Is There a Pill For That?/Counseling the Marijuana User

Daniel Dionne, MD, ACBC

A. How Doctors Think

1. The Disease Model of Medicine
    - The Art of Medicine
    - The Profession of Medicine
    - The Science of Medicine
2. Paul Ehrlich
3. Definition of pathology
4. Chemotherapy
5. The “Magic Bullet”
6. Treating cancer
7. Why is pathology important? Pathology=Disease
8. Disorders
    - Making Lists
    - The Challenge of a disorder
9. The Science of Psychiatry
10. Conclusion: Psychiatry is Squishy Science.

B. Understanding Medications

1. Depression and Pills
    - How it starts
    - Synapses and nerves

Medication List

Antidepressants

SSRIs
Citalopram (A, OCD)
Escitalopram (A, OCD)
Fluoxetine (A, OCD)
Fluvoxamine (A, OCD)
Paroxetine (A, OCD)
Sertraline (A, OCD)

SNRIs
Desvenlafaxine
Duloxetine (A)
Levomilnacipran
Milnacipran
Venlafaxine (A, OCD)

Atypical Agents
Agomelatine
Bupropion (A)
Mirtazepine (A)

Serotonin Modulators
Nefazodone
Trazodone
Vilazodone
Vortioxetine

Tricyclics and Tetracyclics
Amitriptyline
Amoxapine
Clomipramine
Desipramine
Doxepin
Imipramine
Maprotiline
Nortriptyline
Protryptiline
Trimipramine

MAOIs
Isocarboxazid
Phenelzine
Selegeline
Transdermal
Tranylcypromine

Anti- Anxiety Medications

Sedating Anxiety Medications
Buspirone
Gabapentin
Pregabalin

Benzodiazepines For Anxiety
Alprazolam
Bromazepam
Chlordiazepoxide
Clonazepam
Clorazepate
Diazepam
Lorazepam
Oxazepam
Prazepam

Others
Pregabalin
Mirtazepine
Quetiapine (A)
Hydroxyzine
Imipramine

Sleeping Medications

Benzodiazepines for Sleep
Estazolam
Flurazepam
Nitrazepam
Temazepam
Triazolam
Quazepam

Non-Benzodiazepine Sleep Agents
Eszoplicone
Zaleplon
Zolpidem
Zoplicone

Anti-Psychotic Medications

First Generation Anti-psychotic Medications
Chlorpromazine
Fluphenazine
Haloperidol (B)
Loxapine
Perphenazine
Pimozide
Thioridazine
Thiothixene
Trifluoperazine

Second Generation

Agents

Aripiprazole (B)
Asenapine (B)
Brexpiprazole
Cariprazine (B)
Clozapine
Iloperidone
Lumateperone
Lurasidone
Olanzapine (B)
Paliperidone (B)
Pimavanserin
Quetiapine (A, B)
Risperidone (B)
Ziprasidone (B)
Carbamazepine
Gabapentin
Lithium
Valproic acid

OCD Medications

Clomipramine
See Above List

Key

A=Anxiety
B= Bipolar
OCD=Obsessive Compulsive Disorder

Bipolar Medications

2. Do the pills work?

- The study
  -Medications,
  -Counseling (CBT),
  -Complementary (Acupuncture, meditation, Omega 3 fatty acids, SAM-e, St John's Wort, and Yoga)
  -Exercise treatments for the diagnosis of Major Depression.
  -It looked at benefits vs. harms of these treatments.

- The results

  -The benefit of anti-depressants and Cognitive Behavioral Therapy are similar, and are viable choices for initial treatment.
  -There was no statistically significant difference in efficacy of antidepressants and other treatments.
  -That means anti-depressants did not work better than the others. That means people have several viable options.
  -Antidepressants had higher risks for adverse effects than most other treatments. That means anti-depressants work as well as counseling, not better.
  -Only 60% of patients treated with antidepressants respond-40% do not.
  -Only 30% are cured, achieve remission- 70% are not cured.
  -Anti-depressants and aerobic exercise had similar results.
  -Adding CBT to an antidepressant did not significantly improve the results. Not additive.

