Increase Your Awareness: Teen Marijuana Use

Marijuana is often one of the main drugs of choice among teens and adolescents. With the legalization of marijuana in several states, our youth have received mixed messages from society that has led to misconceptions over the harm that marijuana has on developing adolescents. While marijuana is not legal in any state for adolescent use, the changes in legislation across our country has created an environment in which marijuana increasingly is seen as acceptable, safe, and therapeutic (American Academy of Pediatrics). Perception data tells us that that the number of young people who believe marijuana use is risky is decreasing (Nebraska Risk and Protective Factor Student Survey).

Marijuana today is much stronger than it was in the past. THC is the psychoactive substance in marijuana. In the early 1990's, the average amount of THC in marijuana was less than 4%; today it averages 15-20%. Not only is marijuana more potent, it is also being used in new ways with the intent to get a stronger and longer lasting high. For example, concentrated marijuana can be up to four times stronger in THC content than the plant itself. Marijuana concentrates are increasingly being used in vaping devices. According to the 2019 Monitoring the Future Survey, more than one fifth of high school seniors reported having vaped marijuana in the past year, as did nearly that same proportion of 10th graders (National Institute on Drug Abuse: NIDA). Users prefer the vaping device because it is smokeless, the vapor produced dissipates quickly, it is sometimes odorless, and it is easy to hide or conceal. Just like nicotine vaping devices, marijuana vapes work by heating a liquid or oil that becomes a vapor the user inhales. While marijuana vaping devices often resemble devices used for nicotine or other e-liquids, the appearance of the liquid in the device looks different. In a vape cartridge, THC is thicker and appears more like oil, whereas nicotine appears more like water. THC may not appear to move in the cartridge as freely as nicotine e-liquid.

The rise in THC levels can increase the negative effects of using marijauna, especially for young people. When marijuana use begins in the teen years, it can have a significant impact on brain development. THC alters the ability of the hippocampus (a brain area related to learning and memory), to communicate effectively with other brain regions. This can lead to:

- Reduced ability to concentrate
- Impaired or reduced short & long-term memory
- Impaired or reduced comprehension
- Impairments in learning, memory, perception and judgement

Compared to those who don't use marijuana, those who use heavily more often report:

- Lower life satisfaction
- Poorer mental health
- Poorer physical health
- More relationship problems

Research also shows that teens who use marijuana are twice as likely as adults to become addicted to it. In fact, the majority of adolescents who enter drug rehab do so for marijuana abuse.

The physical and psychological signs of marijuana use are the same as the side effects the user will experience. Most often, these effects are temporary and may only last for a few hours. For this reason, parents may not have an opportunity to notice the physical side effects of marijuana use when teens use marijuana away from home. Side effects can range in severity and may include:

- Red eyes
- Dry mouth and thirst
- Increased appetite
- Shifts in behavior and mood
- Increased blood pressure
- Delayed reaction time (both physically and mentally)
- Forgetfulness
- Appearing intoxicated
- Nausea or vomiting
- Panic or anxiety
- Hallucinations or delusions (when taken in high doses)

The behavioral signs of marijuana abuse may offer more insight to the existence of a problem. Behavioral signs may include:

- Using new words and phrases like "sparking up," "420," "dabbing," and "shatter"
- Losing interest in and motivation to do usual activities
- A noticeable change in friends and/or spending time with peers that use marijuana
- Possessing marijuana paraphernalia such as pipes, lighters, vape pens, or rolling papers
- Stealing money or having money that cannot be accounted for
- Changes in Appearance
- Diminished performance in school, at work, and/or in meeting responsibilities at home

Together, parents, schools and the community play an important role in preventing drug use amongst youth. The earlier we start talking to our youth about the risks of substance use, the more equipped they are to develop the knowledge, attitudes and skills they need to make healthy choices. Below are some helpful talking points to help guide conversations about marijuana use.

