Clearing Up Cannabis

The growing controversy and interest in **Cannabis**, commonly known in the United States as **marijuana**, is attributable to several factors: the rapid legalization or decriminalization of the substance, the debate across state lines and spiritual arenas regarding medical marijuana, and also the increasing interest in Cannabidiol (CBD) oil. This all creates confusion and questions regarding the differences between, and the uses and effects of Cannabis and its related products. Therefore, in order to discuss this issue or weigh in on its appropriateness in our society, it is important to know the differences, the uses, and the effects of each type and view them as different entities altogether.

Christians tend to lean toward either end of the spectrum: from 'all things are permissible' to 'nothing is beneficial or profitable.' Therefore, this brochure aims to clearly provide information, guidelines and cautions for personal consideration and decision-making rather than blanket statements.

Key terms:

The following terms are foundational for greater understanding of the topic.

Cannabidiol (CBD) is extracted from industrial Hemp. The breeding of the hemp plant affects the amount of CBD in the plant. There are two principal strains of hemp, of which one, the **indica strain,** is almost entirely CBD. CBD contains minuscule amounts of THC (sativa strain) in it. Therefore, CBD does not create the "high" that is found in marijuana for recreational use. **Tetrahydrocannabinol (THC)** is the <u>psychoactive compound</u> in marijuana that produces the high. THC is produced in higher quantities in the **sativa strain** of marijuana and is therefore popular with recreational users.

Medical marijuana (MM) is a purposefully grown mixture of the two types of strains (CBD and THC) in order to reap the benefits of both for purposes of medical treatment. A prescribing doctor will guide a patient towards a strain specific to the diagnosis being treated.

Recreational Marijuana (RM) is grown to contain more THC than CBD, and is found in shops where marijuana has been legalized.

Street Marijuana (SM) as seen in drug culture, contains additional substances to stretch or maximize the high or feeling one receives from its use. SM may contain butane, pesticides and fertilizers, fungus and bacteria due to storage and production of the plant. Additionally, PCP, Heroin, Fentanyl, embalming fluids, cocaine, laundry detergent (for smell) and LSD can all be added to increase its appeal. SM is unregulated and has the potential to do cause long-term harm, or even death, due to the additives.

Synthetic marijuana, better known as K2 or Spice, is not marijuana. It is not safe, and its use is strongly discouraged by the National Institute on Drug Abuse (NIDA). The adverse effects are known to have lifelong, or even fatal, effects on the health of those that use them.

Basic differences be	etween CBD	and THC. ¹
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CBD	ТНС
Feelings of heaviness	Feelings of euphoria
Physical effects	Psychological effects
Less than .3% THC (undetectable)	Greater percentage of THC
Dense short plant structure	Tall and thin plant structure

How it works²

THC: is like the cannabinoid chemicals that we have naturally in our bodies.³ When one ingests or inhales THC it then connects and activates the brain's cannabinoid receptors. This then sets our reward system into action thereby reducing pain. It is when THC binds to the receptors that the high is also produced. Plants which have the highest levels of THC are popular with recreational users.

CBD: also interacts with the brains pain receptors, but binds differently and therefore does not produce the high. Plants with little to no THC are harvested and sold as CBD oils as well as added to food products and lotions and sold in stores legally for health purposes.

Plants that are grown specifically to have a **combination of CBD and THC** are harvested for use as medical marijuana.

Medical Marijuana

Medical Marijuana OILS

Full Extract Cannabis Oil (FECO), not to be confused with CBD oil, comes from the full cannabis plant, using grain alcohol or ethanol in the process. Treatment comes in the forms of lotions, balms,

salves, and patches. It can also be found in edibles such as cookies, brownies, or candies infused with

the oil.

Typical uses for Medical Marijuana

Cancer

- Studies show that smoking can help reduce nausea and vomiting during the chemotherapy process.
- Studies show that smoked or vaporized marijuana helps to alleviate pain suffered from neurological damage.
- Ongoing studies are being conducted to understand the relationship between medical marijuana and the treatment of tumors and other symptoms that are experienced by cancer patients.