3. Why do doctors prescribe anti-depressant medications?

C. How should we think about our counselees if they are taking psychiatric medication?

1. Putting off and putting on

Dr. Dan's Put Offs

- Don't judge them if they are on medication.
- Don't make them feel like they have inferior faith if they are on medication.
- Don't tell them that it is a sin to be on medication.

Dr. Dan's "Put Ons"

- Ask what was going on at the time they started meds and what they were hoping the meds would do?
- Ask why their doctor prescribed this medication and were there other medications that have been tried?
- Ask about side effects of the medication.
- Ask how well the medication has worked for them.
- Ask if you can go with them to their next doctor's visit
- Ask if you can have permission to speak with their doctor(will need a signed release)
- Get to work talking about heart issues.

D. Resources

1. Hodges, Charles (2012) Good Mood, Bad Mood, Shepherd Press.
2. Mack, Wayne. (2006) Out of the Blues Focus Publishing.
3. Welch, Edward T. (2004). Depression: A Stubborn Darkness. Greensboro, NC: New Growth Press.
4. Milton Vincent, (2008) A Gospel Primer for Christians, Focus Publishing.
5. Arthur W. Pink, (1975) *The Attributes of God*, Baker Books
6. Jim Berg, (2005), Taking Time to Quiet Your Soul, BJU Press
7. National Suicide Prevention Hotline,(24/7)800-273-8255
8. www.suicidepreventionlifeline.orb/gethelp/my3-app.aspx

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Intro: Your friends, your family and your counselees are all talking about marijuana and CBT. This next hour will help you be able to add "salt" to those conversations.

1. Case presentations

Physical Suffering
Youthful Dangers
Marijuana Intoxication
"My Kids Made Me Use It"

2. Botany/Agriculture

A. **Cannabis** is a genus of plants that includes three varieties; Sativa, indica and ruderalis. The scientific name for marijuana is Cannabis sativa.

B. "**Marijuana"** refers to all the parts of the sativa variety, whether that is the leaves, stalks, seeds, resins, etc. The two main ingredients are:
-THC (delta 9 tetrahydrocannibinol) today's marijuana has been engineered to have higher concentrations of THC, between 5-20%
-CBD (cannabadiol)-has variable concentrations of CBD
-Grows like a shrub and needs to be in a hot house.

C. **Hemp** is also known as "Industrial Hemp" and is a different variety of Cannabis sativa. It was outlawed in the US in the 1930s but is now legal again in several states.
-It has been grown for thousands of years, and can be used for rope, textiles and lots of other applications.
-Contains minimal amounts of THC, 0.3%
-Contains higher concentrations of CBD
-Grows outdoors in fields and can reach 20 feet in height.

Because Hemp is in the same family as Marijuana it has been considered a controlled substance and had a hard time becoming an acceptable crop that can be grown in the US. The Hemp Farming Act of 2018, which was part of the 2018 Farm Bill was signed by President Trump on December 20, 2018, changed hemp from a controlled substance to an agricultural commodity, which made it easier for farmers to get loans to grow hemp, and allowed them to get federal crop insurance.

2. Medico-legal: (How marijuana is viewed by law makers and nations)

The United Nations International Single Convention on Narcotic Drugs said the following: “the cannabis plant, cannabis resin and its extracts and tincture are classified under Schedule I, meaning use should be allowed for “medical and scientific purposes”, also Schedule IV, for “medical and scientific research”.

US Federal law classifies Cannabis and all phytocannabinoids as Schedule I, “which have high potential for abuse and no currently accepted medical use in the United States, illegal to possess or use under federal law.” It is in the same category as LSD and Heroin. It has “no accepted medical use”.

Result: The Federal Government (FDA and DEA) does not recognize marijuana as legal in any state.

States where marijuana is legal for medical use: 36 states and the District of Columbia.

Recreational use: legal in 18 states and District of Columbia

Illegal for any use: Idaho and Nebraska

3. Causes for concern:

Cannabis is the most commonly used illegal psychoactive substance and is used by an estimated 192 million individuals worldwide.

