Marijuana – linked to other addictive drugs?

By Jennifer Faringer, MS.Ed., CPPg, Director of DePaul’s NCADD-RA

A study conducted in 2017 with over 30,000 adults found that marijuana users were more than twice as likely to move on to abuse prescription pain medications, even when controlling for demographics and other substance use disorders, family history and depression. “Cannabis use, even among adults with moderate to severe pain, was associated with a substantially increased risk of non-medical prescription opioid use…” [The American Journal of Psychiatry (2017)].

The Centers for Disease Control and Prevention (CDC) found that marijuana users are three times more likely to become addicted to heroin. A Journal of Neuropsychopharmacology study (2007) found that rats given Tetrahydrocannabinol (THC), the chemical compound in cannabis responsible for the euphoric high, later self-administered heroin as adults and increased their heroin use while rats not given THC did not show an increase in heroin use as adults. A 2014 study in European Neuropsychopharmacology found “adolescent THC exposure in rats seemed to change the rodents’ brains, as they subsequently displayed ‘heroin-seeking behavior.’ Youth marijuana use could lead to increased vulnerability to drug relapse in adulthood.”

The National Institutes of Health (NIH) says that research in this area is “consistent with animal experiments showing THC’s ability to prime the brain for enhanced responses to other drugs…rats previously administered THC show heightened behavioral response not only when further exposed to THC, but also when exposed to other drugs such as morphine – a phenomenon called cross sensitization.” (NIH/NIDA, 2017)

The National Academy of Sciences (NAS) report found that “with regard to opioids, cannabis use predicted continued prescriptions one year after injury…cannabis use was associated with reduced odds of achieving abstinence from alcohol, cocaine, or polysubstance use after inpatient hospitalization and treatment for substance use disorders.” (NAS Report 2017)

A three-year study of adults conducted in Colorado found that marijuana compounds problems with alcohol. Those who reported marijuana use during the first wave of the survey were more likely than adults who

What will legalization of marijuana cost employers?

- **Safety** – ability to maintain a drug-free workplace.
- **Compliance** – ability to comply with drug laws if in multiple states.
- **Productivity** – an adequate supply of qualified workers.
- **Flexibility** – ability to shift workers to other positions.
- **Litigation** – will employers have to accommodate medical marijuana use?

People who are addicted to...

<table>
<thead>
<tr>
<th>Substance</th>
<th>Addiction Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>2x</td>
</tr>
<tr>
<td>Marijuana</td>
<td>3x</td>
</tr>
<tr>
<td>Cocaine</td>
<td>15x</td>
</tr>
<tr>
<td>Rx Opioid Painkillers</td>
<td>40x</td>
</tr>
</tbody>
</table>

...more likely to be addicted to heroin.

Marijuana

Continued from page 1

did not use marijuana to develop an alcohol use disorder within three years.

With substantial research illustrating the link between marijuana and other addictive substances, states currently engaged in proposals to further expand existing regulations and/or to legalize marijuana for recreational use would be wise to more carefully reconsider the potential consequences of these actions. Further expansion continues to decrease the perception of risk and increase access particularly among youth. Additionally, trends in Colorado and Washington state are surfacing that like tobacco and alcohol, costs to youth, families and communities far outweigh any tax revenue.

A further area of concern with expansion and increased access is the potential impact to businesses and to the workforce.


Percentage of heroin/prescription painkiller users who first used another addictive drug in previous years:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Drug Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>92%</td>
<td>Marijuana → Heroin</td>
</tr>
<tr>
<td>57%</td>
<td>Marijuana → Painkillers</td>
</tr>
<tr>
<td>47%</td>
<td>Painkillers → Heroin</td>
</tr>
<tr>
<td>36%</td>
<td>Marijuana → Painkillers → Heroin</td>
</tr>
<tr>
<td>6%</td>
<td>Painkillers → Marijuana → Heroin</td>
</tr>
</tbody>
</table>

