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English 12

15 March 2019

A Pill a Day Keeps the Doctor Paid:

Why the Decriminalization of All Drugs in America is Not Only Logical, But Necessary

Drugs and addiction have both played integral parts in humanity's development for tens of thousands of years. As far as one can look into the past, humans have coexisted with intoxicants and dependency. From the dawn of agriculture being linked to grain alcohol cultivation, to our relentless consumption of the most popular drug in the world, caffeine, we are undisputedly connected with drugs, especially in America. However, America's relationship with drugs needs to be explored in more detail, both the positives and the negatives. Working towards the decriminalization of drugs in our society is key to solving our national drug epidemic; we need to extend our arms in a helping way instead of shaming and spotlighting addicts. While decriminalization might appear controversial and counterintuitive at first, there is an abundance of strong evidence for the benefits a monumental change in drug policy can have for our nation.

At first glance, decriminalization of all drugs on a national scale seems ludicrous. Why would we not punish and incarcerate those who are dangerous drugs users in our society, to protect our nation as a whole? That ideology, although effective in press and speeches, is grossly ineffective and incomplete in practice. One of the major flaws in our drug enforcement policy is

directly related to how addicts are treated in society, and our lack of real education about the dangers and uses of drugs, prescription or not. The real war we should be fighting is not against drugs, it is against addiction. We vaccinate our kids from the flu in the hopes that they won't get sick; If they do get the flu, we treat them with care and appropriate medication. We don't put them in jail or keep them inside a house for years so they won't be exposed to germs again. We attempt to "vaccinate" kids from drug usage at a young age with cautionary tales of what horrors will unfold if they try drugs once. Some children are effectively vaccinated, becoming adolescents who abstain from trying a bowl of weed or a drink of alcohol until college (some last longer.) Yet, there are many kids who have a curiosity towards this forbidden fruit. They figure, "if every adult in my life is telling me to stay away from drugs, they must make you feel pretty awesome!" It is for this demographic of kids that more in-depth education and harm reduction is beneficial.

Many kids hear marijuana referred to as "the devil's lettuce" and see cocaine as a drug that mobsters and gangsters snort in movies. From a young age, a child's understanding of what a drug is can be significantly altered. Many children, who are taking adderall for attention problems or percocets for pain management, of which both medications are grossly overprescribed, view their medication as inherently safe and risk free; some may go on to abuse this medication with that justification in the back of their mind. If they were informed, they would know that although the active chemicals in adderall and percocets are shaped and named slightly differently, bottling up derivatives of speed and heroin, respectively, in pills does not make taking those drugs inherently safer then their less flattering counterparts. While the doses in these medications are regulated and deemed "safe," individuals are seldom told of the

consequences abusing prescription medication can have on our lives until it's too late. Instead, countless time is spent hammering the fear of "illicit drugs" into our mind, with little success being evident. The separation of illegal and legal drugs makes no sense, and the imaginary line should be torn down.

Many people are unable to comprehend why or how some people become addicted to drugs, legal or illegal. One incorrect assumption about addicts is that they lack moral principles or willpower and that they could get sober off of their drug of choice simply by choosing to. In actuality, drug addiction is a disease, and a complex one at that. Quitting drugs takes more than just good intentions or strong will. Drugs change our brain in ways that makes quitting extremely hard, even for those that strongly desire a life of sobriety. In Johann Hari's TED Talk, he discusses how "human beings have a natural and innate need to bond, and when we're happy and healthy, we'll bond and connect with each other, but if you can't do that, because you're traumatized or isolated or beaten down by life, you will bond with something that will give you some sense of relief" (Hari). It is this need to bond that gives addiction such a strong power over an individual. Hari discusses how the subconscious mind viciously fights with our conscious identity, and hijacks our brain to crave drugs more than anything else, including friends, family, and loved ones. This might sound scary, which it is. Addiction has the power to tear people away from the things that matter most to them, and oftentimes addicts don't see any way out.

