



UW PACC

Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

SUBSTANCE USE DISORDER IN ADOLESCENT POPULATION

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GENERAL DISCLOSURES

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SPEAKER DISCLOSURES

✓ No conflicts to disclose

OBJECTIVES

1. Epidemiology
2. Evaluation and Diagnosis
3. Treatment approach

CASE EXAMPLE

16 y/o male present to his pediatrician at the request of his mother secondary to concern about depression and some odd behaviors. Mom reports that the patient has withdrawn increasingly from the family. Choosing to spend time with a new group of friends. Mother also thinks son may have started smoking MJ.

WHAT'S NEXT?

- Any ideas on what's going on with this teen?
- What would be your approach to this patient case?
- What are your concerns for the teen and family?
- What are the concerns that you may have for yourself in this situation?

TELL ME THE FACTS: EPIDEMIOLOGY

- Monitoring The Future survey
- National Survey on Drug Use and Health (NSDUH)
- AACAP Practice Parameters on Substance Use in Children and Adolescents

MONITORING THE FUTURE (MTF)

- MTF survey has collected data from a total of 45,473 students from 372 public and private schools for their most recent December 2016 update.
- MTF survey is conducted by the University of Michigan and funded by NIDA which is a branch of the NIH.
- MTF survey has been in commission since 1975
- **Data showed an overall decrease in prevalence of drug and alcohol use among 8th, 10th and 12th graders overall.**

NATIONAL SURVEY ON DRUG USE AND HEALTH (NSDUH)

- NSDUH is a survey of data housed under the Substance Abuse and Mental Health Services Administration (SAMHSA)
- Provides data on prevalence, patterns and consequences of use for alcohol, tobacco and illegal drugs of abuse for individuals greater than 12 years of age.
- NSDUH -special data reports i.e. July 2016 report- marijuana use and perception of risk of harm by state and sub-state regions.

NSDUH RISK AND PROTECTIVE DATA

- Individual's perceived risk associated with the drug use increase likelihood of substance use
- Individual's perceived protective factors decrease likelihood of substance use
- These factors should be considered in in treatment approaches within a primary care setting

NSDUH RISK AND PROTECTIVE DATA (RESULTS FROM 2015 DATA)

- 3 out of 4 individuals age >12 years perceived great risk from weekly use of heroin, cocaine and LSD
- 68.7% of individuals perceived great risk with alcohol use of nearly 4-5 drinks daily
- 72.8% of individuals perceived great risk with smoking > 1 pack per day of cigarettes
- **Only** 1 out of 3 individuals age > 12 years perceived great risk from weekly marijuana use

NSDUH (2014- 2015 DATA)- PREVALENCE ACROSS U.S.A

- <https://www.samhsa.gov/data/sites/default/files/NSDUHsaeMaps2015/NSDUHsaeMaps2015.pdf>
- Marijuana use age 12-17 years past year highest percentages: Alaska, Oregon, Colorado, Vermont, New Hampshire, Maine, Rhode Island, Massachusetts, Washington D.C.
- Cocaine use age 12-17 years past year highest percentages: Oregon, California, Arizona, New Mexico, Colorado, New York, Vermont, New Hampshire, Rhode Island
- Heroin use greater than age 12 years in the past month highest percentages: Alaska, New Hampshire, Vermont, Maine, New Jersey, Maryland, Washington D.C., and Connecticut
- Alcohol use age 12-17 years in the past month highest percentages: Nevada, Colorado, New York, New Hampshire, Vermont, Maine Connecticut, Rhode Island, Washington D.C.
- Tobaccos use age 12-17 years in the past month high percentages: Alaska, Montana, Wyoming, North Dakota, South Dakota, Oklahoma, Missouri, Arkansas, Kentucky, West Virginia

RISK FACTORS

- Genetic predispositions
- Environmental influences: family/ peer group
- Comorbid psychopathology
- Developmental process

RISK FACTORS

- Comorbid psychopathology: disruptive behavior disorder, ADHD, mood disorder, and anxiety disorder
- Developmental pathway: adolescent invulnerability, achieving autonomy, and peer influence (“peer pressure”)
- Environment influences: media influence, peer group influence, childhood trauma/ exposures- sexual abuse, exposure to parents using substances/ family attitudes to substance use

DEFINITION OF SUBSTANCE USE DISORDER

- An illness which results in a change in the circuitry of the brain secondary to use of substance. These changes are persistent in nature and continue after detoxification, resulting in behavioral changes i.e. cravings in the context of exposure to drug- related stimuli
- Adolescents- impairment in psychosocial and academic functioning.