The increase of cannabis use over the past decade has occurred largely in adults, rather than in adolescents.

Cannabis use was initiated by 2.6 million individuals in 2016, almost half (46%) were age 12-17.

33% of users are age 18-25

Men are twice as likely to use as women. Women initiate at the same rate but discontinue at higher rates than men.

Full time college students use at the same rate as non-student users. College graduates use it less.

Adolescents in school have a 2-3x greater prevalence of cannabis use if they have the following…

Failing grades.

Non-participation in extracurricular activities.

Dislike of school.

Others in their grade who use cannabis, alcohol, or cigarettes.

Adolescents with frequent attendance at religious services or strong religious beliefs are 2-3x less likely to use marijuana in the last month.

Rates of cannabis use in the United States are higher in young adult men with low incomes and no college education than among other population groups. Approximately one in eight current regular cannabis users develops a cannabis use disorder. (More on cannabis use disorder later)

4. Adverse effects

Cannabis use before age 17 years is strongly associated with lower educational attainment and increased use of other drugs.

Individuals with cannabis use or cannabis use disorder often use other psychoactive substances, especially alcohol and tobacco. Individuals with cannabis use disorder may suffer from schizophrenia, and several other psychiatric disorders, including depression, bipolar disorder (mania), anxiety disorders, and antisocial personality disorder.

Cannabis acutely impairs attention, concentration, episodic memory, associative learning, and motor coordination in a dose-dependent manner. The higher the dose the greater the impairment. Chronic cannabis use is associated with impairment of verbal memory and cognitive processing speed, which does resolve after at least a month of abstinence.

Neuroimaging studies of the brain show decreased volume of the hippocampus and lower hippocampal gray matter in adult cannabis users.

Functional MRI scans show decreased neuronal activity in anterior cingulate cortex and right dorsolateral prefrontal cortex and increased functional connectivity across other brain regions.

Substantial evidence suggests that chronic cannabis use, especially during adolescence, is associated with later development of schizophrenia. The mechanisms responsible for the association between cannabis use and schizophrenia remain unclear. Some cannabis users will develop cannabis-induced psychosis, and if they smoke more before the age of 16 are more likely to develop psychosis.

Those with schizophrenia will have exacerbations of their disorder if they use cannabis.

Chronic cannabis use has not been found to be associated with serious or chronic medical conditions or death from medical conditions. But cannabis use is associated with injury and death from motor vehicle accidents.

Cannabis users are twice as likely to go the ER or be hospitalized over the next five years.

Cannabis smoking is associated with acute, transient respiratory symptoms, but chronic use is not associated with impaired lung function (like emphysema). There are probably carcinogens like in tobacco in marijuana, but no long-term studies at this time to prove an increased incidence of cancer.

Smoking marijuana causes cough, sputum production, wheezing, mild airway obstruction like asthma and conjunctival injection (bloodshot eyes)

Cannabis smoking acutely increases sympathetic activity and myocardial oxygen demand, and is associated with a small increased risk of heart attack (5x more likely in first 60 min after cannabis use), and stroke (17% increase). The process of inhaling and holding one's breath can lead to spontaneous pneumothorax (collapsed lung).

Cannabis use is also associated with periodontal disease, hyperemesis syndrome, and a lower sperm count. Hyperemesis syndrome is a relatively rare condition involving episodic severe nausea and vomiting and abdominal pain. It used to be thought that marijuana could be used to treat nausea and vomiting, but it also seems to cause it.

Pregnancy: There is no long-term effect on fetal health or neonatal outcome, but there is a 77% risk of decreased birth weight, and the baby is twice as likely to go straight to the neonatal ICU.

Breast milk: Does not reach the high concentrations in mother's blood, only 0.8-2.5% of the concentration in mother's blood.

5. Cannabis intoxication:

Site of Action: Cannabinoid receptors:

THC acts on two different receptors in the human body. The CB1 receptors are located mostly in the brain. CB-2 receptors are in the peripheral nerves of the body, may affect the immune system and has effects on the vas deferens (spermatic cord).