Fortunately, we know more today than ever on how drugs affect the brain, and are beginning to create effective recovery options that can help addicts recover from addiction and maintain a productive life. But, the first step in this long and grueling process of undoing the work that doctors have done in over-prescribing medications. Throughout this paper, the problem

of overprescribing will be constantly discussed, and the negative consequences it poses will too. We have been underestimating the risks of certain drugs for decades, and conversely overestimating the risks of others. The social stigmas that laws and misinformation have created is what is making progress in drug rehabilitation so hard. We need to realize that addicts are not to blame, addiction is a disease and not simply some habit that can be overcome with willpower.

The first argument for decriminalization has to do with allocation of money spent on incarceration versus rehabilitation. The thought process behind the rationale of decriminalization is simple. If we simply took all of the money that we spend on incarcerating drug users, and rerouted it to rehabilitation programs, potentially making them a free public institution, we would see a drastic change in our nation's state of dependency on drugs. If we got people the help they need in a timely, affordable fashion, we would see the progress in action. This isn't just a hypothetical thought either, we have seen evidence that approaching drugs in a less aggressive, more holistic way does help national addiction statistics and benefits society as a whole.

In the 80's, Portugal had one of the worst drug epidemics in all of the European Union. "Forty years of authoritarian rule under the regime established by António Salazar in 1933 had suppressed education, weakened institutions and lowered the school-leaving age, in a strategy intended to keep the population docile" (Ferreira). People were wholly uneducated to the dangers drug use posed, as even owning a bic lighter under the previous administration required a specialized license. By the end of the 80's, heroin began washing up on Portugal's shores. Overnight, the Algarve coast became one of the drug capitals of Europe, and one in every 100 Portuguese was battling a problematic heroin addiction. Headlines in the local press raised the alarm about overdose deaths and rising crime, as we see in America today. The rate of HIV

infection in Portugal became the highest in the European Union. Desperate patients and families began frantically seeking help and outreach, but at the time, Portugal treated drug addiction like we do here in America, with incarceration. However, incarceration was not working, 1 in 10 people were addicted to heroin in the hardest hit parts of the country and there was no sign of the epidemic slowing down. In one of the most radical decisions a country has ever made regarding drug policy, Portugal decriminalized the possession and consumption of all illicit substances. Rather than being arrested for possession charges, those caught with a personal supply would likely be given a warning, a small fine, or be subject to before a local commision, made up of doctors, lawyers, or social workers. And surprisingly, or unsurprisingly, this more comprehensive, human approach to addiction worked. The opioid crisis stabilised, and the following years saw dramatic drops in problematic drug use. For the first time in decades, incarceration rates, rates of bloodborne disease infections like HIV and hepatitis, and overdose deaths all plummeted. HIV in particular saw a 2600% decrease in a 15 year period. "The official policy of decriminalization made it far easier for a broad range of services (health, psychiatry, employment, housing, etc.) that had been struggling to pool their resources and expertise, to work together more effectively to serve their communities" (Ferreira).

At the time of decriminalization, Portugal was so overwhelmed with addiction to the point that such a radical change could be made with support from the government. But we don't have to wait until 1% of all Americans are addicted to drugs to try decriminalization, right? Well, we are currently farther in the hole, so to speak, then Portugal in terms of substance use. "According to the National Survey on Drug Use and Health (NSDUH), 21.5 million American adults (aged 12 and older) battled a substance use disorder in 2014" (Thomas). There were 318.6

million American citizens in 2014, which means we have a national substance abuse rate of 7%. If this doesn't warrant action, what will? America's dependency on drugs blows Portugal's 1 in 100 statistic out of the water. Although 46% of Americans admit that a family member or close friend is currently or has been addicted to drugs (vox), we still act as though addiction is a distant problem from the sober, "responsible" members of society. Integration of all drugs into one category is of the utmost importance if we are to follow Portugal's footsteps in a major change in societies' drug policies, and it all starts with correct education and information. Yet our current education system has left us seeing illicit drugs as being innately more dangerous than their legal counterparts, and vice versa, which is ludicrous. It's time for our mentality about illicit drugs and legal drugs to change, as they are one in the same.