- Marijuana is not a benign drug for teens. The teen brain is still developing, and marijuana may cause abnormal brain development.
- Marijuana use can lead to the development of marijuana use disorder, which takes the form of addiction in severe cases. One in six teenagers who use marijuana today will become addicted.
- Teens who use marijuana regularly may develop serious mental health disorders, including addiction, depression, and psychosis.
- Recreational use of marijuana by minors and young adults under the age of 21 years is illegal and, if prosecuted, may result in a permanent criminal record, affecting schooling, jobs, etc.

• Never drive under the influence of marijuana or ride in a car with a driver who is under the influence of marijuana. Adults and teens regularly get into serious and even fatal car accidents while under the influence of marijuana.

For additional information, download the free marijuana talk kit from Partnership to End Addiction:

https://drugfree.org/wp-content/uploads/2017/02/Marijuana_Talk_Kit.pdf

References: American Academy of Child and Adolescent Psychiatry; American Addiction Centers; Drug Enforcement Administration; Journal of Adolescent Health; National Institute on Drug Abuse (NIDA); Partnership to End Addiction; Substance Abuse and Mental Health Services Administration (SAMHSA)

Drug Trend Data: 2020

The National Institute of Drug Abuse (NIDA) funds the annual Monitoring the Future (MTF) survey. This survey asks students in 8th, 10th, and 12th grades across the country questions about their attitudes and use of alcohol and other drugs.

The results of the survey are tabulated and made available in the same year it was conducted. The most recent results available are from the 2020 survey.

It should be noted the past year (2020) has been quite different than those of years past. And while it has been a challenging year for most people, we know it has been an extraordinarily challenging time for students with school ending abruptly in March of 2020 and lasting through the end of the school year. Even now, some schools remain closed and provide instruction and classes virtually online, while others have cautiously reopened with significant adaptations to their policies and protocols to help address concerns surrounding the pandemic.

As we know, during difficult times, individuals may turn to alcohol and other drugs as a way to cope with feelings of disappointment, anger, sadness, boredom etc. In fact, data from the Centers for Disease Control and Prevention show substance use has increased among all age groups, including youth, during the pandemic.

Below is MTF survey data from 2020 regarding more commonly used substances by youth compared to survey data from the previous year - 2019.

| ALCOHOL USE: | 2019 | 2020 |
|--------------------------------------|------|------|
| 8 th Grade: | 19.3 | 20.5 |
| Past Year | | |
| 5 or More Drinks | 3.8 | 4.5 |
| 10 th Grade: | 37.7 | 40.7 |
| Past Year | | |
| 5 or more Drinks | 8.5 | 9.6 |
| 12 th Grade: Past Year | 52.1 | 55.3 |

School Community Intervention and Prevention

February 2021

As we can see from the data above, there was an notable increase in alcohol use at all grade levels. Furthermore, the data shows a related increase in binge drinking. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines binge drinking as 5 or more alcoholic drinks for males and 4 or more alcoholic drinks for females on the same occasion.

It should be noted that prior to 2020, the MTF survey had shown a consistent and measurable decline in use over the past several years. However, as already mentioned, 2020 was not like most years so it is important to understand how a significant disruption, like the pandemic, can impede and negatively impact the progress made in addressing alcohol use and abuse among students.

| CIGARETTE/TOBACCO USE: | 2019 | 2020 |
|---------------------------------------|------|------|
| 8th Grade: | 2.2 | 2.3 |
| Past Month | | |
| 10 th Grade: Past Month | 3.4 | 3.2 |
| 12 th Grade: Past Month | 5.7 | 7.5 |

The data on cigarette use above shows a very minor change in reported use for 8th and 10th graders but shows a more significant increase among 12th graders. This reported trend is particularly noteworthy. It is fair to suggest the pandemic may have a more profound impact on 12th graders who may have, or will, lose out on experiencing and/or celebrating milestones that are often connected to school, such as prom, graduation, and athletic or extracurricular activities. We also need to be mindful that prior to the pandemic, there was an unsettling trend developing among teen nicotine vapers. A study conducted by USC found teens who had not smoked cigarettes prior to vaping, began smoking cigarettes. This is important to note when moving forward to address youth cigarette use.

