

A Comparative Study between Cocaine and Marijuana

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Forms and Modes of Cocaine and Marijuana Use

Many researchers define cocaine as a sort of stimulant drug which is particularly addictive in nature and is made from the leaves of the coca plant which is found mostly in the south native America. (Drug Enforcement Administration [DEA], n.d.-a) It is commonly used as blue bump Candy whereas commercially, it is recognized as a cocaine hydrochloride topical solution, which is used mainly in many medical procedures and operations in hospitals. The drug is commonly used in the form of powder or crystalline substance. The drug users use it by sniffing it or smoking it or injecting it into their veins through different injections.

Similarly, the origin of marijuana is from a plant named Cannabis Sativa. (DEA, n.d.-b) Marijuana is also known as a psychoactive or mind-altering drug since it has a chemical composition of a substance named delta-9-tetrahydrocannabinol or THC. Marijuana is commonly known as blunt, dope or ganja by its users whereas it is sold in the form of plant or resins or in the form of oil. The drug differs from cocaine since it can also be eaten directly or vaporized for leisure. However, its users mainly resort to smoking it for the purpose of ease.

Cocaine is known to be taken into different forms for instance in a Rock crystalline form called freebase cocaine. (DEA, n.d.-a) Such a crystalline form (commonly known as crack), which its users then take as vapour, gets absorbed into the blood as it is inhaled through the lungs. The substance is called crack since it makes a crackling noise when it is heated to be absorbed. The different forms of ingestion of cocaine exist because the intensity and duration of cooking impact depends upon the type of intake used. The most intense form of cocaine appears when it is directly entered into the bloodstream through smoking or injecting however it is short-lived. The drug is often taken by its users in a bridge pattern where they constantly take and retake the drug in a higher quantity as compared to earlier.

Marijuana has more of a green, dry, leafy structure where its concentrated and resinous form is known to exist as a sticky, black, thick liquid called hashish. (DEA, n.d.-b) The users of marijuana enjoy it by brewing it with tea or mixing it in their food like burgers. The users also use it in hand-rolled cigarettes called joints or through pipes called bongs.

Neurological and Short-Term Effects

Cocaine is also regarded as a form of stimulant which has a deep-rooted impact on the effective functioning of the cognitive abilities of the human mind since it releases a drug called dopamine in the brain, which affects the brain controllers which induce pleasure and movement of the human body. Dopamine is a form of enzyme in the human body responsible for a sense of pleasure or reward released by neurons of the human brain and recycled as soon as they are released into the originating cells. However, in this case, the insertion of cocaine induces a wonderful feeling of peace and euphoria and prevents it from being recycled into the originating cells. Because it is not being recycled, excessive amounts of dopamine build up at the junction between neurons. This, in turn, affects the brain's normal function and impacts the human mind's cognitive abilities. If used continually for a long period of time, it can damage the brain for the long term and can employ a certain intolerance to the effect induced by the drug, hence forcing the drug user to increase his exposure to the amount he used to take earlier of the same drug. As the user improves his usage of the drug the density of a chemical named cannabinoid increases in his brain affecting his thinking abilities, memory perception of time and sensory movements of his body.

Similar to cocaine, marijuana when taken into the bloodstream impacts the brain as well as other organs. The drug has different impacts when it is ingested via food or compared to when it is taken directly into the bloodstream by smoking. It further impacts a specific number of molecules on brain cells known as cannabinoid receptors. The influence of the drug on the receptors has a direct impact on the users' thinking ability along with their memory, learning and problem-solving abilities, concentration and coordinated movement. In severe cases, the drug is also responsible for causing hallucinations.

Short-term effects of cocaine include the thinning of blood vessels, an increased sense of euphoria, restlessness, Insomnia, and anxiety. (DEA, n.d.-a) Furthermore, it also results in a severe headache and a sense of nausea and abdominal pain. The drug is also responsible for physical symptoms including an enhanced body temperature and increased blood pressure and heart rate which can also lead to heart problems like heart attacks panic attacks and violent behaviour on behalf of the user. Since the drug is known to have a short-term effect on the cognitive abilities of the user henceforth it can also cause a sense of erotic and violent behaviour along with Paranoia from the drug user.

Whereas, short-term effects of marijuana include a slow reaction time on the behalf of the user along with problems in his physical coordination like keeping his balance. (DEA, n.d.-b) The drug is known to induce a sense of euphoria along with relaxation and drowsiness on the part of the user. The drug particularly differs from cocaine since it is also responsible for inducing hallucinations for its users along with creating problems of memory and learning. It is also known for causing anxiety severe panic attacks and an increase in appetite along with heart problems.

Prevalence, Trafficking, and Long-Term Health Consequences

American culture has been enriched with diverse civilizations and societies with different cultural perspectives throughout history, and particularly the Native Americans and African Americans along with Chinese and Canadians add much to the cultural practices and common beliefs. According to an estimate “More than 550 federally recognized tribes of Native Americans who not only have their cultural values but also practice their languages and cultural beliefs.” Instead of this, most of the drug statistics show that around 90% of the drugs in America have been of Colombian origin.

According to a national survey from Drug Use and Health, there was a sudden boost in the first-time users of cocaine drugs from 2013-2015 to around 61 per cent, which has been directly associated with the overproduction/ bumper harvest of the illicit coca crop between the same years which went as far as 400,000 acres. The usage of cocaine has life-threatening impacts on the users and the attempts of the US government to protect people’s lives from addiction by narcotic seizure by cocaine trafficking (including cocaine cultivation and distribution) have strengthened but owing to its huge demand in the population, they still remain unsuccessful.

The long-term impacts of marijuana include [mental health](#) problems and different kinds of respiratory infections including a chronic and sometimes fatal cough. However, the long-term impacts of cocaine include various kinds of diseases including weight loss and diseases of the intestine along with infection in the bowel tissue and a reduced amount of blood flow. The poor condition of the drug user is particularly imminent by his poor nutrition and nasal damage including nosebleeds and a lost sense of smell.

Comparative Prevalence, Harm, and Dependence

In 2010, the percentage of people above age 12 who had used either marijuana or cocaine in their lives was noted for their entire lifetime. In that regard, the percentage of marijuana users was found to be 39.8 per cent whereas cocaine users were at a mere amount of 11.28 per cent. The same users when recorded as having drug usage in the year 2010 were found to be 18.3 per cent for marijuana and 2.3 per cent for cocaine.

The data provided by the site of recreational drugs of Health Guru according to the year 2010 shows the harmfulness caused by both drugs by creating a standard amount of 3. The physical harm caused by cocaine in that regard was recorded as 2.3/3.00, but for marijuana, it was 0.99/3.00. The amount of societal harm caused by cocaine was 2.17/3.00, but for marijuana, it was 1.5/3.00. The dependence risk for cocaine was found to be 2.39/3.00, while for marijuana it was 1.51/3.00. All the facts show how the use of drugs has impacted the population drastically. The usage also regards cocaine as having more lethal impacts on the users as compared to marijuana.

Behavioral Treatment Approaches

There is no such medication available for the drug abuse of both cocaine as well as marijuana. However, the FDA has approved many behavioural therapies to deal with people struggling to quit drug addiction. In the case of cocaine, the therapies include Cognitive-behavioral therapy (CBT), Community reinforcement approach plus vouchers, Contingency management, or motivational incentives, the matrix model and 12-step facilitation therapy. In the case of marijuana, the therapies include Cognitive-behavioral therapy (CBT), Contingency management, or motivational incentives, Motivational Enhancement Therapy (MET) and Behavioral treatments for adults. (National Institute on Drug Abuse [NIDA], 2018)

References

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