Many individuals don't think of alcohol as being a drug. After all, we hear the phrase "drugs and alcohol" repeated in literature and speech on numerous occasions. According to Stedman's Medical Dictionary and Dictionary.com, "A drug is any substance that, when inhaled, injected, smoked, consumed, absorbed via a patch on the skin, or dissolved under the tongue causes a physiological (and often psychological) change in the body [and mind]" (Drug). Alcohol, otherwise known by the chemical name ethanol, is a psychoactive substance that can cause mood lift and euphoria, decreased anxiety, increased sociability, sedation, impairment of cognitive, memory, motor, and sensory function, and generalized depression of central nervous system function. So right away, one can draw the parallels of ethanol as having both physiological and psychological/psychoactive effects on the user when consumed. To defend alcohol as being separate from drugs is like trying to convince one that tomatoes aren't a fruit, because most people commonly think of them as vegetables. Botanically, a fruit is a ripened

flower ovary and contains seeds, which is characteristic of a fruit. And pharmacologically, alcohol is a psychoactive and physiological compound, which is characteristic of a drug. A specific mechanism, or description on how alcohol influences the brain like a drug does, requires the definition of neurotransmitters, the central nervous system, and how other parts of the body are influenced by drugs, like alcohol.

There are billions of nerve cells in our brain and trillions of synapses. These cells don't directly touch each other, rather they use neurotransmitters to send signals across the small synaptic gaps between nerve cells. There are approximately 50 neurotransmitters that have been identified in the brain, of which the most common are acetylcholine, norepinephrine, dopamine, serotonin and gamma-aminobutyric acid (GABA). These neurotransmitters can either be excitatory and stimulate nerve cells (acetylcholine, norepinephrine, etc.) or inhibitory and sedate nerve cells (serotonin, dopamine, GABA, etc.) Our appetite, sleep schedule, mood, motivation and drive, desire, satiety, pleasure, and general quality of life is largely determined by a precise balance of these many neurotransmitters. When we eat food or have sex, dopamine is released, which is our natural reward molecule. Humans have evolved these reward centers of the brain to reward behaviour and activities that lead to a release of dopamine, as they are generally beneficial to the survival of our species. This is why sugar tastes so good, because once upon a time, we craved food that would provide us with storable energy, like fat. However, since we have advanced so far as a species, many of these natural reward centers have become constantly overloaded, with junk food being a staple part of western society, video games being a majority passtime of adolescents, and gambling over-stimulating the brains of billions, all in similar ways to drugs. Drugs make their way into this overstimulation mix, but are perhaps the most

dangerous when it comes to our brains natural equilibrium. This is because a drug is basically an imposter molecule whose shape and function are very similar to neurotransmitters, which tricks our brain into thinking that the drug or action we have done to reward us with such a surge in neurotransmitters is imperative to survival. Our subconscious mind, our "primal" brain, is tricked into thinking that since a substance or action can lead to such a high production of neurotransmitters, it must be beneficial for our health and survival. This artificial activation of our brain's reward center is what leads to cravings for a drug, similar in mechanism to how our stomach tells us we're hungry or why people get horny. However, while abstaining from sex and fasting from food is easy for some, it can be impossible for others. Some people are addicted to sex, and some have obsessions with food. Some crave drugs insatiably, while others can try numerous drugs and not become addicted. "These dispositions are largely due to genetics, as well as socioeconomic status, one's environment and any pre-existing mental health disorders. For example, we know there is a high prevalence of depression, trauma and other problems among drug users" (How Addiction). The more you view addiction as a predisposed condition, like obesity or sex addiction, that is determined by nature and nurture, rather than a conscious choice or moral decision, is the first step into treating mental diseases like drug addiction. This way of viewing addiction is contrary to the popular thought that merely taking a drug leads to addiction, which is incorrect. This is why when morphine or similar painkillers are administered at hospitals, patients don't walk out as twitching junkies.