Pharmacokinetics studies how THC gets into the blood stream, how long it stays there and where it goes from there. THC does not stay in the blood stream for long, then it moves into the fat cells and stays there for hours or days.

When someone inhales THC the onset of psychoactive effects is within 15-30 minutes and will last for about 4 hours. 2-3 mg of inhaled THC is enough to cause intoxication for a naive user.

If Cannabis products are ingested, the onset of symptoms may be from 30 min to 3 hours, and the psychoactive effects may last up to 12 hours. Only 5-20% is absorbed through the intestinal tract, so it may require a 5-20 mg ingested dose in the naive user to get the same effect as 2-3 mg inhaled.

Whether one takes 2-3 mg inhaled or 5-20 ingested, the results are impaired attention, concentration, short-term memory and executive functioning. Higher doses >7.5 mg can results in nausea, low blood pressure, delirium, panic attacks, anxiety, myoclonic jerking, and psychosis.

Children may accidentally overdose especially with oral preparations. The oral products look appealing to children, like gummy bears, soft drinks, brownies, etc.

What does an intoxicated person look like? Most people do not seek medical care when intoxicated with marijuana, unless they are having undesirable side effects like intractable vomiting, behavioral problems (dysphoria or agitation), bronchospasm, pneumothorax, chest pain or heart attack. Children who have accidentally overdosed may be sleepy, euphoric, irritable, or show behavior changes, and large overdoses can cause coma and decreased respirations.

Although the "high" may be over in 4 hours, psychomotor impairment can continue for 12-24 hours. The user will not perceive their impairment. Example: licensed pilots were tested 24 hours after exposure and put on a flight simulator, and all showed impaired function, but only 11 percent felt like they were impaired. This can affect operation of heavy equipment like automobiles, trains, motorcycles, etc.

Drivers using cannabis are 2-7x more likely to be responsible for car accidents. Higher plasma levels of THC correlate with a higher probability of causing an accident.

Urine drug screens can be positive for 1-4 weeks after last use. A positive urine drug screen is not very helpful in an acute situation. Blood tests are more difficult to administer, but might be helpful in investigation of an accident.

How much THC needed to be intoxicated? This is extremely variable depending on concentration in the marijuana being smoked and the depth of inhalation…possibly as little as 2-4 inhalations/hits.

6. Cannabis use disorder:

Here is the DSM-V criteria for this diagnosis:

At least two of the following symptoms within a 12-month period indicates cannabis use disorder:

1. Taking more cannabis than was intended
2. Difficulty controlling or cutting down cannabis use
3. Spending a lot of time on cannabis use
4. Craving cannabis
5. Problems at work, school, and home as a result of cannabis use
6. Continuing to use cannabis despite social or relationship problems
7. Giving up or reducing other activities in favor of cannabis
8. Taking cannabis in high-risk situations
9. Continuing to use cannabis despite physical or psychological problems
10. Tolerance to cannabis

11. Withdrawal when discontinuing cannabis.

Severity:

Mild: 2-3 symptoms

Moderate: 4-5 symptoms

Severe: 6+ symptoms

Your counselee may have this diagnosis. Now you know how the diagnosis was made. You don't need to make this diagnosis for your counselee, but you might use this information to show her she has a problem, even by secular criteria.

7. Cannabis Withdrawal: There is a constellation of signs and symptoms occurring within one week after abrupt reduction or cessation of heavy and prolonged cannabis use, including irritability, anger, anxiety, depression and disturbed sleep. This is most likely to occur in those that use cannabis daily for long periods of time. Those that use once weekly are not likely to have withdrawal symptoms.

Summary**:** The cannabis user does not need to be hospitalized or go on meds to help with withdrawal symptoms like someone might with alcohol withdrawal. They need support to go through withdrawal. They will be tempted to relapse in order to relieve their symptoms. If you do not take them to the hospital, you are not harming them. If you are worried that there may be other problems, like psychiatric conditions, possibly other drugs, it is wise to take them to the ER.

