

understanding and treating adolescent substance use

Viktoriya Magid, PhD

Medical University of South Carolina
Adolescent Substance use Skills Education Training



Thanks to...

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Objectives

By the end of this presentation, learners should be able to:

- A. Understand the adolescent brain
- B. Learn about adolescent-specific substances
- C. Understand treatment and prevention issues related to adolescent substance use



Our son made us some special brownies but said we'd have to wait until 4:20 on 4/20 to eat them.....
He's so silly!



your  cards
someecards.com

- Only 10% of parents think their kids drink alcohol (nearly 50% of teens do regularly)
- Only 14% of parents talk to their kids about dangers of drug abuse
- Teens are up to 42% less likely to abuse substances if parents talk to them regularly about dangers of substance use

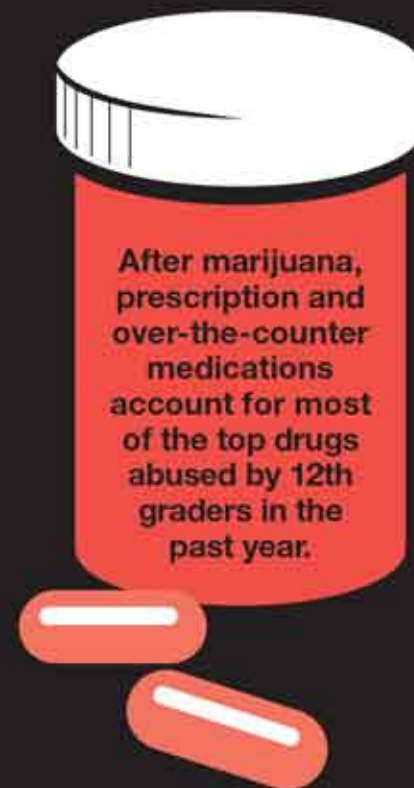
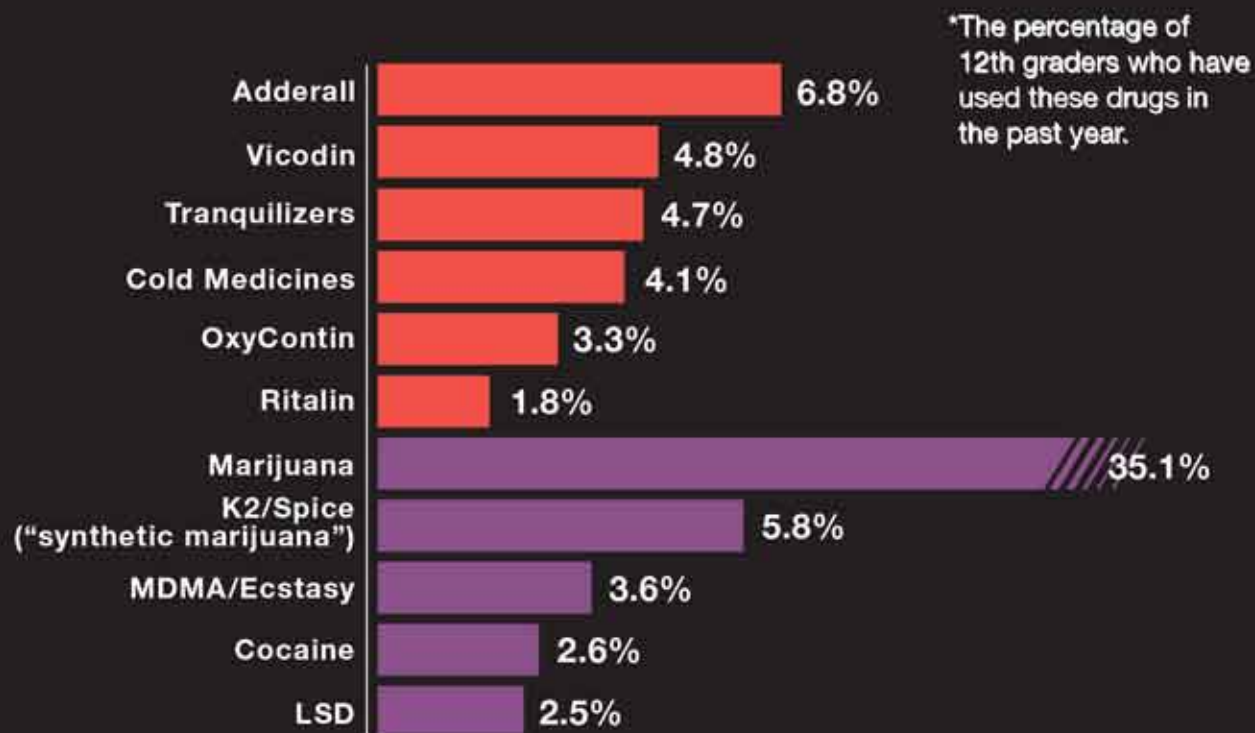
“I will quit when I get older!”