Alzheimer's Disease

- For depression treatment especially in the early stages of the disease.
- In a 2014 study the Journal of Alzheimer's Disease analyzed the potential effects of THC specially on the disease. They discovered that THC helped slow the advancement of the proteins that build up in the brain, an indicator of Alzheimer's Disease. ⁴

General Pain

- Often prescribed in the form of rubs, creams and lotions infused with THC.
- o Relief from pain associated with joints and nerve damage
- Used for treatment of non-migraine headaches

Mental Health

- Animal studies have shown that the CBD found in MM may treat Obsessive Compulsive Disorder, Post Traumatic Stress Disorder, Panic Attacks, Schizophrenia, Moderate Depression and Generalized Anxiety.
- Side effects of MM are increased anxiety conditions and panic disorders.

Eating Disorders

 In many cases of anorexia and bulimia, the body's endocannabinoid system is underutilized making the brain look at food as undesirable. MM is used to stimulate this system and help the brain treat food as a reward again.

Glaucoma

• MM helps relieve the pressure build-up in the eyes for hours at a time.

Multiple Sclerosis

• Treatment of tight, stiff muscles and muscle spasms

Seizure Disorders

• Some evidence has shown a dramatic drop in seizures after taking this drug.

"It's not yet proven to help many of these conditions, with few exceptions. The greatest amount of evidence for the therapeutic effects of cannabis relate to its ability to reduce chronic pain, nausea and vomiting due to chemotherapy, and spasticity from MS." according to Marcel Bonn-Miller who is a substance abuse specialist at the University of Pennsylvania.⁵

Currently, even if MM is effective in treating nausea, there are now newer drugs available that work at least as well as, and often better than MM. There comes a point where the question needs to be asked: 'Is MM being used because of the added benefits, ie. the high, or because it truly is the best drug available to treat the condition?'.

"Whether marijuana works will depend on what the alternatives are. Even if a given drug isn't very effective, it may be the best treatment that mainstream medicine can offer for that problem at the time, so we'll say that (for now) it works. However, as other better, safer treatments are developed, that drug will start to look less attractive. Eventually, doctors will set it aside. In the 1970's marijuana was commonly used to treat glaucoma. Although marijuana is effective in treating glaucoma, new drugs have proven to be much better, so marijuana is no longer recommended."6

Side Effects of Medical Marijuana⁷,⁸

Blood Shot eyes Depression Dizziness Fast heartbeat Hallucinations Low blood pressure Dependence Breathing problems Impaired reaction times Memory issues Loss of concentration Interactions with medication Psychotic episodes Mental health issues for those predisposed to them Furthermore, Marijuana, in general, has some of the same chemicals found in tobacco.

evidence of increased risk for bronchitis and other lung problems.

]The National Institute on Drug Abuse says marijuana can be addictive and is considered a "gateway drug" to using other drugs. "The higher the level of THC in marijuana, including MM, the more likely you are to become dependent." ⁹

"The drug can also affect judgement and coordination, which could lead to accidents and injuries. When used in the teenage years when the brain is developing, marijuana might affect IQ and mental function." ¹⁰

Regulation

There is limited research that has been done to determine its true effects, benefits and longterm results. "At the same time, the FDA requires carefully conducted studies (clinical trials) in hundreds to thousands of human subjects to determine the benefits and risks of a possible medication. So far, researchers haven't conducted enough large-scale clinical trials that show that the benefits of the whole marijuana plant outweigh its risks in patients it's meant to treat." ¹¹ Since it is considered a Schedule 1 drug by the US Drug Enforcement Agency (DEA), the same as Heroin, LSD and ecstasy and likely to be abused and lacking in medical value, a special license is required to study it. Additionally, the cost and length of time necessary to do appropriate studies is prohibitive.

The DEA is attempting to support additional research and to make the process easier, until then much caution must be used in deciding to use MM. It is almost impossible to know what you are getting as the testing of marijuana in most states is optional.

Medical marijuana only has approval from the <u>U.S. Food and Drug Administration (FDA)</u> as a safe or effective treatment for two conditions. These are rare and severe forms of <u>epilepsy</u> that involve seizures that other drugs have not been able to control. The name of the drug is Epidiolex. It contains a purified form of CBD, and the FDA gave approval in June 2018. The FDA have also approved medications containing synthetic THC cannabinoids called dronabinol (Marinol) and nabilone (Cesamet). These drugs reduce nausea in people undergoing cancer treatments and increase appetite in people living with HIV. The FDA have not yet approved the use of any marijuana drugs for pain relief ¹²

