

EFFECTS OF COCAINE AND CRACK COCAINE

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Introduction

Drugs play a major role on the streets and in the medical field. Some drugs are seen as less serious as others. Stimulants are a wide category of drugs that is an upper. Stimulants generally make you feel happy and energetic. Cocaine and crack cocaine do exactly that. These are two drugs that are very similar, yet very different. Crack cocaine comes from cocaine, but is mixed with baking soda and water to create a lower purity form of free-base cocaine. This creates a hard, brittle unstructured material known as a piece of rock, which is crack cocaine. When it is smoked, it creates a cracking sound, which gives crack cocaine its' name. Cocaine in its purest form is a white powder, whereas the colour of crack cocaine varies based upon the origin of the cocaine and how the baking soda is added. Crack cocaine can range from white to yellowish to a light brown. Crack cocaine in its purest form is an off-white solid with jagged edges. This paper is going to compare the history, administration, effects, and legal aspects of cocaine and crack cocaine.

History

Cocaine originated from South America, from coca leaves. Originally, the coca leaves were chewed by workers to decrease fatigue, improve endurance and have a greater resistance to the cold. This was to benefit the workers so they could work longer hours and be more productive. In 1855 the active ingredient in cocaine was isolated from the leaves, and in 1880 it was used as a local anesthetic (Nunes,2006). It was also used in coca cola. In 1855, coca cola was a soda beverage that contained sixty milligrams of cocaine for every eight ounces of the beverage. The idea behind this was to give people energy and a sense of well being (Nunes, 2006). By the late 1880s Sigmund Freud was using cocaine regularly and was even recommending it to others. This only lasted for less than twenty years, until he started discouraging it to others. Then by 1914 cocaine was banned for medical use and in beverages. This caused the use of cocaine and by the 1930s, the use had drastically decreased. It then became popular for recreational use in the 1980s (Nunes, 2006). It was often used and shown in movies such as Scarface, and is famous for the amount of cocaine that Al Pacino uses in one of the final scenes of the movie. Now it is still used recreationally and used by a 'party crowd'. Although this is the primary category of people who use cocaine, people of all demographics use cocaine recreationally.

Cocaine started to be first cut with baking soda in the early 1880s. This was done because of the price drop that drug dealers were facing. They decided to mix it with baking soda and make a hard piece of rock, and sell it in smaller quantities. This made crack cocaine, easily manufactured, cheap which made it highly profitable for drug dealers to develop (Kornbluh, 1997). Crack first started to become largely used in 1984. The worst impact that

crack cocaine had was on the Northeastern states of the United States. This was believed to be because the CIA knew about the large amounts of cocaine that was being brought into the United States, to fund some of their operations (Kornbluh, 1997). This was alleged in the Dark Alliances article by a journalist. Today crack cocaine is still used recreationally but by heavy drug users and abusers. It is seen as a more serious and more addictive drug than cocaine.

Administration

Cocaine can be administered in multiple ways, whereas crack cocaine only has one administration method. Cocaine has four main routes of administration. They are orally, injection, intranasal and inhalation. When cocaine is taken orally the person is swallowing the powder or liquid; it then dissolves in the stomach and large intestine and then through passive diffusion it is distributed to get the desired effect. This process takes approximately thirty minutes to enter the blood stream (Volkow, 2013). The next method of administration is injection. There are four different ways that cocaine can be injected into the body. The first method is subcutaneous, which is under the skin. Another method to inject cocaine is intramuscular, which is in the muscle. The third method is intraperitoneal which is in the stomach. Lastly, there is intravenous which is into the veins. Intravenous injection results in intense effects within 30 seconds of the injection (Volkow, 2013). This method is thought to be most common when thinking of heavy drug users because of the fast results. The next route of administration for cocaine is intranasal. This is where cocaine is snorted or sniffed up the nose. This is the most common way that cocaine is administered. Intranasal routes require ten to fifteen minutes for the desired effect of cocaine to begin. The last method is inhalation. This is where cocaine is smoked. The effect of inhaling cocaine is felt almost immediately; however, the effects do not last more than five to fifteen minutes (Volkow, 2013). This method is less likely with cocaine since it is the only way for crack to be administered. Cocaine is readily absorbed after oral and intranasal administration, but the onset of drug action is slower and the peak effect is takes longer period of time to be reached than with other routes of administration. Cocaine is processed rapidly with most of its effects vanishing twenty to eighty minutes after administration (Volkow, 2013). Cocaine and crack cocaine is eliminated through the urine and is detectible up to two to three days after administration. The route of administration is chosen by the user, and is addictive from whichever route is chosen. They become addictive because of the effect cocaine and crack cocaine has on the body.