Developmental period?

- Adolescent brain is developing until early-mid 20s
 - Judgment, decision-making, impulse control
- Early substance use may **impede normal brain development**
- Even moderate substance use **may lead to addiction**

Vulnerable Times...

PRESCRIPTION/OVER-THE-COUNTER VS. ILLICIT DRUGS*



PRESCRIPTION



ILLICIT DRUGS



National Institute
on Drug Abuse

The National Institute on Drug Abuse is a component of the National Institutes of Health, U.S. Department of Health and Human Services. NIDA supports most of the world's research on the health aspects of drug abuse and addiction. Fact sheets on the health effects of drugs of abuse and information on NIDA research and other activities can be found at www.drugabuse.gov.

ASSET Data

- Substance use past 3 months (prior to tx)

<i>Substance</i>	<i>Used at least one/ 3months</i>	<i>Daily or almost daily</i>
<i>Marijuana</i>	84.3	40.0
<i>Alcohol</i>	59.5	4.7
<i>Tobacco</i>	56.7	31.3
<i>Opiates</i>	25	6.5
<i>Hallucinogen</i>	16.3	2.3
<i>DXM</i>	15	2.5
<i>Amphetamine</i>	13.6	7.6
<i>Cocaine</i>	9.7	1.6
<i>Heroin</i>	7.3	1.6
<i>Inhalant</i>	6.8	2.3

“...the reason these drugs are so popular is because they are seen as safer than their illegal counterparts, so it is important to challenge such assumptions”.

Opacka-Juffry, MD

Prescription Drugs

- Opiates/“pain pills” (Lortab, Percoset, Oxycontin, Hydrocodone)
- Benzodiazepines/“benzoes”/“anxiety pills” (Xanax, Ativan)
- Amphetamines/“uppers”/“speed” (Adderall, Ritalin)
- Family history of addiction

Among most commonly abused substance by teens remains....

- Synthetic marijuana
 - K-2, K-3, Spice
 - Psychoactive designer drug
 - 6% of 12th grades in past year (2014, NIDA)
 - A drop of 5% since 2011 - why?

Synthetic Marijuana: Effects

- Shorter half-life → more addictive
- hallucinations
- paranoid behavior
- agitation
- anxiety
- seizures
- nausea, vomiting
- racing heartbeat
- high blood pressure

Synthetic Marijuana: Legal Status

- July 2012 - Synthetic Drug Abuse Prevention Act – Schedule I Drug
- BUT....

Synthetic Cathinones:

Good bye, Bath Salts; hello, Flakka!

- Bath salts – banned schedule I drug July 2012
- Flakka: compound alpha-PVP
- Designer drug; China, Pakistan, India
 - zero reported cases in 2010
 - 85 cases in 2012
 - greater than 670 in 2014
- Smoked, vaped, snorted, injected
- Effects similar to cocaine/amphetamines
 - Highly addictive
 - Heart palpitations/heart attack
 - Nausea
 - Kidney, liver damage
 - Hallucinations
 - Paranoia, “excited delirium”
 - Violent Behavior

Over-The-Counter...

- **Dextromethorphan**

(DXM, Triple Cs, Robitussin, NyQuil)

- One teen in every 10 has reported abuse of cough medicine to get high
- Hallucinogenic effects
- euphoria, distortions of color and sound, and “out of body” hallucinations that last up to 6 hours
- vomiting, loss of muscle movement, seizures, blurred vision, drowsiness, shallow breathing, and a fast heart rate
- Addictive
- Hallucinogen Persistent Perception Disorder - HPPD

- “Lean”

- Aka “Drank”, “Purple drank”, “Purple Jelly”, “Texas tea”
- -Prescription cough syrup (Promethazine w/Codeine)
 - Sprite Soda
 - Jolly rancher candy - flavor additive
- Sedative/euphoric effect
- 25 times recommended dose
- Lethal (Lil Wayne hospitalized with seizures in 2013)