However, that has not stopped it from being used for a myriad of medical symptoms and problems. Cannabis has been used as a medical treatment for thousands of years. MM is not overseen by the FDA in the same way that prescription medications are. This means that the strength of ingredients in MM can differ depending on where it is purchased. Clinics and dispensaries are all run differently, often by those that do not understand the product or how it works. "The stakes are too high to let some clinics do what they want. Medical marijuana is becoming too widespread, and the risks are too great, to leave the patient to fend for themselves, and let the buyer beware."¹³

The volume of information out there regarding the risks, uses, variety, and the amount of THC v. CBD and other ingredients is widespread and confusing. For the medically trained it is a challenge to sort through it, and is almost impossible for those without medical a background. With the additional

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danger that addiction is still possible, depending on the amount of THC consumed, it would seem like one was playing Russian roulette with his or her life. In most cases, there are other drugs available that are safer than MM for the chemical makeup and its side effects are more widely understood

Medical Marijuana and the Opioid Crisis

One of the biggest arguments for the increased use and legalization of MM is that it will serve to curve opioid abuse, even among those that have been prescribed opioids such as OxyContin for pain. While there is some evidence of this, caution must be taken regarding the choice to use it as a replacement to opioids.

A survey of over 3,000 MM users found that 30% had used opioids in the past 6 months. A large majority reported that marijuana was more effective alone than when used with opioids. Almost unanimously they said that they were able to decrease their opioid usage when on marijuana.¹⁴ The circulation of this kind of information has led to many turning from one potentially abusive drug to another.

"To date, research into the effects of cannabis on opioid use in pain patients is mixed. Some data suggest that medical cannabis treatment may reduce the dose of opioids required for pain relief, while another NIH-funded study found that cannabis use appears to increase the risk of developing nonmedical prescription opioid use and opioid use disorder. Though no single study is definitive, they cumulatively suggest that medical marijuana products may play a role in reducing the use of opioids needed to control pain, but that these products don't come without risk. More research is needed to investigate the potential therapeutic role of marijuana including its role as a treatment option for opioid use disorder and its ability to reduce specific types of pain."¹⁵

The greatest caution is that while prescription opioids are regulated and exact contents are known, medical marijuana varies constantly from strain to strain, producer to producer and therefore

from shop to shop. One must ask if that is a risk to take – having no idea exactly what one is taking and putting into his or her body and thereby risking the detrimental side effects they can cause.

"If medical marijuana works, then its growing popularity is good news. But if it doesn't work, then it's an enormous waste of time and money. Even worse, if marijuana isn't safe, we'll have an enormous public health crisis on our hands. If lots of people are using medical marijuana, even a very small risk could result in lots of people being harmed or even killed."¹⁶

RISKS

If one chooses to seek out Medical Marijuana as an alternative it is vitally important that he or she understands the known risks:

The evidence of a link between marijuana and psychosis is substantial The evidence for brain damage is cautionary The risk of addiction is great The negative effects on the body vary from person to person Driving and reaction times is greatly diminished

CBD OILS

Most CBD oils come from the <u>hemp plant</u>, which tends to have a higher concentration of CBD than marijuana. It is extracted from the flowers or buds of the hemp plant and then added to a carrier oil much like so many of the oils on the market today. Because it is an entirely different compound than THC its effects are vastly different. It does not produce the "high" or change a person's state of mind, instead it influences the body to use its own endocannabinoids more effectively.¹⁷ It is legal to purchase and consume hemp-derived CBD in all 50 states. The government classifies hemp as any plant of the cannabis family that contains less than .3% THC. It classifies marijuana as any plant of the cannabis family that contains greater than .3% THC.

Dr. Lynne Jahns

In the United States, CBD oils has varying legality both at the federal level and across different

states. Although CBD has been used as far back as 2900 BC,¹⁸ it has become a product that is all the rage

and touted as the new miracle cure, for its range of applications including:

Arthritis pain Multiple sclerosis muscle spasms Chronic pain and inflammation¹⁹ Smoking cessation and drug withdrawal Treating seizures and epilepsy Anxiety treatment Reducing some of the effects of Alzheimer's, as shown by initial research Antipsychotic effects on people with schizophrenia Future applications in combating acne, type 1 diabetes, and cancer While more research is required to confirm some uses of CBD oil, in June 2018, the U.S. Food and

Drug Administration (FDA) approved one form of CBD as a treatment for people with two rare and

specific kinds of epilepsy, namely Lennox-Gastaut syndrome (LGS) or Dravet syndrome (DS).²⁰

Side Effects (most common)

