

# ***Cannabis and Psychosis: What you Need to Know***

## **Cannabis Explained**

Cannabis is a psychoactive drug that alters awareness, thoughts, and mood. It is made up of more than 100 chemicals called cannabinoids with the two most well-known being THC (delta-9-tetrahydrocannabinol) and CBD (cannabidiol). THC is the psychoactive substance in the cannabis plant that gives you a 'high'. CBD is not associated with causing a high. Cannabis with a THC content greater than 10% is considered "high potency" (Hines et al., 2020).

Cannabis comes in different forms including herbal cannabis, resin, and cannabis oil. The most used form in Ireland is herbal cannabis.

## **Cannabis Use and Risk For Psychosis**

Cannabis is widely associated with increased risk for acute psychotic experiences, leading to a 4-fold increased risk in heavy users and a 2-fold increased risk in the average user, when compared with non-users (Marconi, et al., 2016).

There are three main risk factors that studies have shown to be a good predictor of psychosis in cannabis users:

- A. Family History of Psychosis and Individual Genetic Vulnerabilities** Individuals with a family history of psychosis may have a genetic predisposition to psychotic disorders, resulting in increased illness risk (Batalla, et al., 2013). Studies suggest that cannabis users with a family history of psychosis are 2.5 to 10 times more likely to develop psychotic disorders, compared to non-users with a family history (Radhakrishnan, et al., 2014).
- B. Age at first use** Cannabis users under the age of 16 are at a greater risk of developing psychosis (Bagot, et al., 2015). Compared to non-users, age at onset of psychosis for cannabis users is on average 2.7 years younger (Large, et al., 2011). This increased risk has been linked in various studies to pre-existing genetic vulnerability, greater severity of use, and alterations in brain structure and function associated with cannabis use at an early age.
- C. Frequency and Potency** Higher concentrations of THC/high potency cannabis have been associated with an increased risk of psychotic symptoms (Di Forti, et al., 2015). Higher frequency of cannabis use has been shown to increase both overall risk of psychosis and the severity of symptoms (Di Forti, et al., 2014; Marconi, et al., 2016).

## **Is Cannabis Use associated with more chronic symptoms in psychosis?**

People with cannabis-induced psychosis are at increased risk of progression to chronic psychotic disorders, including schizophrenia. Studies suggest that 1 in 5 people who suffer cannabis-induced psychosis will progress to a schizophrenia diagnosis within 3-4 years (Kendler, et al., 2019).

Stopping or reducing cannabis use has been shown to improve psychotic symptoms and outcomes while continued cannabis use increases the risk of relapse and leads to more severe positive symptoms and longer hospital admissions (Schoeler, et al., 2016).

## **Is Cannabis Addictive?**

Although not everyone who uses cannabis will develop an addiction, cannabis can be addictive and can lead to cannabis use disorder. The risk of dependence increases if you start using cannabis at an early age or if used

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regularly. In Ireland, there was a two-fold increase in adolescents entering the addiction service for treatment of a cannabis use disorder from 2006-2016 (Smyth, O'Farrell, & Daly, 2019).

## **Determinants of Use**

Studies found that the main reasons for cannabis use include:

- A. **Belief Cannabis is Harmless** With the Internet becoming the main source of information for people (Russell, 2015), positive media and marketing coverage of cannabis has led people to believe that cannabis is harmless. A recent study showed that 29.2% agree that smoking cannabis prevents health problems with 22.4% believing that marijuana is not at all addictive (Keyhani, et al., 2018).
- B. **Peers and Social Environment** Particularly at a young age, when adjusting to school, college, or a new job, a person's social environment and their peer group can be influential. Strong peer group integration was found to be linked with cannabis use (Kohn, et al., 2005).
- C. **Coping Strategy** Negative life events, trauma, and maladaptive coping were found to be related to cannabis use (Hyman, & Sinha, 2009). Lee, Neighbors, and Woods (2007) found that 18% of recent graduates who used cannabis reported using for stress-coping purposes.
- D. **Social & other difficulties** Cannabis use is associated with lower socio-economic status, and lower satisfaction with family, friends, and school (Tu, Ratner, and Johnson, 2008). Disrupted families or drug-using parents, childhood problem behaviours, and poor parental monitoring and supervision in childhood were found to be associated with increased cannabis use (Hayatbakhsh, et al., 2008).

## **Can cannabis help with symptoms of psychosis?**

No. Although CBD products are sold in Ireland, the Food Safety Authority of Ireland (FSAI) have stated that no health or medicinal claims has been authorised in the sale of these products. Under the Medical Cannabis Access Programme (MCAP), medical consultants will be able to prescribe a cannabis-based product for individuals who have not responded to standard treatments for three conditions: spasticity associated with multiple sclerosis intractable nausea and vomiting associated with chemotherapy, and severe and treatment-resistant refractory seizures. Otherwise, there are no cannabis-based products approved which can be recommended in the treatment for psychosis in Ireland.

## **Useful Resources**

[www.drugs.ie](http://www.drugs.ie) [www.erowid.org](http://www.erowid.org) [www.ncpic.org.au](http://www.ncpic.org.au) [www.drugsmeter.com](http://www.drugsmeter.com)

HSE Drugs and Alcohol Helpline 1800 459 459 [helpline@hse.ie](mailto:helpline@hse.ie)

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