8. CBD

CBD and THC are the two main ingredients in marijuana.

CBD is thought to be less psychoactive with little or no abuse potential.

There are lots of reasons we don't have good research on these substances.

As a result, most of the excitement about CBD is based on anecdotal evidence.

Here is the small amount of accepted scientific evidence:

Cannabidiol-Epidiolex is a new seizure medication, for certain rare seizure disorders.

CBD can also be helpful in treating muscle spasms in patients with Multiple Sclerosis.

<u>Current status/thinking</u> (what you will read if you Google CBD):

"CBD is a naturally occurring molecule without psychoactive properties that is found in the cannabis plant. It can be procured by patients from legal marijuana dispensaries or street suppliers (often as CBD oil).

It is unlikely that there will be any good research on the benefits of CBD products, but you will continue to hear lots of people rave about the benefits, which are anecdotal.

9. Biblical input:
As you meet with your counselee and want to see what the Bible says about Marijuana, here are some good passages for you to study:

A. Creation
1. God is Creator and made all things good. Genesis 1:12
2. Everything created by God is good. I Timothy 4:4
3. There must be a "good" purpose for marijuana, but that is not the same as saying all purposes of marijuana are good. Medical science at this time does not have good information about what marijuana is good for.

B. Liberty Issues
When it comes to "liberty issues" all believers are commanded to think about others: Rom. 14: 20-23, I Cor. 8:13 Will your cannabis use cause others to stumble in your family, among other believers, among unbelievers?

C. Government/Authorities
1. Obey your parents: Eph. 6:-3, Ex. 20:12, Col. 3:20
2. Obey your authorities: Eph. 6:5 obey your earthly masters Col. 3:22-25. Your employer may prohibit use of marijuana and a positive drug screen could get you fired.
3. Your pastors or elders may prohibit its use: Heb. 13:17
4. Obey the government Rom. 13:1-7, Titus 3:1, I Peter 2:12-17
The state you live in may say it is legal, but the federal government still says it is illegal. In states where marijuana is legal, the legal age is 21, so a young person is in rebellion for under-aged use as well.
If your counselee is using it for "medical purposes" there is a very real question about when they can justify it as honoring to God. They may try to justify it for "medical purposes" as a way to treat suffering.

Summary:
At this time, you can exhort your counselee to discontinue marijuana just based on submitting to Government authorities, but that argument will likely go away when marijuana is legalized at the federal level. If they have trouble with this argument, then there are heart issues to explore, like the following…

D. Medication-is marijuana permissible for medical purposes?
1. Medications are advised sometimes in the Bible for relief of suffering Prov. 31:6, Isaiah 38:21, Luke 10:34 Good Samaritan, I Tim. 5:23 wine for his stomach.
2. Traditional medicine is not always approved by God 2 Chron. 16:12.
3. Medicine does not always work Mark 5: 25-26, Luke 8:43

E. Intoxication

1. Alcohol is not prohibited in the Bible. John 2:9-10 Jesus made it. Some examples:
- Glad heart- Psalm 104:15
- Sacrificial system-Drink offering in Ex. 29: 38-57, Numbers 15:7, I Chron. 29:20-22.
- Alcohol in the tithe-Deut. 14:22-29
- Drunkenness is condemned- Gen. 9:21 Noah, Gen. 19:30-38 Lot, Prov. 23: 20-21, 30-35, Gal. 5:19-21, I Tim. 3:3, Titus 1:7,
- Consider the effect on others- Rom 14: 20-2,
- We should not be dominated by anything- I Cor. 6:12
- There are examples in the Bible where alcohol may be consumed without becoming drunk or intoxicated.

2. Most users of cannabis are consuming it to get "high" or to get a "buzz". There are godly ways to use alcohol without becoming intoxicated, but marijuana does not seem to meet those criteria. If 2-3 puffs cause impairment, this is likely the same as drunkenness or intoxication. This would be the same as drinking alcohol with the intention of getting drunk.