- Tiredness and fatigue
- Diarrhea
- Changes in appetite
- Weight gain or loss
- May cause other medications to be less effective
- Liver damage²¹

Cautions

Even less is known about CBD than THC, yet it appears that CBD is possibly the key compound in MM which makes it helpful with some medical problems. At this time, as with Medical Marijuana, there limited evidence to make a firm conclusion that CBD oils work as they are marketed. Experts caution

that the evidence is scant for most of the touted benefits. "It really is the Wild Wild West," states Marcel Bonn-Miller.²²

Currently, CBD is not regulated by the FDA. In at 2017 study Bonn-Miller found that nearly 7 of 10 CBD products didn't contain the amount of CBD extract as promised on the label.²³ Until more is done, additional research is conducted, and regulatory standards are established, one must proceed with caution. According to Timothy Welty, chair of the department of clinical sciences at Drake University's College of Pharmacy and Health Sciences, "There's no control, so it's basically how do you know if we're dealing with the true effect of the drug or just simply a placebo effect because somebody thinks they've been given a drug that will be beneficial?"²⁴

As a further caution, while CBD does not cause dependence or addiction as FECO does, the two products are used in much of the same way and it is important to know what is being consumed. For example, a beverage, candy or other food item might be labeled to include cannabis. In states where MM is not legal, it might only contain CBD which does not produce a high, and is added to products in the same way that vitamins are. However, in states where MM is legalized, these products might contain FECO.

Recreational Marijuana (RM)

Marijuana is legal for recreational uses in 10 states and the District of Columbia. The risks that are associated with medical marijuana are even higher when looking at recreational use. For example, the danger of addiction danger is greater due to the motivation and reason for using it, not for pain or symptom relief but for the euphoria or calm that it produces.

Additionally, studies have shown significant links between THC and:

Increased Violence Domestic Violence Paranoia Schizophrenia Addiction Transition to Opioids Social anxiety disorder Increase incidence of lung conditions and bronchitis Cardiac symptoms and arrhythmias Motivation and reward system hijacked

It is startling to note that in 2017 a reported 8 million Americans smoked RM daily, as compared to 12 million daily alcohol consumers. That is to say, of those that consume alcohol, one in 15 do so daily, while about 1 in 5 marijuana users smoke cannabis that often. These numbers continue to soar since the legalization of marijuana.

As with alcohol, the use of RM has widespread ramifications, including the fact that the concentration of THC in marijuana today is up to 29% greater if smoked the traditional way than the marijuana of the 1970's. That concentration can increase up to 80% when the oil is extracted from the leaf and smoked. That is a dangerous situation considering that, unlike with alcohol, there are no known ways to determine at which level of concentration one becomes impaired. No such level for THC has been set, yet the National Highway Traffic Safety Commission found that there is a rise in drivers under the influence. In 2015, the figure was 12.6% - compared to 8.3% for alcohol. Clearly the threat is worse when the two are combined, which is very often the case with recreational marijuana.

The media is not reporting these short-term results of legalizing marijuana. Yet, if just 7 years after its legalization in many states such a notable rise in its use and subsequent effects have been observed, what impact will the long-term results of legalizing marijuana have on the future?

Considering the ripple effect on relationships, families, the work force, and the medical and mental health fields, the questions and the unknown still outweigh the few things that are known and

understood relevant to the use of marijuana. It is a frightening proposition to move forward without more research, guidelines, and education concerning its dangers and cautions.

The risks of all psychoactive substances are, of course, real. However, our long and usually legal relationship with alcohol and prescriptions drugs mean that they have been widely studied. Marijuana is moving inexorably toward the same kind of legality and acceptance as those other substances. It will take more research before we know if that's a wise and safe choice.²⁵

Christian Response

Christians are called to be lights in the world and to open the eyes of those blinded to the truth, by the truth. One of the best ways to begin is through education, building knowledge with facts and asking people questions in order for them to consider their own response and draw their own conclusions. The church has become accepting of much, without doing its own research. It is time that the church searches not only the Scriptures, but also takes a hard look at the hidden facts that many would wish to leave unknown. It is by lining up the information with the Scriptures, given the individual's knowledge of Jesus, that one can best decide how to respond.