| VAPING NICOTINE: | 2019 | 2020 |
|--------------------------------------|------|------|
| 8th Grade: | 16.5 | 16.6 |
| Past Year | | |
| 10 th Grade: Past Year | 30.7 | 30.7 |
| 12 th Grade: Past Year | 35.3 | 34.5 |

The data above on nicotine vaping does offer some promise as to how well early preventive measures work. In a year where the trend for substance use showed measurable increases, there were notable decreases among 12^{th} graders and extremely minimal to virtually no increase among 8^{th} and 10^{th} graders.

School Community Intervention and Prevention

February 2021

Many local, state and federal regulations have been put in place, rather quickly, to help curb youth vaping use. These regulations included restricting the sale of vaping products and devices to minors as well as changing the age of purchase from 18 to 21 years of age.

| SMOKING MARIJUANA: | 2019 | 2020 |
|--------------------------------------|------|------|
| 8th Grade: | 11.8 | 11.4 |
| Past Year | | |
| 10 th Grade: Past Year | 28.8 | 28.0 |
| 12 th Grade: Past Year | 35.7 | 35.2 |

The data above shows a small decline in the smoking of marijuana across all three grade levels, which is quite notable in a year where there was an uptick in the use of many substances.

Of course, it should be noted that for the most part, while recreational use has become more widely accepted as "okay", the overall trend of youth use has been on the decline for the last decade in regards to youth smoking marijuana.

| VAPING MARIJUANA: | 2019 | 2020 |
|--------------------------------------|------|------|
| 8th Grade: | 7.0 | 8.1 |
| Past Year | | |
| 10 th Grade: Past Year | 19.4 | 19.1 |
| 12 th Grade: Past Year | 20.8 | 22.1 |

The above survey data on vaping marijuana presents a different picture than that of smoking marijuana. Two of the three grade levels experienced a visible increase. This is most concerning because marijuana concentrates are generally four times more potent than very high grade smokable marijuana. It should also be noted that over the last several years, substance treatment centers for adults and youth have seen an explosion in those being treated for marijuana dependency.

All in all, the 2020 MTF survey data suggests that the pandemic has played a significant and disruptive role in prevention and early intervention strategies surrounding the use of illicit substances by students. As a result, we must understand the importance of remaining vigilant in addressing the needs of students through early prevention and intervention strategies long after the pandemic ends.

Stats & Trends in Teen Drug Use with Interactive Chart | NIDA ... teens.drugabuse.gov > teachers > stats-trends-teen-drug-...

Monitoring the Future Study: Trends in Prevalence of Various ... www.drugabuse.gov > drug-topics > trends-statistics

www.cdc.gov

Drinking Levels Defined | National Institute on Alcohol Abuse an www.niaaa.nih.gov > moderate-binge-drinking

Zoom Engagement: ADHD and Other Tactics

Since the pandemic has begun, teachers have been struggling with how to engage their students. Student engagement can be difficult for multiple reasons, especially in a virtual world of video conferencing. This medium requires more discipline on the part of the student who may have multiple things competing for attention in the comfort of their home.

Some students may have additional reasons why they struggle to focus. It can be difficult enough in school, but now with the current atmosphere of zoom, it makes it nearly impossible. One example is students with ADHD. ADHD stands for Attention Deficit Hyperactivity Disorder. Some of the hallmark traits of this disorder are impulsivity, inability to focus, fidgeting, and distractibility. Some of these traits can be commonplace because they are children and have still developing brains, but for a child with ADHD, these traits can be more difficult to control. In the zoom environment, students are home without the ability to have one on one attention or possibly may not even have a parent at home to help them stay on task like a teacher would while in person at school.

So, what can we do to help these students? Some of the tactics that will be shared in this article can be beneficial for all students both with and without ADHD or other learning disabilities.