Kratom

- Tropical tree (*Mitragina Speciosa*) native to Southeast Asia
- Legal, available via internet
 - Leaves
 - Powder
 - Encapsulated powder
 - Tea
 - Suckers
 - Resin pies

Kratom

- Alkaloids act on the μ -opioid receptor
- Mitragynine is 13 times more potent than morphine
- Effects are dose-dependent:
 - Low – stimulant effect
 - High – opioid effect
 - Short-term: Nausea, itching, sweating, dry mouth, constipation, seizures
 - Long-term: weight loss, insomnia, skin darkening
 - Withdrawal symptoms are opioid-like – diarrhea, cravings, anxiety, tremor, irritability

“Benzo Fury”

- 5-APB (5-aminopropyl benzofuran)
- Most popular “legal high” in UK
- Available online, clubs, festivals
- Designer drug, similar to Ecstasy
 - stimulant + hallucinogen
- Effects
 - Euphoria, hallucinations, paranoia, high blood pressure, death
 - Addictive

“Mellow Munchies”

- Formerly “Lazy Larry” (“Lazy Cake”)
- **“100% legal, 100% natural!”**
 - Melatonin - neurohormone
 - RoseHips
 - Valerian Root
 - Passion Flower
- Effects: relaxation, sleepiness

Well, THIS one seems OK!

Melatonin- large doses linked to adverse effects on reproductive and cardiovascular systems; causes ocular and neurological problems

FDA: “not safe”

A word about alcohol...

Move over, Four Loko!

Blast = 12%, 24 ounces

So, how can you tell
and what do you do?

Prevent

- **Talk**

- Teens are up to 42% less likely to abuse substances if parents talk to them regularly about dangers of substance use

- **Monitor**

- #1 predictor of whether a teen uses drugs/alcohol is whether his/her close friends use

- **Negative attitude**

- Negative parental attitude towards teen use of alcohol and drugs is strongly related to low levels of substance use by teens

- **Limit setting**

- Authoritarian parenting style

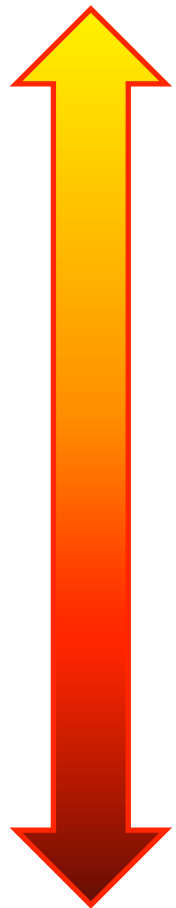
Recognize: Warning Signs

- verbally or physically aggressive
- cheats, steals
- unexplainable mood swings and behavior ; depression/anxiety
- sudden drop in grades
- truancy
- sleeping in class
- overly tired or hyperactive
- poor attitude toward sports or other extracurricular activities
- reduced memory and attention span
- not telling/lying about where they are going
- change friends
- secretive, lying
- drastic weight loss or gain
- always needs money, or has excessive amounts of money
- sudden increase or decrease in appetite
- disappearance of valuable items or money
- breaking curfew
- isolating
- finding empty beer cans/bottles; missing alcohol
- **IMMEDIATE EFFECTS:** dilated/constricted pupils, flushed cheeks/ears, giggly or talkative, smells like incense, gas, paint; slurring words, aggressive, vomiting, staggering, falling

What to do?...

- Identify type and severity of problem
 - 1. In-office prevention/early intervention
 - 2. Refer to specialized outpatient treatment
 - 3. Inpatient/Residential – last resort
- “Stepped Care” approach matches the intensity of treatment to the severity of substance use problems

Stepped Care

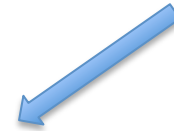


Less Severe

More Severe

- Prevention
 - Education, setting limits
- Brief Intervention
 - Feedback on use, discuss change strategies
- Outpatient Treatment
 - Identify triggers, relapse prevention plan
- Intensive Outpatient Treatment
 - Several weeks of 2-3 hours daily treatment
- Inpatient Treatment
 - 1 to 4 weeks in hospital ward, detox, crisis stabilization
- Residential Treatment
 - One to several months of residential living in safe environment
- Halfway House
 - Typically post-discharge from inpatient or residential facility, living with others in a safe environment while working and attending treatment

ASSET!