Effects

Cocaine is a stimulant drug that has physiological effects that are seen outside of the brain, through how a person acts. Common effects of cocaine that can be detected by others are increased talkativeness, sociability, alertness and insomnia. Cocaine is a stimulant that stimulates the central nervous system. When an individual administers cocaine into body, three neurotransmitters are released into the brain; they are norepinephrine, dopamine and serotonin. These neurotransmitters are normally reabsorbed; however, cocaine works by blocking the reuptake for these neurotransmitters, which allows for these chemicals to build up in the brain (Holman, 1994). Cocaine binds to the transporters that normally remove the excess of these neurotransmitters from the synaptic gap which prevents them from being reabsorbed by the neurons that released them ("Depression: Cocaine," 2014). This results in a natural effect of dopamine on the post-synaptic neurons, which is amplified and gives the pleasurable effects or feelings of the drug (Holman, 1994). These feelings are happiness, confidence, and energy. Each of

these feelings are stimulated from a different neurotransmitter. Happiness comes from excess dopamine, confidence comes from serotonin and energy comes from excess norepinephrine. Along with the pleasurable effects of cocaine, it also has negative effects. Cocaine can cause nasal damage, loss of appetite, hallucinations, strokes, increased blood pressure, and increased pulse and heart rate. Recent studies have found that five to six percent of people who use cocaine become dependent on it (O'Brien & Anthony, 2005). There is no safe way to use cocaine to avoid becoming dependent; but once dependence is established, withdrawal occurs when not on the drug. This is the same for crack cocaine.

Crack cocaine has a high that is extremely pleasurable and produces feelings of euphoria. The initial high is what crack cocaine users constantly keep trying to achieve. This creates the addictive behaviours associated with the abuse of crack cocaine. This desirable euphoric effect only lasts for a few minutes. Once this effect is done, the negative side effects begin and last longer than the pleasurable effects. The negative side effects include, paranoia, depressed and extreme itchiness. Long term effects of crack cocaine use are crack lips from the hot glass smoking pipe that is used to smoke crack cocaine. Other long term effects are respiratory and heart problems, teeth damage, loss of appetite, malnutrition, insomnia and liver and kidney damage. Crack cocaine abuse has been found to be associated with homelessness, unemployment and the sex trade (Edwards, Halpern & Wechsberg, 2006). This is due to the paranoia and the need to support their drug use.

Legal

Legally, cocaine and crack cocaine are both classified as a Schedule I drug under the Controlled Drug and Substance Act. The classification means that there are no legal rights to use cocaine and crack cocaine for medical use. Punishment is different for cocaine and crack cocaine, but it is based upon the amount of the drug that is found, and the purpose for having the drug. They are each treated as an indictable or summary conviction. If you are convicted of possession of cocaine or crack cocaine, with an amount over one kilogram it is an indictable offence and has a maximum sentence of seven years in prison. If it is less than one kilogram, it is a summary conviction. The punishment depends on the person's criminal history. There is a maximum fine of 1000 dollars for first offence and/or six months imprisonment or a maximum fine of 2000 dollars for subsequent offences and/or maximum one year imprisonment. If you are convicted of trafficking or possession with the intent of trafficking, the punishment has a maximum sentence of life imprisonment and a mandatory one year of imprisonment if amount is less than one kilogram and two years if amount exceeds two kilograms ("Controlled drug and," 2013). The starting point for trafficking in cocaine in small quantities is three years for most provinces, whereas the range of sentence for trafficking of cocaine in the amounts of one kilogram or more will typically see sentences in the range of five years. Larger amounts upward of three kilograms will have a range of six to eight years. In comparison, in Ontario, the range of sentencing for trafficking in small amounts of crack cocaine is six months to two years ("Controlled drug and," 2013). This shows that although cocaine and crack cocaine are different drugs, they are classified under the same legal category. The only difference is the sentencing, which is based upon the amount you are convicted of having. Crack cocaine has a longer jail sentence with smaller amounts than cocaine has of the same amount.

Conclusion

Cocaine and crack cocaine have similar long term effects. They both create insomnia and kidney and liver problems. They differ in the short term effects. Cocaine gives you increased feelings, of energy and happiness, whereas crack cocaine has a short high of euphoria and then negative effects of depression and paranoia. Crack cocaine is seen as a more serious drug than cocaine. This is shown by the legal sentencing of trafficking. A lesser amount of crack cocaine, gives a longer jail sentence than cocaine does. "Crack has been widely believed to be cheaper than powder cocaine, and this "fact" has been used to help explain why drug problems worsened in the 1980s" (Caulkins, 1997).