While technology has created some of these problems by taking away the one-on-one interaction component, there have been many great apps created to keep students' attention during class. These apps give students the opportunity to engage and participate in class just as though they are there. They allow teachers to see if a student is participating, even if they do not have a camera or if the camera is off, because it will show names of those who are participating.

One of the functions available through Zoom is the chat box. Students and teachers have the ability to chat as a class for questions or send the teacher a private message when desired. This is a great way for students to respond with answers or to just have the student enter a specific word or some identifying factor to show they are still there and engaged. There are two apps or software called Eventzee or Goosechase that you can use to do a virtual scavenger hunt throughout the day or week. This allows students to capture items with their cameras. Then there are apps like Kahoot!. This app is for trivia that can be done live or at the student's pace. The students' scores decrease with time on each question. This prevents students from "googling" answers. There are also survey apps like Nearpod. This allows you to gather feedback through a second screen or browser. This is great for games like "Would You Rather". One last app worth mentioning is BreakoutEDU. This helps engage students of all ages and creates a series of clues or challenges that students have to discover themselves. Teachers who use this usually use the "breakout" feature on Zoom and have teams solve challenges or questions in a specific timeframe. You can use the "Build Your Own" resource so you do not have to purchase a subscription.

Another way to help keep students on task is having a schedule and sticking to it. Consistency is key to having successful students. If they know what to expect, it can help lower anxieties about the unknown. It is also important to have consistency in consequences. So, working with parents and staying in communication about how their student is doing with engagement and participation in class is key.

One last big piece in helping students be successful with zoom learning is brain or movement breaks. Everyone, even adults, need a break from the screen every now and then. Our minds are only able to look or focus on a screen for so long before we lose interest, get a headache, or get restless from sitting still. Students normally have a break about every hour in school, whether that be from changing classes by walking in the halls, moving to grab items for a different subject, etc. Breaks are key with students and adults to keep the body and mind focused to the best of its ability. Even during a zoom training, the people hosting the training will often try to give a break every 45 minutes to an hour and encourage participants to move, get away from their screen and give their brain a real break. Utilizing apps, such as GoNoodle, would be beneficial. Even though students would not be away from the screen, it would get their body moving to expend some excess energy.

All in all, educators and parents are struggling in this virtual environment. As learning continues via zoom, more and more teachers and parents are finding new and innovative ways to engage their students. Whether that is thinking outside the box, utilizing an old tactic, or modifying it to fit with this technological age, it doesn't matter. Utilize each other, utilize the internet, and most of all, do what you all have been doing and work hard to accommodate students where they're at and help them be successful. Hopefully there is an end in sight soon, but until then, implementing some of these strategies may help enhance student engagement.

References:

"25 Strategies to Engage Your Students on Your Next Zoom Meeting" https://hookedoninnovation.com/2020/05/13/25-strategies-to-engage-zoom/

"5 Ways to Support Kids with ADHD in Remote Learning"

School Community Intervention and Prevention

February 2021

https://www.edutopia.org/article/5-ways-support-kids-adhd-during-remote-learning

"Zoom Can't Show You How Hard It Is to Learn This Way." https://www.additudemag.com/online-learning-advice-adhd-students/

"5 Focus Tricks for Students with ADHD Learning at Home"
https://www.additudemag.com/how-to-focus-adhd-child-homeschool/?src=embed_link

"Are You Crisis Schooling? Daily Schedule Advice for ADHD Families" https://www.additudemag.com/daily-schedule-coronavirus-home-school/

"ADHD & Learning During COVID-19" https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/ADHD-and-Learning-During-COVID-19.aspx

"ADHD: Tips for Online Learning" https://www.webmd.com/add-adhd/childhood-adhd/tips-online-learning

"Experts share advice for helping kids with ADHD through the virtual learning process" https://www.wsav.com/back-to-school/experts-share-advice-for-helping-kids-with-adhd-through-the-virtual-learning-process/

"Evidence-Backed Ways Parents Can Think Like a Teacher to Improve Virtual Learning" https://www.goodhousekeeping.com/life/parenting/a33608758/virtual-learning-tips-for-parents/