

History of drugs and addiction



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Drugs and drug addiction have been around for thousands and thousands of years. Drug addiction is when one who uses any type of addictive substance becomes dependent on that substance, and cannot properly function without it. Addiction is a combination of environmental, behavioral, biological, and genetic risk factors. The word is Latin for “enslaved by”. (Harvard Medical School) especially to drugs, can take over a person’s life. In 2017, roughly 70, 000 Americans alone died from drug overdose (David E. Newton). Many believe that those who overdosed chose to continuously do drugs and have placed a negative stigma on those struggle with substance abuse. Addiction is a disease of the brain and body, and the person addicted has no control of it because the brain puts creates a sense of pleasure with drugs and a sense of pain without it.

Opium has been around longer than what most people know. It is thousands and thousands of years old. In fact, the famous Hippocrates used opium, which is a liquid from poppy seeds, on his patients. He discovered that it greatly helped relieve pain and was a fantastic relaxer. A drug is considered any substance that has a physiological effect on the body. They can come in any shape or form. Some examples of drugs that are plant-based are: opium, marijuana, cocaine, meth, shrooms, ecstasy, heroine, morphine, and codeine. These come from roots, flowers, bark, mushrooms, and other parts of plants. There are addictive substances that are originally not meant for consumption. One example of this is that someone can get high off of huffing paint thinner, glues, or cleaning products. These are all chemical based and things that one can easily buy at a hardware store. The drugs that will be focused on for the sake of this research paper are painkillers, and these

drugs are personally believed to be some of the most devastating in the mental aspect of addiction.

One type of drug that is highly addictive, easily available, and increasingly popular is the painkiller. For example, oxycodone, oxycontin, hydrocodone, and morphine are all types of highly addictive pain relievers (The Recovery Village). These are mainly prescribed to people from their doctors in order to relieve pain. Painkillers target your nerve endings, cells, nerve endings, and your brain. It numbs someone from feeling pain and prevents the nerves from shooting signals into the brain saying that identifies discomfort. The danger about this is that one can go into a stupified and dazed state. A person could have their hand on a hot stove and have no reaction.

Someone can get an excess amount of painkillers by getting it prescribed by multiple doctors, stealing them from someone familiar, or even buying them off the street. This means that if someone is in an area that has drugs in it and are exposed to a person, that person is more likely to become addicted than someone who isn't exposed (Khary K. Rigg). If someone has a compulsive nature they might be more easily susceptible to becoming dependent, and if someone comes from a family who has many addiction issues or their own parents are addicts, they are genetically predisposed to have a weaker resistance towards that drug and will be more likely to abuse a substance when compared to someone who has a clean family where none of their relatives misuse any subject or drug.

As said before, opium was used during Hippocrates time, which was 400-300 BCE. After opium there was morphine. Morphine was named after Morpheus,

the Greek god of dreams. This is a branch off of opium. Morphine was used in large amounts during the Civil War to help the soldiers deal with battle wounds. It was called the “ wonder drug”. Unsurprisingly, many became addicted to the opioid. Roughly 80, 000 to 100, 000 were addicted to opioids.

(Dillon J. Carroll)

One drug that is less powerful than morphine but still addictive is codeine. Codeine can be man made and is used in some cough syrups. There are many more types of pharmaceutical drugs that have been created, and there will be more in the future.

Along with relieving pain, people use painkillers to relax, help emotions, get better sleep, increase or decrease the effects of other drugs, and to get high (Newton 81). Those who suffer from chronic pain are more likely to become reliant on opioids (Solanki et. al). However, the youth are beginning to use opioids as a recreational activity.

When looking at what addiction does to the body, it is easy to see that affects several aspects. Addiction negatively impacts a person’s behavior, physicality, mental capability and comprehension, and relationship with others. When taking opioids, some of the physical side effects can be fatal. The veins can collapse, the heart lining can become infected and contaminated with the opioid, lungs go into a respiratory depression where they are unable to breathe at a normal rate or breathe at all, the brain goes into a state of sedation, the digestive system slows which can become painful, the immune system weakens and becomes more vulnerable to diseases and infections, and the opioids can impact the nervous system and actually make nerves more sensitive which causes even more feelings of pain.