We must view nationwide epidemics not as solitary occurrences, but as wholly interlinked events that reflect the effect our policy of hatred for drugs and drug users has on a society, whether that be small scale or nationwide. The opioid crisis likely rings several bells of

familiarity, as it is all over headlines from every media source across the country. We are currently in the midst of one of the deadliest epidemics America has had, but it is far from the first. If you are over the age of 50, you might remember quaaludes, which were sleeping medication that was first synthesized in India in 1951. These pills were prevalent in the 60's and 70's, at a time where marijuana was first starting to make an appearance in society, heroin use was beginning in ghettos, and LSD was being promoted by Harvard professors. It was around this time that Americans began developing the now widespread fear of "illicit" drugs. "In a 1969 Gallup poll, only 4% of American adults said they had tried marijuana. Thirty-four percent said they didn't know the effects of marijuana, but 43% thought it was used by many or some high school kids. In 1972, 60% of Americans thought that marijuana was physically addictive" (Robison). However, many americans paid no attention to quaaludes, and many people became dependent on them, which the government quickly noticed. They attempted to crackdown on the prescription drug, which led to underground production of fake quaaludes, which were more dangerous and easier to get then their prescription counterpart. Does this sound familiar? The 70's also was perhaps the beginning of the first "epidemic" America has had: the cocaine epidemic.

For a long time cocaine was produced as a medicine in the US, and used by working people to get through long, arduous work days, and was often cheaper than alcohol. After criminalization, the production moved to South America where the plant originated from, and the cocaine pipeline from Colombia to the US existed pretty much as long as the drug had been illegal. However, it was not a huge import until later. By the late 1970s there was a huge glut of cocaine powder being shipped into the United States. This caused the price of the drug to drop by

as much as 80%. Faced with dropping prices for their illegal product, drug dealers converted the powder to "crack," a solid form of cocaine that could be smoked (Crack).

And so began the next "epidemic," crack cocaine. The crack epidemic dramatically increased the number of Americans addicted to cocaine. In 1985, the number of people who admitted using cocaine on a routine basis increased from 4.2 million to 5.8 million. As the crack and cocaine epidemics began to trail off in the 90's, a new vice caught Americans by surprise. Club drugs such as MDMA, commonly referred to as ecstacy, and other drugs such as heroin, meth, and various psychedelics began making their way into American society. This was more gradual then the cocaine epidemics that the previous decades had encountered, but was widespread nonetheless. However, perhaps the worst mistake that America made regarding drugs was the late 90's and early 2000's, which was the inception of OxyContin, and other opioid painkillers.

For Americans, the opioid epidemic is well known and frequently talked about, whether on news stations, online articles, or simply on a person to person basis. Regardless of who you are and where you live, you've probably heard about America's problem with prescription pills, heroin, and a recent addition to the melting pot, fentanyl. One might wonder, what's actually going on? Are opioid pain pills evil and uncontrollably addictive? The answer is no, at least when it comes to the drugs inherent risks and benefits. The fact is, opiates have been used for thousands of years for pain management. The difference between opiates and opioids comes from how the drug is made. Opiates are synthesized from the poppy plant, such as morphine and codeine. Opioids are semi-synthetic or synthetic opiates that are slightly altered to have different effects on the body and mind. In the past century, we began experimenting with opioid pain

medications, and initially, doctors thought they had discovered something great. Heroin was initially synthesized to replace morphine, as morphine addiction was becoming problematic during the turn of the 20th century. Now, opioids like heroin and fentanyl, a synthetic opioid 80-100 times more potent than morphine (Fentanyl) are one of the leading culprits in overdose deaths. As Americans do, you likely are reading this and assume that heroin and fentanyl should be outlawed and restricted even further then they currently are. This line of thought is flawed, and it's what has landed us so deep in the hole of addiction within america. Fentanyl is listed as one of the essential medicines for cancer pain by the WHO. (Selection), and opioids like morphine, codeine, and even heroin are all effective analgesics when used under the right circumstances.

But sadly, misinformation is America's middle name. And the opioid crisis is no different. We assume that since people have become addicted to these drugs that restricting their accessibility through regulated means will prevent addicts from attaining these drugs. In reality, we have only made our overdose deaths increase through the scrutinous enforcement of our anti-drug policies. When there is a high demand for something, and a low supply, prices can be set inflatably high. This is a basic economic principle, and it creates an opportunity for a cartel, which is "a group of similar independent companies or countries who join together to control prices and limit competition" (Cartel). Cartels are not limited solely to drugs; OPEC is a cartel that artificially inflates the price of gasoline sales that we all know and love. However, where we have seen cartels do the most damage and set prices on goods the most absurdly high is in the drug cartels. These cartels, such as the Sinaloa cartel, receive drugs from either south america or china, and resell them to america at absurdly high prices, relative to their cost of production.

