and effects.
- Be genuine, affirm progress and practice self efficacy, use humor.
- Sometimes being empathetic, honest, genuine, knowledgeable is what people will remember when they need help to make changes and decide to come back.
Thank you!

Lisa Laitman
llaitman@echo.rutgers.edu