What addiction does to you mentally is why it is believed that addiction is not a choice, but a disease that takes over your life. Medical sources and research centers such as the Center on Addiction and Harvard Medical School also believe that addiction is a disease. They believe that addiction is a chronic disease that changes the brain's structure and function. When a person originally takes an opioid, they typically receive a sense of relaxation. Their brain gradually turns the feeling of relaxation into a feeling of pleasure. After the brain considered the drug a pleasure, it rewires itself to think of it as a reward. So, whenever someone take a drug, their brain automatically feels like they are rewarding themselves with something good because it associates the reward with the feeling of relaxation and sedation and delusion (Center on Addiction). When they stop taking the drug, they can experience both a physical and mental withdrawal. When they go through withdrawal, their brain goes into a state of panic and releases high amounts of adrenaline. When going through withdrawal one can experience depression, anxiety, panic attacks, social isolation, mood swings, insomnia, irritability, fatigue, and poor memory or concentration. Those are just the mental symptoms of withdrawal, the physical symptoms can be much more serious. When someone is experiencing withdrawal the can have dizziness, headaches, chest pain, difficulty breathing, rapid heartbeats, palpitations, skipped heartbeats and arrhythmia, nausea, vomiting, stomach pain, diarrhea, muscle tension, twitches, spasms, tremors, aches, stinging, and sweating. Some of the more deadly side effects are seizures, strokes, heart attack, hallucinations, and delirium. The more deadly symptoms are more commonly found with abusing alcohol and tranquilizers, but it can happen with any drug if used hard enough. The brain puts someone through

withdrawal when they remove any regular substance from their life, whether its caffeine or morphine. When one removes that substance the brain tries to adjust to stabilize itself and the internal organs. The brain, along with the rest of the body, was numbed from the drug, and once someone stop taking it their brain tries to jump start itself back to normal by trying to bring the body functions and brain function back as quickly as possible. This makes the brain circuits become hyperactive, which is the cause of the anxiety and twitch and whatnot. Withdrawal can be incredibly painful, especially when going through opioid withdrawal. Since most of the time one starts taking opioid to relieve pain, the brain tricks the body into believing that it is in extraordinary amounts of pain. This will make one want to take the pain medication, because the brain creates the belief that one is in an unbearable amount of pain that the opioid will fix instantly. It is only after one starts slowly weaning off of the painkillers for the brain to stabilize and to realize that it is not in pain anymore, and hasn't been in pain for a while. It is the fact that the brain tricks someone into thinking that they are in pain or that something is wrong within your body that helps support my belief that addiction is a disease. One can't help the fact that their brain is naturally wired to crave things that give pleasure. So, when your brain firsts experiences the euphoria of opioids, it remembers that feeling and what gave it that feeling. The brain circuits that are linked to the need for rewards begins to crave that feeling over and over again. Once you start taking opioids for a long length of time, your brain begins to rewire itself. Your brain changes so that it becomes increasingly more difficult to have the same effects and feelings on your twentieth pill compared to your second one. Your brain tells you to consume more and more in a vain attempt to achieve

a similar feeling of pleasure. This is called a tolerance, when someone develops a drug tolerance is when they fully develop a physical dependency to a substance (The Recovery Village). Studies show that opioids can also completely alter the parts of the brain that handle stress and motivation. These parts of the brain will shrink, which means that the person is unable to handle difficult situations as much as they used to. So, when they are stressed and don't know how to handle it, they turn to their opioids to calm down. Even a short-term use of opioids can lead to a reduction of gray matter, which is the darker tissue of the brain and spinal cord.

Opioid addiction is a downward spiral that starts with something as simple as wanting to relieve pain, that ends with you becoming so dependent on the drug that you can not physically be without it without experiencing awful physical and mental breakdowns. What makes addiction a disease is the fact that the brain rewires itself to crave that drug and to trick one into believing that it's needed. There is no way to control how the brain works and wires itself. The brain is the total boss of the body and controls everything one does. It is an involuntary muscle, which means it works without someone consciously trying to make it work. It's just like breathing, one doesn't tell themselves to breathe they just do. One can't tell the brain what to do, it does what it wants and one just goes along for the ride.

Drug addiction is the disease of the brain. It brain rewires itself without one knowing to create an insatiable crave that only leads to using and taking more and more drugs. This leads to physical and mental decay, yet the brain will not allow you to stop taking that drug because it associates it with rewards and pleasure. It becomes painful and difficult to stop, and

withdrawal is something no one should ever experience. A person would never choose this way of life, not even for a couple moments of euphoria. If they were ever able to experience what the life of an addict would be like they wouldn't continue to partake in substance abuse. But at that point it would be too late.

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