These cartels are in the money making business, and as such, quality of their products are often compromised in favor of profit maximization. And here lies the problem of criminalizing drugs in the United States. Our overdose deaths are generally a combination of misinformation, lack of harm reduction available, and perhaps the most troubling, laced drugs.

Heroin spiked with fentanyl is likely more common than pure heroin on the streets. This is again due to cartels and middleman dealers down the rungs of the ladder trying to make an extra penny, at the cost of the safety of addicts. Cocaine is commonly laced with meth to pinch pennies. Heroin has been cut with fentanyl ever since El Chapo came up with the idea decades ago. We are not only in an addiction crisis, we are in a cutting agent crisis as well. Sometimes, these cutting agents are as harmless as Vitamin B12 or sugar, but some cutting agents or substitute substances can have extremely dangerous consequences.

Montana Sean Brown was a 15 year old high schooler in Frisco Texas. One evening, Montana's parents went on a business trip, and left Montana and his older brothers, Rory, 20, and Jack, 16, in charge of the house. Montana had been caught smoking weed after hydrocodone and morphine was prescribed to him for a tubing accident he had. His parents subjected him to drug tests, in the age old American way of untrustworthiness and fear. Montana's friend Steven brought over LSD, and all the boys took a few tabs. Now, LSD (Lysergic Acid Diethylamide) is made to sound like a dangerous synthetic chemical that you should avoid at all cost, but again America's capacity for misinformation knows no bounds. LSD is derived from ergot, a fungus that grows on wheat, which naturally contains lysergic acid. Pure LSD has no known lethal dose, making it one of the safest substances, physiologically, to consume. However what the Browns and Steven took that night was not LSD, but a common substitute: 25I-NBOMe, also known as

N-bomb. This psychedelic is a derivative of the substituted phenethylamine 2C-I, which is part of the 2C-X family of psychedelic phenethylamines. The 2C-X family is not the same as shrooms and acid; there are known lethal thresholds for these "designer psychedelics." "Immediately, Montana and his brothers became violently ill, and all were rushed to the emergency room... Rory was hospitalized for a few days and incoherent during his entire stay, but he survived the ordeal. Montana wasn't so lucky." (Montana) Montana Sean Brown died in the hospital that day, and he isn't the only victim who has lost their lives due to laced drugs. Artists like Prince, Tom Petty, Mac Miller, and Lil Peep all overdosed due to fentanyl, and the laced drugs problem isn't getting any better, as long as cartels still control the market supply.

This leads me to my second argument for decriminalization. We simply can never and will never eliminate drugs from society. We have been intertwined with drugs for thousands of years; they are inseparable from the human experience. It is commonly thought that the dawn of agriculture arose from the desire for grain alcohol (Man), and caffeine, opium, and coca leaves have been tied into cultures dating back thousands of years as well. If we choose to decriminalize drugs, it means that the high prices and profit margins cartels control currently will drop fast. If the U.S. decided it was also ready for an even further step in the post-ignorant direction, addicts could receive controlled doses of pure drugs from federal and state vendors. These would not be drug shops, but a way for current addicts to make sure they're receiving safe doses of the actual drug they need. At the very least, we need more safe injection sites then we have in America, which are places addicts (predominantly heroin users) can inject their drug of choice in the monitored supervision of medical professionals, who can reverse the effects of an overdose before it's too late. For too long we have seen addicts as scum who are deserving of our

complacence. We have no problem ignoring homeless addicts as we walk past them on the street, whether they're asking for money or not. Our negative mentality about addicts lets us look the other way when it comes to the horrors that go on in an addicts' road of addiction, and we do not yet realize the effect that our outlook has on an addicts' mental state and the challenges it poses for those attempting to quit.

