Medical Marijuana (Cannabis) and Workplace Drug Testing and Safety

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Objectives

- History of Marijuana use for medical purposes
- Legal history of marijuana in the US
- Forms of Marijuana (Cannabis) and Potency
- Substance abuse in the workplace
- Health risks of Marijuana use
- Legal Implications of Marijuana Legislation
- Assessing Marijuana Impairment
- Development and management of chemical impairment policy
History of Marijuana as Therapy

- The first recorded medical use of marijuana dates to 2737 BC by the Emperor Shen Deng of China.
- “Marijuana tea” used to treat gout, rheumatism, malaria, and poor memory.
- Medical Cannabis was introduced to the US in mid-19th century by Dr. O’Shaughnessy to treat rheumatism, tetanus, and infantile seizures.
- In 1850 cannabis was included in the *United States Pharmacopeia* where it remained until 1941.
- Late 1800s American medical journals recommended use of hemp seeds and cannabis root for multiple medical conditions.
History of Marijuana as Therapy

- During the 19th century medical use of marijuana more refined especially for increased eye pressure and nausea and vomiting with cancer and chemotherapy
- 1930’s greater than 2000 cannabis medicines worldwide
- 1970’s restrictive legal environment stunted research and withdrawal of support for use in human disease
- 1980’s Discovery of the human cannabinoid neurotransmitter system- critical for normal human physiology, especially in the control of movement, pain, appetite, memory, immunity, and inflammation
- Recent study concludes that Cannabis use is associated with a 6.2 fold increased risk of substance abuse and a 2.7 times increased risk of alcohol abuse disorder
1907 California outlaws Marijuana as a poison
1970 Comprehensive Drug Abuse Prevention and Control Act- all natural cannabinoids are classified as Schedule I substances and therefore illegal
1996 California’s Compassionate Use Act ensures “seriously ill” residents gain access to medical marijuana
2011 DEA- marijuana has “high potential for abuse” and “has no current accepted medical use in treatment in the US and “lacks accepted safety for use under medical supervision”
Legal History of Cannabis in the US

- 1996 California leads with medical marijuana and today many states have followed their lead
- 2018 - 8 states & DC legalized recreational marijuana
  - 21 states legalized medical marijuana
  - 21 states no broad laws legalizing marijuana
- August 2017 DEA maintains marijuana as Schedule I illegal drug
- Physicians prohibited from prescribing Marijuana, recommendation only
- April-October 2011 Arizona 14,925 medical cannabis applicants only 7 denied
Forms of Cannabis and Potency

- **Cannabis Sativa** – is the most common form in the US
- Contains over 400 chemical compounds and over 60 cannabinoids
- **delta 9-tetrahydrocannabinol (THC)** is the psychoactive cannabinoid compound
- **Cannabidiol (CBD)** has the therapeutic effect
- 1980s street marijuana averaged 3.3% THC now the THC level is much higher averaging 20% and retail often 30% or more
- Recognition of therapeutic effect of low THC and high CBD with little intoxication effect - Charlotte's Web, Pharmaceutical Sativex - Europe and Canada
Pharmacokinetics of Cannabis

- Pharmacokinetics - how quickly the chemical is absorbed, metabolized and eliminated from the body.
- Cannabis can be smoked, vaporized, ingested orally, or absorbed through the skin by a patch.
- Smoking - 2 - 56% absorbed, psychoactive effect start within seconds to minutes, maximum effect in 15-30 minutes and begin to taper off in 2-3 hours.
Pharmacokinetics

- Vaporizing – 95% of the vapors are cannabinoids, psychoactive in minutes, maximum effect in 2-10 minutes and decline rapidly over 30 minutes, duration of action 1-2 hours.
Pharmacokinetics

- Ingesting Cannabis - THC is absorbed much more slowly and continues to be absorbed for a longer period of time. There is 10-20% absorbed after ingestion. The psychotropic effect begins in 30-60 minutes reaching peak effect after 2-3 hours and lasts for 4-12 hours. If the Cannabis is mixed with fat containing food, there is more of a delay.
Pharmacokinetics

- Dermal Cannabis – Absorption through the skin is difficult and variable. Once absorbed, peak effect occur in 1.4 hours and are maintained for at least 48 hours.
Drug Use in the Workplace

- US Substance Abuse and Mental Health Administration (SAMHSA) 2007 estimates that 8.4% of full-time workers have engaged in some type of illicit drug use within the preceding month.
- Recent poll found 9.74% of 534 respondents reported going to work after smoking Marijuana.
- Workers who are illicit drug users and users of Cannabis in the states where it is legalized are at increased risk of injury.
- Increased risk of absenteeism and presenteeism
Drug Use in the Workplace

