Cannabis

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Out of all of the illicit substances available today, cannabis proves to be one of the most popular. The substance, which comes from a plant called hemp, is scientifically referred to as cannabis sativa (MedlinePlus, 2018). Per the 2013 National Survey on Drug Use and Health (NSDUH), there were 19.8 million past month users. From the same survey, it was reported that there were 24.6 million total illicit drug users. Comparing these two figures really gives one an idea of the scope of use for cannabis. Among the existing population, 7.22% were adolescents aged 12-17 (Hughes et al., 2015). Further delving into the adolescent population and their views on the drug, it was found that nearly 1 in 4 12-17 year olds believed that there is great risk associated with marijuana use (Hughes et al., 2015). I chose this drug because I have personally seen the effects it can have on people and how the public’s view is changing because of legalization. I believe that the substance is beneficial in many aspects, but the negative effects are being overshadowed and mitigated.

There are many ways to consume cannabis and among the most popular method is inhalation. This route of administration is favorable due to the near immediate onset of desired effects. Combusting cannabis is by far and away the most common, with nearly 90% of all users resorting to this method (Russell et al., 2018). Among current users, roughly 50% reported using joints or pipes, while only 20% reported using bongs or blunts (Russell et al., 2018). This is consistent throughout all age groups. Despite the popularity of this route of consumption, it plays the greatest risk in potential health problems. The second route of administration is orally, which is done through eating thc-infused edibles. 29.8% of people who have ever used cannabis reported taking an edible. Additionally, in Colorado in 2014, nearly 45% of all cannabis product sales were cannabis-infused edibles/products (Barrus et al., 2016). Consuming in this manner is
attractive to many users because of the health benefits compared to combustion. However, many users don’t know proper dosages or how long it will take to feel the effects. Despite this, taking THC-infused goods is still healthier than the alternative of smoking or vaporizing it.

When cannabis is smoked, its main chemical delta-9-tetrahydrocannabinol (THC) reaches the users bloodstream and eventually makes its way to the brain. It makes most users feel euphoric and relaxed, along with heightened senses and an increased appetite (MedlinePlus, 2018). Most users consume cannabis to feel these pleasant psychological effects. There are negative effects too, though, and they usually aren’t as apparent to most. Since the 1970’s there has been consistent findings that cannabis use negatively impacted learning and memory functions. One study found that after chronic use, users may have slower information processing while abstinent until acute use. Another study found that subjects given a high dose of THC exhibited higher risk taking than those given a low dose of THC. Most important of all, cannabis affects working memory which hinders the ability to store information and remember it shortly after. Multiple studies have shown that acute use negatively impacts working memory (Crean et al., 2011). As for short term physical effects, cannabis use leads to an immediate decrease in airway resistance due to bronchodilation (Gates et al., 2014).

Long term effects from cannabis use can be more severe and aren’t usually reported on as often. When used in moderation, there aren’t any considerable negative long term effects. However, when one becomes a chronic user of the substance, other issues arise. New studies are beginning to find that chronic use can be linked with multiple mental health problems. One study showed that chronic use in teen years led to some users having “abnormally shaped” hippocampal regions by the time they reached their twenties. These same individuals performed
significantly worse in long term memory tests compared to those who never used marijuana (Smith et al., 2015). Although cannabis is often used to treat anxiety, it can actually make it worse. It can also have the chance to exacerbate or induce psychosis among chronic users (Steenkamp et al., 2017). Due to the nature of the developing brain, consuming during adolescence proves to be worse than adulthood use. The effects on the developing brain are much more profound and pose a greater risk to cognitive development. One study showed that cannabis use throughout adolescence and into adulthood increases ones chances of developing clinical depression (Chadwick et al., 2013). As for long term physical effects, combusted cannabis has been seen to lead to airway inflammation due to the harsh nature of the smoke as well as decreased function of immune cells which leads to increased susceptibility of airway infection (Gates et al., 2014). Most concerning of all is the increased risk of schizophrenia among chronic users. Swedish studies have shown that cannabis use is linked to an increased chance of being diagnosed with schizophrenia later in life. Other studies confirmed the relationship between adolescent cannabis use and schizophrenia symptoms as they reached adulthood (Chadwick et al., 2013).

The following information is important for people to know because it sheds light to the negative effects of a very popular drug. Due to the legalization movement many people are overlooking how harmful this substance can be. It is very important for our youth to be informed about this as they grow up with this changing climate regarding legalization. Society’s mindset regarding casual cannabis use may lead to a generation of people with cannabis use syndrome because of increased use in adolescence. I have personally seen how damaging this substance
can be to peoples productivity and work. More people need to be aware of the side-effects that come with using this drug.
Bibliography


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