When we picture addicts, the first thought that comes to mind are homeless junkies fiending, which is wrong. The streets are the final destination of addicts, when they have lost everything else, but all addicts have to start somewhere. Most are not born on the streets, and don't grow up shooting heroin as soon as they can walk and talk. They are citizens of our country that range from all socioeconomic backgrounds and locations. I recently conducted a survey on 100 kids about drug usage at my high school, and saw some interesting trends. Of those who I interviewed, 90% were 12th graders, mostly at analy. 77% said they had smoked weed in the last 12 months and 66% said they had consumed nicotine in some form. Hard drugs like stimulants, opioids, and anxiolytics like benzos were all similar with about 20% of those surveyed saying they had tried each in the last 6 months. As one can see, with one fifth of highschool seniors having admitted to trying hard drugs in the last 6 months, drug consumption is not and will never be completely eliminated.

Lower income neighborhoods without social institutions and such are at risk for higher rates of crime and drug possession/use charges, but this does not mean drug use and addiction are limited to these areas of our country. Addiction comes in many faces, and the widespread reach of some who are addicted might be shocking. In Russell Brand's book Recovery, he describes how "The condition [addiction] in extreme is identifiable but the less obvious version of addiction is still painful and arguably worse because we simply adapt to living in pain" (Brand). What might shock you is that even in Northern California, away from L.A. and Oakland, drugs still make their way into the hands of hundreds of thousands of people. These drugs don't come from the cartel, they come from doctors. "How serious is the over-prescription problem in Sonoma County? In a county with 502,146 people, there were 399,240 legal prescriptions for opioid medications filled in 2017, according to the California Opioid Overdose Surveillance Dashboard, a website of the California Department of Public Health. That's enough for one prescription for four out of every five people in the county" (Rush). That means when you are walking around in the streets of sonoma county, wherever you may be, close to 80% of adults are likely to have an opioid prescription at home. Here we can see how the opioid crisis has become so bad. We have underestimated the risks and dangers associated with opioid pain medicine, as we have in the past with drugs like quaaludes and barbiturates. And now we have exposed millions to unnecessary amounts of painkillers, which has led to hundreds of thousands of addicts nationwide. What is also scary about this statistic is the effect it can have on uneducated, misinformed teens. "1 in 4 teenagers get started on the road to addiction by taking drugs from their parent's medicine cabinet," said Dr. Dave Anderson, a member of the [Northern Sonoma County Harm Reduction] taskforce" (Rush). Tackling overprescription and mismanagement of medication should be the primary concern of medical professionals and harm reduction groups like the Sonoma County Harm Reduction Taskforce, but this is still not enough. We need to educate kids from a young age, not solely about abstinence from drugs, but of the actual effects and dangers each individual drug poses.

In highschool, harm reduction and education about substances will provide those who are going to seek out a high regardless, a way of consciously monitoring themselves or their friends to make sure they are not developing habits, combining drugs that are not safe to combine, or looking for potential overdose signs before it's too late. As someone who has watched their best friend foam at the mouth, turn blue, and stop breathing before them because of a fentanyl overdose, I cannot stress how important proper education and harm reduction is to our society. Luckily, paramedics arrived in time to administer narcan, a drug that reverses the effects of opioid drugs, and I was able to perform CPR because I learned it in middle school, but not all overdose victims are so lucky. Society has pushed addicts to the corners and crevices of our society, and overdoses largely go unnoticed unless someone stumbles into an alleyway or notices a crumpled body.

Decriminalization is not a hotfix solution to our current drug crisis in America, but it is a legitimate, healthy first step in the right direction. We have seen it work on a country wide scale in Portugal, who had similar addiction rates and problems to the U.S. in their height. If rehab was not a for profit, private industry, but a government social institution like welfare or healthcare, we would see dramatic changes in our society. The less we scrutinize and demonize addicts, the faster our society will heal. And this new and improved way of thinking about drugs and addiction will usher in a generation of Americans, who are conscious and properly educated of the dangers drugs pose, but are not scared or afraid of drugs and addicts in the same way we as a society are today. We need to find the courage to admit that the way we've dealt with addicts and addiction previously is nothing short of horrific. We need solutions. We need decriminalization.

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