SUBSTANCE USE EVALUATION

1. Communicate confidentiality terms and establish provider- patient rapport
2. Screening tools of alcohol and/or other substance use
3. Formal evaluation

SCREENING TOOLS

- CRAFFT: Brief, 6 items
- DUSI- A (The Drug Use Screening Inventory- Adolescent): Documents level of involvement in various substances and quantifies severity of consequences associated with the use; 159 items
- POSIT (Problem- Oriented Screening Instrument for Teenagers): Identifies problem areas and potential needs for 10 functional areas that include substance use/ abuse; 139 items
- PESQ (Personal Experience Screening Questionnaires): Screens for drug use disorder, 40 items

ALCOHOL AND/OR DRUG SCREENING

Please remember the limitations to each of these laboratory tests and possibility of false positives or negatives

1. Urine drug screen- proper collection mechanism should be in place so as to avoid compromising the substances fidelity
2. Serum drug screening
3. Hair sample drug screening

FORMAL EVALUATION

- Substance used
- Method of use (intravenous- risk of STI)
- Quantity/ price amount spent on use
- Frequency
- Approximate time/ age of initiation
- Approximate total duration of use
- Longest period of sobriety
- Prior treatment mechanisms to address substance use
- Withdrawal symptoms (acute vs chronic)
- Complications of withdrawal
- **Perceived consequences of use**
- **Perceived benefits of use**

FORMAL EVALUATION- SCREENING TOOLS

- Adolescent Drug Abuse Diagnosis (ADAD)
- Adolescent Problem Severity Index (APSI)
- Teen Addiction Severity Index (T-ASI)
- Comprehensive Adolescent Severity Index for Adolescents (CASI-A)
- Global Appraisal of Individual Needs (GAIN)
- Customary Drinking and Drug Use Record (CDDR)
- Adolescent Diagnostic Interview (ADI)

DIAGNOSIS

- There has been a shift from DSM IV to DSM V in the nomenclature of substance use illnesses
- DSM IV: dependence vs abuse
- DSM V: use disorders, no longer polysubstance illnesses, tolerance and withdrawal

SUBSTANCE USE DISORDER

Per DSM 5: a problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12- month period.

1. Substance is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control substance use.
3. A great deal of time is spent in activities necessary to obtain substance, use substance, or recover from its effects.
4. Craving, or strong desire or urge to use substance.
5. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of substance
7. Important social, occupation, or recreational activities are given up or reduced because of substance use.
8. Recurrent substance use in situations in which it is physically hazardous.
9. Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by substance.

TOLERANCE, as defined by either of the follow:

- A need for markedly increased amounts of substance to achieve intoxication or desired effect.
- A markedly diminished effect with continued use of the same amount of substance.

WITHDRAWAL, as manifested by either of the following:

- The characteristic withdrawal syndrome for substance
- Substance (or closely related substance) is taken to relieve or avoid withdrawal symptoms.

SEVERITY:

Mild: Presence of 2-3 symptoms

Moderate: Presence of 4-5 symptoms

Severe: Presence of 6 or more symptoms

TREATMENT

Goal: achieve and maintain abstinence.

Harm reduction models can be used in the short-term interim as an approach within the longer treatment course

- Family therapy approach
- Individual therapy approach: Cognitive Behavioral Therapy +/- Motivational Enhancement
- Twelve step programs (i.e. NA and/or AA)
- **Treatment needs to take place in the least restrictive setting**

CONSIDERATIONS FOR TREATMENT SETTING

- Safety of the teen
- Motivation and willingness of the teen and family to engage in treatment
- Need for limit setting and structure
- Comorbid medical and psychiatric conditions
- Availability of treatment settings
- Preference of teen/ family
- Treatment failures in least restrictive setting

CONSIDERATIONS FOR TREATMENT SETTING (WASHINGTON STATE)

- **Outpatient treatment:**

- Seattle Children's Hospital Co-Occurring Disorders clinic with Dr. Ray Hsiao/ Lisa Chinn, PhD
- Sundown Ranch
- Northwest Recovery Centers
- Ryther Center for Youth and Children
- Belair Clinic

- **Intensive outpatient treatment:**

- Northwest Recovery Centers
- NAVOS
- Belair Clinic
- Sea Mar Community Health Center

- **Residential treatment:**

- NAVOS
- Sundown Ranch
- The Healing Lodge of Seven Nations
- Teen Challenge (faith based)
- Sea Mar Community Health Center

PHARMACOTHERAPY CONSIDERATIONS

- Remember the need to address co- occurring psychiatric disorders (i.e. mood disorder, anxiety disorder, psychosis), failure to do so may result in treatment failure/ relapse.
- Consider co- occurring substance use disorders when selecting pharmacotherapy for the individual- risk of overdose from the substance use (i.e. opioid use disorder and use of opioid receptor blocking agent)
- Alcohol pharmacotherapy considerations
 - Cravings: naltrexone, acamprosate, odansetron
 - Aversive agent: acamprosate

REFERENCES

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