Changing our approach...

- **Just say “NO” does not work**
 - Scare tactics (“If you try this once you’ll get addicted!”)
 - Ignoring underlying reasons (e.g., social anxiety)
- **No judgment**
- **De-stigmatize**
- **Motivate; open dialogue**
- **Honest facts**

ASSET:

Adolescent Substance use Skills Education Training

Prevention track

- At-risk teens with minimal substance use
- 6 weekly 1-hour classes
- Optional individual sessions/Family consultation
- Substance use/addiction education
- UDSs

Treatment track

- Teens with SUD
- 8 weeks, 2X per week groups
- Individual therapy + Family counseling
- Substance use/addiction education
- Coping skills, relapse prevention skills
- UDSs

Motivational Enhancement Therapy Component

- Most teens don't want to be here...
 - Precontemplation
 - Contemplation
 - Preparation
 - Action
 - Maintenance
- Goal: Increase motivation for change
 - Normative feedback – understanding “all my friends do it”
 - Education - scientific facts, not sensational stories
 - Decisional balance
 - Goals and values – I'm on your side!

4 Principles of MI...

- Express empathy
- Support self-efficacy
- Roll with resistance
- Develop discrepancy

“you really don’t want to be here right now...”

“Marijuana really helps you relax and you’re concerned about how to handle anxiety without it.”

“Last week you were not sure you could go one day without using cocaine, how were you able to avoid using the entire past week?”

“On the one hand you’re sick and tired of being on probation and your parents are always breathing down your back, but on the other hand you’re telling me you want to keep smoking marijuana. Sounds like marijuana is so important to you, you’re willing to go to jail just so you can keep using”

“I know you have been coming to treatment for two months, but you are still drinking heavily, maybe now is not the right time to change?”

Commonly Made Comments:

– “But its all natural!”

- Yes, it is. So are a number of other natural plants that aren't so good for us, like poisonous mushrooms and berries. And, morphine.

– “But EVERYONE is doing it!”

- I know it can seem that way. It's actually less than half of all kids your age... (show statistics) I wonder if it seems that way to you because those are the kids you are always surrounded by...

– “But it's medicine! It's good for you!”

- That's true in some way. It can be used to reduce nausea in cancer patients and increase appetite and maybe even to treat glaucoma. But just with every medicine, it has side effects. In some cases, pros of using it may outweigh cons. Lets see if it applies to your case.

Cognitive Behavioral Therapy Component

- **Increasing ability to cope with high risk situations**
 - Refusal skills
 - Communication skills
 - Changing peer support group
 - Relaxation training
 - Identifying and changing thoughts about use
 - Positive behavioral coping skills
- **Optional Modules**
 - Coping with anxiety
 - Coping with depression
 - Anger-management skills
 - Impulse control skills
 - Dealing with past trauma

Family Component

- Involvement of one or both parents is ideal
 - Education
 - Parent training skills
 - Negative attitudes towards substance use
 - Expectations
 - Monitoring
 - Parenting skills
 - Communication skills
 - Pleasant family activities
 - Contingency management (e.g., behavior contracts)
 - e.g., home and in-clinic urine drug screens

ASSET

Pre/Post sample

- Substance Use Change (%)

Substance	Abstinent prior to ASSET	Abstinent after ASSET
Marijuana	19.7	69.2
Tobacco	40.9	46.2
Amphetamine	90.6	100
Cocaine	90.3	100
Alcohol	40.5	84.6
Opiates	75	100
Heroin	92.7	100
DXM	85	100
Hallucinogen	83.7	100
Inhalant	93.2	100

ASSET

Pre/Post sample

- **Motivation** – URICA Readiness for change
 - Scale ranges from 1 – 5 (Strongly disagree – Strongly agree)
 - “I am really working hard to change”

Readiness Domain	Pre (mean)	Post (mean)	t	p
Precontemplation	2.28	2.56	-0.87	0.4
Contemplation	2.95	3.49	-1.8	<.05
Action	3.1	2.97	0.6	0.56
Maintenance	3.86	4	-0.6	0.56

ASSET

Treatment Satisfaction Index

- Item and anchor
 - You are satisfied that the staff...
 - “Helped you to do something for you substance use”
- Max = 70; Range = 55 – 70
- Mean = 67.6

Thank You!

- (843) 792-2448
- magid@musc.edu