n 2017, NCADD-RA was awarded a grant from the New York State Office of Alcoholism and Substance Abuse Services (OASAS) to open a regional addiction resource center covering the nine counties of the Governor’s Finger Lakes Economic Development Region, which includes Monroe, Orleans, Genesee, Wyoming, Livingston, Ontario, Yates, Seneca and Wayne counties. Organization and preparation began over the summer. Erin Egloff was hired as the Finger Lakes Addiction Resource Center (FLARC) Coordinator to develop the program deliverables and coordinate community collaboration by connecting multiple sectors and sharing information and awareness of services. The demographics and cultures of each area are being approached with sensitivity and deliberate awareness of the unique opportunities and challenges that exist, including important considerations of high-risk population needs.

An immediate priority for the FLARC was to collect and disseminate accurate information about current substance use disorder treatment and recovery options that already exist in each county. NCADD-RA has maintained a comprehensive directory of Monroe County OASAS Certified Treatment Providers for many years as well as more recently the Monroe County Recovery Services directory. The FLARC adopted this proven format for the other eight counties. We encourage interested parties to bookmark https://ncadd-ra.org/programs-services/finger-lakes-addiction-resource-center, as biannually updated directories and resources will be posted on that webpage. Additional resources will include prevention provider directories, coalition contact lists, and opioid overdose prevention trainings, among others.

A Community Action Partnership of 32 diverse stakeholders has assembled to ensure that a group representing all of the nine counties is involved in the activities and is able to advise the FLARC as needed. As the FLARC network continues to expand, the Partnership is increasing its numbers. A diverse email distribution list for FLARC updates and information is growing daily, as healthcare professionals, community members, social workers and individuals are requesting inclusion. To add an email address to the distribution list, contact FLARC Coordinator Erin Egloff at eegloff@depaul.org or via phone at (585) 719-3485.

Other early FLARC efforts include the development and promotion of area events, trainings, and awareness forums around issues of substance use disorders, as well as identifying gaps in treatment and recovery resources for each county. On December 11, 2017, the FLARC sponsored a free public screening of the new OASAS film Reversing the Stigma before it was released online. The film highlights efforts in New York state to address substance use disorder issues, and is narrated by television journalist Laurie Dhue. The film screening was followed by a discussion panel featuring three local organizations that have strong relationships with NCADD-RA including Open Access, RCovery Fitness and Recovery Now. Discussion was facilitated by Dr. Charles Morgan and Jennifer Faringer. The theatrical version of the film can be found at www.youtube.com by searching the words “Reversing the Stigma OASAS.”

NCADD-RA’s FLARC will continue to focus on the nine counties through relationship building, enhanced awareness of substance use disorders as well as treatment and recovery resources, and serve as a center for regional information. As a facilitator of the Opioid Task Force of Monroe County, NCADD-RA is at the forefront of strategic and tactical plans to address the opioid epidemic facing our communities, and the FLARC is a useful vehicle for resources, referrals, and information awareness.

If you have any questions or would like more information about NCADD-RA’s new Finger Lakes Addiction Resource Center, please call the FLARC Coordinator, Erin Egloff at (585) 719-3485 or via email at eegloff@depaul.org.
The human body is naturally wired to respond to threat through natural survival mechanisms. Particular regions of the brain become activated, releasing various hormonal responses, and various major systems become hypervigilant during this time of ‘threat.’ A critical feature of the stress response is that it terminates itself when the stressor has ended or is no longer perceived as a threat. If this did not occur, continued activation could wreak havoc on the body.

When a child is exposed to a traumatic event, chronic cumulative stress, or on-going fear, these high levels of tension and strain affect the developing brain, particularly in those areas involved in emotions and learning. The amygdala and the hippocampus are two brain structures involved in fear and traumatic stress. These two brain structures play an important role in the release of stress hormones such as cortisol and adrenalin influencing the capacity of the prefrontal cortex for regulating thought, emotions and actions, as well as keeping information readily accessible during active learning. In response to overwhelming stress in young children:

- The brain drives the “fight or flight” response and release of stress hormones.
- The young child has limited capacity to manage this overwhelming stress and experiences increased arousal, fear and anxiety.
- Excessive fear and anxiety and excessive cortisol (stress hormone) can affect the capacity for stress regulation as well as development and higher functions of the brain.
- Significant early adversity can lead to lifelong problems (physical and mental health).