- American College of Occupational and Environmental Medicine (ACOEM) - "Workers who are suspected of being intoxicated with Marijuana or any other substance should be removed from the workplace immediately" and "Marijuana should not be permitted while an employee is on duty unless the employer can determine with certainty the associated neurocognitive (higher brain function) and judgement impairment will not pose a risk to users, coworkers, or the public. This includes assurance of safe transport to and from the job site"

- These jobs include operating motor vehicles, other modes of transportation, forklift driving, overhead crane operation, heavy equipment operation, sharps works… and tasks involving high levels of cognitive function and judgement.

- Evidence Level C: moderate certainty
Health Risks of Marijuana Use

- Hundreds of distinct components can be found in the leaves of Cannabis plants
- Through smoking these lead to irritation of the lungs and a cough and like cigarettes cause COPD or chronic bronchitis and worsen asthma.
- Acute anxiety and a psychosis may occur in new users
- Decreased short term memory and impaired motor skills
- Motor vehicle crashes are 2.0-2.6 times more frequent after Cannabis use
- Serious drops in Blood Pressure when standing and fast heart rate
Health Risks of Marijuana Use

- Psychotic breaks occur in 4% of THC users
- Heavy long-term use results in persistent cognitive defects
- Persistent neuropsychological deficits among adolescents years after stopping use of Cannabis. Adults permanent structural brain changes with chronic use
- Cannabis Hyperemesis Syndrome - persistent vomiting
- Use in pregnancy - damages the fetal brain leading slower growth and lower school achievement
- Lifetime addiction risk 9% for Cannabis, 32% tobacco, and 15% for alcohol
Legal Implications Of Marijuana Legislation

- 2009 US Department of Justice (DOJ) memorandum encouraging federal prosecutors not to prosecute individuals who distribute marijuana for medical purposes in accordance with state law.
- 2013 DOJ issued a memorandum that restated its right to contest the legality of state marijuana laws, but will defer the right to challenge at this time.
- 2018 DOJ reversed the 2009 decision to discourage prosecution by federal prosecutors. Attorney General Jeff Session’s memo reminds employers who take a zero tolerance stance policy, that they are not alone.
- Employers face discordant regulations and legislation - a challenging position when needing to provide a safe workplace.
Legal Implications Of Marijuana Legislation

- American Disability Act (ADA)- as long as marijuana is illegal under federal law, employers who fire or refuse to hire employees for using marijuana are not in violation of the ADA or any other anti-discrimination statute.

- However some states limit employer action against workers who use marijuana according to state standards

- Decision to drug test must be job-related and necessary for business, and conducted when there is evidence of a safety or job related problem
Legal Implications Of Marijuana Legislation

- ADA does not require employers to permit marijuana use as a reasonable accommodation for an employee with a disability
- DOT- Marijuana use remains unacceptable for any employee subject to drug testing under regulations
- Drug-Free Workplace Act (DFWA) of 1988 – all federal grantees with contract of $100,000 or more, or those who receive a federal grant of any value must maintain a drug-free workplace
- DFWA mandates employers to: publish and distribute a policy statement, specify actions taken against employees who violate the policy and provide education on the dangers of drug use
Legal Implications Of Marijuana Legislation

- DFWA- Employees may be subject to discipline including termination if marijuana use is proven, regardless of permission under state law.
- Transportation of marijuana between state lines can lead to federal drug transportation charges.
- State laws varies- some include employee discrimination protection, however most don’t.
- Rhode Island, Massachusetts, and Connecticut have employee protections for medical marijuana patients.
Legal Implications Of Marijuana Legislation

- Colorado allows employers to prohibit the use of marijuana at work, but prohibits from firing employees using lawfully while off-duty and off premises during non-working hours.
- The ND law does not provide any specific employee discrimination protection in this regard.
- Although state laws vary- laws regulating marijuana require employers neither to permit drug use in the workplace nor to tolerate employees who report to work impaired.
- Employers may institute drug-free workplace policies to ensure that employees come to work in an unimpaired state and do not endanger themselves or others while working.
Assessing suspected Marijuana Impairment

- Common self-described effects: relaxation, euphoria, relaxed inhibitions, disorientation, altered time and space perception, giddiness, increased appetite, lack of concentration, altered thought formation, drowsiness, and sedation.

- Physical findings: dilated pupils, red conjunctiva, fast heart rate over baseline, and slow reaction of the eye’s pupil to light.