3. The big heart issue: "Do not get drunk with wine, for that is debauchery, but be filled with the Holy Spirit!" Eph. 5:18, "Glorify God with your body" I Cor. 6:19-20

10. Implications for your counselees:

Task- Information gathering: Your PDI may already tell you if the counselee uses marijuana, alcohol, prescription meds, etc. Ask them the following:
- Route- ingested or inhaled?
- Frequency- Daily? Weekly?
- Cost-how much money are they spending?
- Duration- how long have they been using?
- Purpose- Pain, anxiety, sleep, some other medical purpose.
- Dependence- have they ever tried to stop? How did that go? Did they have withdrawal symptoms?
- Effects- go down the list of symptoms in Cannabis Use Disorder from page 5 and 6.

Heart Issues-
- If illegal in your state- ask how he thinks about his illegal actions?
- If legal in your state- ask how she thinks about it being illegal at the federal level?
- Is there anyone in her life that disapproves of her cannabis use? Parents, family, friends, pastor, teachers? How does she think about that?
- Does his cannabis use harm anyone? Self, relationships, physical danger?
- What does he think God thinks about his cannabis use?

Counsel-

- Authority: passages on authority- see above
- Intoxication: passages about intoxication-see above
- Medical: passages on suffering
- Anxiety: passages on anxiety/worry
- Sleep: passages on sleep

11. Summary:

-Marijuana is created by God and is "good", but …
-There is a lack of helpful evidence at this time to show what it is good for, how it can be helpful, and what doses are harmful. As a result, most medical doctors will not feel comfortable prescribing it for their patients.
-Because it is illegal at the Federal Level, almost everyone who uses it will need counseling regarding his view of the authorities God has put in his life.
-Since most people are using it to get intoxicated, a Christian is going to need to stop using marijuana and learn to find her joy in a rich relationship with Christ.
-If your counselee is using marijuana for medical reasons, you will want to explore what legal means they have tried, and how to help him have a godly attitude about his suffering.
-If someone is using CBD products for pain or sleep, it will be more difficult to call this a sin issue. It will be helpful to understand your counselee's motivation for using CBD and try to discern if there are any heart issues that need to be addressed.

12. Resources:

Tom Breeden, Mark L. Ward, Jr., Can I Smoke Pot?, Marijuana in Light of Scripture. Cruciform Press, October 2016.

Heath Lambert: Truth in Love Podcast 98
https://soundcloud.com/acbc-2/til-098-should-christians-smoke-marijuana

Douglas Wilson, Future Men, Appendix A Liberty and Marijuana, Canon Press, 2001Liberty and Marijuana Appendix A, pages 173-83.

David A. Gorelick, MD, PhD, Andrew J Saxon, MD, Richard Hermann, MD, UpToDate Official reprint. Cannabis use and disorder: Epidemiology, comorbidity, health consequences and medico-legal status, Cannabis withdrawal, Cannabis: Acute intoxication

George Sam Wang, MD, Michele M Burns, MD, MPH, Stephen J Traub, MD, James F Wiley, II, Md, MPH, UpToDate Official reprint, Cannabis (marijuana) Acute intoxication, Synthetic cannabinoids: Acute intoxication.

Marijuana-Impaired Driving A Report to Congress, NHTSA, July 2017,https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf

David A. Porter, MA, LADC, Use Disorder DSM-5, 305.20, 304.30, https://www.theravive.com/therapedia/cannabis-use-disorder-dsm--5%2C-305.20%2C-304.30

Wikipedia, Entries on Hemp and CBD oil

Ilana Braun, MD, James Tulsky, MD, Reconciling the Discrepancies in Medicine's Relationship to Medical Marijuana, Annals of Internal Medicine, October 2, 2018

Salomeh Keyhani, MD, MPH et al, Risks and Benefits of Marijuana Use, A National Survey of US Adults, Annals of Internal Medicine, September 4, 2018.

John Piper, "Don't Let Your Mind Go to Pot", https://www.desiringgod.org/articles/dont-let-your-mind-go-to-pot