These quite concerning consequences of overwhelming stress must be considered in a larger developmental context – including aspects of the child and the availability of supportive adults.

It is important to understand the developmental nature of trauma in order to understand the child’s experience and consider a plan for intervention. A child’s ability to adapt, use internal coping resources and employ defense mechanisms in the face of trauma are determined by development, attachment relationships and resilience (see graphic).

Infants and young children experience their world as an environment of relationships and these relationships affect virtually all aspects of their development. The quality and stability of these relationships in the early years lay the foundation for a wide range of other developmental outcomes (National Scientific Council on the Developing Child, 2004). The influence of these relationships on development continue throughout the lifespan – and include those caring relationships from multiple caregivers (extended family, etc.) and those outside of the child’s family.

When young children experience a trauma, are injured or witness violence or other types of adverse experiences, their recovery from that single experience is enhanced if they can rely on secure relationships with caring adults. They can be comforted, guided, and supported by attuned and trusted caregivers, including those who understand the impact of trauma, and move toward a positive outcome. Young children under chronic stress, especially maltreated children and those exposed to trauma within the context of their caregiving relationships or in the context of unavailable caregiving relationships, have often failed to develop a secure attachment to their caregivers and do not have a sense of basic security or trust in their world (Cohen & Walthall, 2003; Ososfky, 1995).

In complex or chronic trauma, the caregivers may be unable to protect or may actively harm the child so that his or her interpersonal world is in a constant state of crisis. The “holding environment” so critical to a young child’s health and development is affected, and ongoing stress and trauma in a family disrupts the scaffolding for the growth of many developmental competencies. (Rice & Groves, 2005; Cook et al, 2003).

Exposure to adverse childhood experiences increases the risk of substance use disorder, high risk sexual behavior, depression, self-harm, suicide, mental illness and physical disease/early death. Increasing protective factors, coping skills, and strengthening resiliency are proven strategies that can support recovery from trauma and traumatic stress.

SOURCE: Center for Early Childhood Mental Health Consultation, Georgetown University Center for Child and Human Development, Tutorial 7 “Recognizing & Addressing Trauma in Infants, Young Children, and their Families”
As of November 22, 2017, Governor Andrew Cuomo signed a bill that bans the use of electronic cigarettes at work, in bars and at restaurants. The Governor also signed a bill that extends New York’s indoor smoking ban to vaporizers as well.

An electronic cigarette or e-cigarette is a handheld electronic device that tries to create the feeling of tobacco smoking. It works by heating a liquid to generate an aerosol, commonly called a “vapor,” that the user inhales. Using e-cigarettes is sometimes called vaping. Traditional e-cigarettes heat the e-liquid, so it is already “burning,” so to speak. After smokers vape for a while, they may prefer the customizability of vapor cigarettes. Vape e-cigarettes are also sometimes slightly larger than a regular disposable e-cigarette and often resemble pens or small tubes.

One such device that has come to be extremely popular among our youth is the JUUL vape pen or e-cigarette which has a higher nicotine concentration than comparable devices. It looks like a USB flash drive and is small enough to fit in the palm of your hand and charges when plugged into a laptop. It comes with pods of e-liquid in sweet flavors such as mango, fruit medley and crème brulee. A new study in the Journal of Pediatrics has found that the chemical acrylonitrile is found in the flavorings. Acrylonitrile is a highly poisonous carcinogenic compound used in the manufacture of plastics, adhesives and synthetic rubber (The National Center for Biotechnology Information).

With the new law, electronic cigarettes and comparable vaping products will be banned from use in public places like bars, restaurants and in the workplace in the same way that traditional cigarettes are illegal under the Clean Indoor Air Act.