Digging Deeper

Liz Flaherty said it well, "In the past few years I've grown increasingly concerned as I've heard a handful of leaders, extol the virtues and sing the praises of marijuana use. Sadly, weed is becoming some believers' functional savior. If you're a Christian and believe that smoking weed benefits your health or leads you to better experiences with God, I'm not going to point out your error using Scripture references, medical studies, or fear-based shaming tactics. However, I'd like to propose to you that there is something better. There is more available in your relationship with Christ and his Kingdom than you ever dreamed."²⁶

Unlike Liz, however, this brochure does offer some Scripture and questions for personal consideration. Rather than asking 'What's wrong with it?' we should be asking:

If marijuana affects the mind, how does that affect my ability to love God fully?

 Mark 12:30 "Love the Lord our God with all your heart and all your soul and all your mind and all your strength."

We use substances like marijuana for comfort and the ability to run and hide from our problems and hide. To whom does Scripture tell us to run?

- 1 Peter 5:7 "Cast all your cares on him; for he cares for you."
- Psalm 55:22 "Cast your cares on the Lord and he will sustain you; he will never let the righteous be moved."
- Psalm 34:4 "I sought the Lord, and he answered me; he delivered me from all my fears."
- Psalm 27:1 "The Lord is my light and my salvation whom shall I fear? The Lord is the stronghold of my life – of whom shall I be afraid?

Am I prepared to sin in order to participate?

Ephesians 5:18 "And do not get drunk with wine (or high on marijuana), for that is debauchery, but be filled with the Spirit." Eph. 5:18

Does this decision make Jesus look good?

"Or do you not know that your body is a temple of the Holy Spirit within you, whom you have from God? You are not your own, for you were bought with a price. So glorify God in your body" 1 Cor. 6:19-20

Will this activity lead me and others to treasure Jesus above all else?

Will it help me to fight the fight of faith with greater success?

 2 Tim 1:7 "For the Spirit God gave us does not make us timid, but gives us power, love and self-discipline."

Will it help me to sharpen my knowledge of Christ?

Isn't it true that that in today's day and age many are yearning for something more, for a deeper spiritual life? This yearning for better health, peace of mind, and freedom from illness and affliction, is a God-given desire. Yet, when God meets you in your brokenness and calls you to deeper waters, deciding to use a substance to manipulate your mind and body is a recipe for idolatry. If you are longing for something more, then perhaps the question is not 'Is it permissible and beneficial?' but rather 'Is this longing only satisfied by Christ? Is there more available from Jesus that He wants to give me?'.

The enemy comes like a thief to steal, kill and destroy (John 10:10). He does so with lies, half-truths and promises that cannot be fulfilled. May we, as the body of Christ, be sober-minded and watchful (1 Peter 5:8) and walk carefully and prayerfully through this new toxic movement which is fraught with controversy and confusion.

https://www.nymedimarijuana.com/post/medical-marijuana-for-chronic-pain

¹³ Casarett, David p.213

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² What are the best Cannabis strains for chronic pain? Accessed from the internet June 5, 2019.

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⁴ The Complete Guide to Medical Marijuana for Seniors. Accessed from the internet May 20, 2019.

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⁵ Medical Marijuana FAQ. Accessed from the internet June 1, 2019. <u>https://www.webmd.com/a-to-z-</u>guides/medical-marijuana-faq

⁶ Casarett, David MD. *Stoned: A Doctor's Case for Medical Marijuana*. Penguin Random House LLC: New York. 2015 p.35

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¹⁵Medical Marijuana Legalization and Prescription Opioid Use Outcomes. Accessed from the internet June 27, 2019. <u>https://www.drugabuse.gov/publications/research-reports/marijuana/marijuana-safe-effective-</u>

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¹⁶ Casarett, David p. 8

¹⁷ Does CBD oil work for chronic pain management? Accesses from the internet June 17, 2019. https://www.medicalnewstoday.com/articles/319475.php

¹⁸ 7 Benefits and Uses of CBD Oil. Accessed June 17, 2019. <u>https://www.healthline.com/nutrition/cbd-oil-benefits</u>

¹⁹ Cannabinoids suppress inflammatory and neuropathic pain by targeting α3 glycine receptors. Accessed June 27,
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²⁰ Does CBD oil work for chronic pain management? Accesses from the internet June 17, 2019. https://www.medicalnewstoday.com/articles/319475.php

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²² CBD oil: All the rage, but is it safe and effective? Accessed from the internet May 19, 2019.

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²⁶ Do Christians need weed? A response to the Christian cannabis movement. Accessed from the internet June 26,
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