- Law enforcement officers use some of these tests to determine road-side sobriety.

- Urine levels of THC do not correlate with impairment.
Assessing suspected Marijuana Impairment

- Blood levels correlate more directly
- Blood level 1 ng/mL risk of crash 2.18 times more; 5 ng/mL risk of crash 4.72 times more
- Colorado and Washington state use 5 ng/mL as driving under the influence
- Federally mandated employment drug testing is limited to urine drug testing, in non-federally regulated drug testing there is no prohibition of blood testing (seek legal counsel on this topic)
- Impairment assessment crucial for safety officers and employers
Assessing suspected Marijuana Impairment

- Psychomotor Vigilance Tests (PVT) - a screen that measures alertness deficits
- ExxonMobil Medical conducted a 10 minute PVT at integrated refining/petrochemical plants and found that the PVT is a valuable tool to determine fitness for duty
- PVT WorkFit iPad app by Pulsar Informatics Inc.
- The result of the test is compared to the individual's baseline test so employee specific.
Assessing suspected Marijuana Impairment
Assessing suspected Marijuana Impairment

- Assessment of impairment is not a simple process
- Any assessment used must be incorporated in your drug testing policy
- The employee’s admission that they feel a “high” is most closely linked with finding impairment
- The higher the THC content of the Cannabis, the more the impairment
- The higher the CBD content and lower the THC content, the less the impairment
Drug Testing Policy and Marijuana

- Under OSHA rules, employers have a federal mandate to address impaired workers who contribute to unsafe work environments.

- For the most part, courts have ruled in favor of the employer’s right to maintain a drug-free workplace and exclude medical marijuana patients with a positive marijuana test, whether or not use occurred just before or during work.

- Workplace policies that rely on the observation of specific individual chemical influence rather than a specific drug test result only, may provide an employer with greater liability protection.
Drug Testing Policy and Marijuana

- Drug-free workplace program should be developed by HR in consultation with their legal departments.
- Small businesses without HR departments must still follow all federal guidelines regarding substance abuse—DFWA, ADA, Family and Medical Leave Act, and DOT.
- Sometimes the drug testing policy must be determined through collective bargaining even if mandated by federal law.
- Historically, employees in safety-sensitive positions have been held to more stringent standards regarding drug use.
Drug Testing Policy and Marijuana

Workplace policies for marijuana use should include the following:

a. Purpose/intent of the program
b. Employees covered by the policy
c. When the policy applies
d. Prohibited behavior
e. Whether employees are required to inform their supervisor of medical marijuana use or drug-related convictions
f. Whether the policy covers searches and extent of the search allowed
Drug Testing Policy and Marijuana

g. Observable and measurable behaviors indicative of unsafe job performance

h. Referral mechanism for unsafe job performance

i. Requirements for drug testing

j. Consequences for policy violation

k. Whether return-to-work agreements are needed after an absence related to substance abuse

l. Measures to protect employee confidentially

m. Measures for policy enforcement
Drug Testing Policy and Marijuana

n. Steps to communicate policy to employees, supervisors, occupational health professionals, management, union management when applicable, and contractors and their employees

o. Assistance is available to treat substance use or abuse
Joint Task Force on Substance Abuse

1. Employees covered by federal drug testing regulation (DOT) marijuana use, both on or off work, is prohibited. Employer may use urine drug testing screening.

2. Employees in safety sensitive positions must not be impaired at work by any substance whether illicit or legally obtained- consider prohibition of marijuana use on the job.

3. Employers residing in or near states that allow the use of recreational marijuana must establish a policy regarding off duty use of marijuana. Legal consultation.

4. Most states that allow medical marijuana, employers may be able to continue policies banning or restricting the use of marijuana- may change on basis of future case law. ADA does not apply as marijuana illegal under federal law.
5. Most workers’ compensation statutes allow reduced benefits when a worker is under the influence of alcohol or illegal drugs

6. All employers must have clear policies and procedures for supervisors to follow regarding criteria for identifying potential impairment and the process for referring an employee suspected of impairment for evaluation

7. Employee education is vital to ensure compliance with company expectations. Education needed at hire and again at regular intervals

8. In states where marijuana use is permitted, employers should provide education regarding the detrimental effect of marijuana use, and delayed effects of edible products
Summary

- Closely monitor all employees in safety-sensitive positions, whether covered by federal drug testing regulations or not
- Best practice would support employers prohibiting marijuana use at work
- Clear policy to guide decisions on when marijuana use is allowed and how to evaluate impairment must be widely distributed and carefully explained to all workers
Questions ☝️ ☝️ ☝️
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