The Centers for Disease Control and Prevention (CDC) released a report that found e-cigarettes are now the most widely used tobacco product among teens. E-cigarette use rose among middle school and high school students from 2011–2015, the report found.

The risk of using products containing nicotine poses danger to youth, pregnant women and fetuses. The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe, according to the United States Department of Health and Human Services. The brain is the last organ in the human body to fully develop. Brain development continues until the early to mid-20s. Nicotine use during spans of critical brain development, such as adolescence, can disturb the growth of brain circuits that control attention, learning, and susceptibility to addiction.

E-cigarettes have not been approved by the Food and Drug Administration (FDA) as an effective Nicotine Replacement Therapy (NRT), despite their promotion as such. Furthermore, the CDC states that e-cigarettes are not safe for youth, young adults, pregnant women or adults who do not currently use tobacco products. New research reports and data are continually being released that bring to question the safety of the e-cigarettes/vape pen as well as their effectiveness for quitting smoking.
Ingredients to Sustain the Community Coalition

*by Jerry Bennett, B.A., CPP, FL PRC Community Development Specialist*

Community members from all sectors make up the Community Coalition. Environmental strategies that provide education and skill building alter the physical design of the community and launch policies impacting the home, school or community at large.

In working with over 23 community coalitions in the Finger Lakes region, we’ve been able to ‘cook up a good recipe’ for sustainability. All it takes is:

**A pinch of credibility.** Does the community really believe in us and in the work we do? Do we have longevity? Have we succeeded over the long haul?

**A dash of relevance.** Are we meeting the real needs of the community and its members? Have we done the proper data gathering to guide us in critical decision making? Have we mapped out a good plan?

**A big dose of volunteers…** and the management of those volunteers. It’s important to be constantly building partnerships and engaging those partners in the work of the coalition!

**A slice of in-kind support.** We need space, clerical support, earned media support and other vital items.

**A dollop of cash!** The successful coalition will seek out support derived from grant writing, fundraisers and donations. But the money doesn’t roll in until the coalition reaches out – through credibility, relevance, volunteer support and in-kind connections.

It’s not what you know as much as it is who you know and where to find it.

Good luck in your ‘baking’!

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**Finger Lakes Prevention Resource Center**

The Finger Lakes Prevention Resource Center (FL PRC), of the National Council on Alcoholism and Drug Dependence - Rochester Area, began services on October 1, 2009.

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HPEP Now Offering Two Curricula to Local Schools!

*By Milagros Rodriguez-Vazquez, A.A.S., Hispanic Prevention/Education Program Coordinator*

This school year, the Hispanic Prevention/Education Program (HPEP) will add the program **Too Good for Drugs** (TGFD) to the kindergarten, first and second grades at RCSD #22 School, in addition to the already implemented **LifeSkills** Training program.

The goal of **Too Good for Drugs** is to reduce risk and build protective factors related to drug use in order to promote healthy lifestyles and prevent alcohol, tobacco and other drugs (ATOD) use. The program is designed to provide students with the skills, knowledge and attitudes they need for positive development, to keep them from initiating drug use and to keep the school community drug-free.

**The program addresses the following risk/protective factors:**

1. Social and emotional competency (skills)
2. Personal efficacy
3. Attitudes towards ATOD use
4. Perceived norms regarding ATOD use
5. Perception of harm/risk regarding ATOD use
6. Intended use of ATOD
7. Attachment to the school/teacher

The **LifeSkills** Training program is designed to target the primary causes of substance use. Rather than focusing solely on substance use disorder, the program addresses all the important factors leading youth to use one or more drugs by teaching a combination of health information, general life skills and drug resistance skills.

The program reduces the use of ATOD by up to 75 percent, cuts poly-drug use by up to 66 percent and is effective with Caucasian, African-American and Hispanic youth. The lessons covered in the program include self-esteem, decision making, smoking information, advertising, stress, communication, social skills and assertiveness.

**For information about the LifeSkills Training and the Too Good for Drugs programs or to schedule a presentation for your school or community group contact Milagros Rodriguez-Vazquez at (585) 719-3486 or mrodriguez@depaul.org.**

**SOURCE:** Mendez Foundation, 2009
Alcohol has long been a part of American culture, and as such is tightly woven into celebrations and social functions. While most Americans drink responsibly and moderately without apparent complications, there is a percentage of Americans who experience alcohol-related problems resulting from drinking too much and/or from binge drinking. According to NIAAA’s January 2018 Report, alcohol-related problems are among the most significant public health issues in the United States and internationally.

How is excessive alcohol use defined?

- **Binge Drinking**
  - For women, binge drinking is four or more drinks consumed in 2-3 hours.
  - For men, binge drinking is five or more drinks consumed in 2-3 hours.

- **Underage Drinking**
  - Any alcohol use by those under age 21.

- **Excessive Drinking Includes**
  - Any alcohol use by pregnant women.
  - For men, heavy drinking is 15 drinks or more per week.
  - For women, heavy drinking is eight drinks or more per week.

- **Heavy Drinking**
  - In the United States, approximately 15 million people had alcohol use disorder in 2016.

Alcohol-related problems

**Statistical Information**

- Each year in the United States, more than 88,000 people die from alcohol-related causes, making it the third leading preventable cause of death in our country. The first is tobacco. The second is poor diet and physical inactivity.

- Alcohol misuse costs the United States about $249 billion per year.

- In the United States, more than 10 percent of U.S. children live with a parent with alcohol problems, according to a 2017 study.

- Globally, alcohol misuse is the seventh leading risk factor for premature death and disability.

**Binge drinkers consume a lot per binge**

<table>
<thead>
<tr>
<th>Average number of drinks consumed on one occasion</th>
<th>Average number of drinks per age group</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="drink-glass.png" alt="6" /> <img src="drink-glass.png" alt="9" /></td>
<td><img src="drink-glass.png" alt="9" /> <img src="drink-glass.png" alt="8" /> <img src="drink-glass.png" alt="8" /> <img src="drink-glass.png" alt="7" /> <img src="drink-glass.png" alt="6" /></td>
</tr>
</tbody>
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NCADD-RA’s 2018 Annual Luncheon

Friday, May 25, 2018
11:30 a.m. – 2:00 p.m.

The National Council on Alcoholism and Drug Dependence - Rochester Area Annual Luncheon will be held on Friday, May 25 from 11:30 a.m. – 2:00 p.m. at the DoubleTree Inn at 1111 Jefferson Road in Rochester, New York.

Keynote:
Carlton Hall, MHS

Changing the Conversation: The Role of Prevention, Treatment and Recovery Communities in a time of National Crisis

For more information or to register, contact Elaine Alvarado at (585) 719-3481 or ealvarado@depaul.org, or register online at www.ncadd-ra.org.

Community Presentations Available Upon Request...

NCADD-RA provides community presentations on a wide variety of substance use disorder topics upon request. We customize presentations to fit the need, interest and available timeframe of your school/university faculty, PTA/PTSA or other school groups including classroom presentations, outreach and clinical staff, youth and adult faith groups, or workplace organizations.

Topics include, but are not limited to:
- Signs, Symptoms and Current Trends of Substance Use Disorders
- Opioid Crisis and Community Response/Resources
- “Medical” Marijuana, Synthetic Drugs of Abuse
- Underage and Binge Drinking
- Fetal Alcohol Spectrum Disorders
- Impact of Addiction on the Family
- Problem Gambling: Impact on Families and Communities
- Electronic Cigarettes/Vaping
- Paraphernalia

For further information or to schedule a customized presentation with one of our staff, please contact Shelly Budinski, at sbudinski@depaul.org or (585) 719-3489, or Jennifer Faringer at jfaringer@depaul.org or (585) 719-3480.