Cannabis and psychosis

Cannabis is the most widely used illicit drug in Australia and is recognised as the third most prevalent drug of dependence following alcohol and tobacco. Cannabis use is increasing among younger age groups. 14.9% of people using cannabis for the first time are aged between 1-19 years. The use of cannabis in adolescence is concerning because it occurs at an important time of transition between childhood and adulthood when brains are still undergoing physiological changes. However, many Australians use cannabis without adverse effects. There is evidence that the strength of cannabis and its active ingredient, THC (the chemical that makes you feel “high”), has increased over the past 30 years, however there is conjecture over this. Strong associations are consistently found between mental illness and cannabis use.

Evidence shows that those who are most at risk of developing a mental illness with the use of cannabis are those who begin at an early age and those who are vulnerable for sociological reasons, including educational failure, unemployment and crime. There is a lot of debate around whether cannabis can cause schizophrenia. Evidence shows that cannabis use can trigger schizophrenia in people who have a predisposition via family history of that mental illness. Evidence further shows that cannabis use in high doses may lead to psychotic symptoms in the short term. However it cannot be considered a major causal factor.

What is cannabis?
• Products of the cannabis sativa plant. THC (delta-9 tetrahydrocannabinol) is the active chemical found in cannabis. Cannabis is a depressant drug effecting the central nervous system and slowing down the messages going to the brain.

What are the different forms of cannabis and how it is used?*
• Marijuana is the most common and least powerful form of cannabis. It is the dried leaves and flowers of the plant. Marijuana looks like chopped grass, and ranges in colour from grey-green to greenish-brown and is smoked in hand-rolled cigarettes (joints) or in a pipe (a bong).
• Hash oil – a thick oily liquid that is usually spread on the tip or paper of cigarettes and then smoked. It is the most powerful form of cannabis and rarely found in Australia. THC is 40 percent.
• Hash – dried cannabis resin. Ranges in colour from brown to nearly black. Hash is added to tobacco and smoked or baked and eaten in foods such as cookies. THC is 20 percent.

Note: some parts of the cannabis plant contain a higher level of THC. For example, the flower or ‘heads’ have more THC than the stem and leaves.

What are the immediate effects of cannabis?*
The effects of any drug (including cannabis) vary from person to person dependant on factors such as the individual sizes, weight and health, how the drug is taken, how much is taken and whether the person is used to taking the drug. The immediate effects of cannabis are:
• Relaxation and loss of inhibition
• Increased appetite
• Affected perception
• Impaired co-ordination
• Affected thinking and memory
• Increased heart rate, low blood pressure, faintness, blood-shot eyes, dilated pupils
• Larger doses make the above effects stronger. Very large quantities can cause confusion, restlessness, feelings of excitement, hallucinations, anxiety, panic, detachment from reality, decreased reaction time or paranoia

What are the long-term effects of cannabis?
Some cannabis users experience the following long term effects:
• Respiratory illness
• Less motivation
• Impaired concentration, memory and ability to learn
• Impaired hormone functioning – lower sex drive, irregular menstrual cycles and lowered sperm counts
• Impaired immune system
• Precipitation of a mental illness in people who are predisposed
• Family/relationship problems
• Work/school problems.

Is cannabis addictive?
Yes. Regular cannabis users can develop a tolerance to cannabis meaning that they need more and more to get the same effect.
People can become psychologically dependent on cannabis meaning that cannabis becomes far more important than other activities in their life.

* Source: Australian Drug Foundation
What are the withdrawal effects of cannabis?

- Sleep disturbance
- Irritability
- Loss of appetite and consequent weight loss
- Nervousness
- Anxiety
- Sweating and upset stomach
- Sometimes chills, increased body temperature and tremors can occur
- Withdrawal symptoms usually last less than a week but sleep disturbances may last longer.

Interaction between cannabis and psychosis

Some people more than others are predisposed to developing psychosis. This is thought to be genetically determined. It is believed that cannabis use - especially if heavy and regular - may be linked to a condition known as a drug-induced psychosis or 'cannabis psychosis' in those who are genetically vulnerable. This psychosis can last up to a few days. The episodes are often characterised by hallucinations, delusions, memory loss and confusion. There is some evidence that regular cannabis use increases the likelihood of psychotic symptoms occurring in an individual who is vulnerable due to a personal or family history of mental illness. Cannabis also appears to make psychotic symptoms worse for those with schizophrenia and makes recovery more difficult.

What are the symptoms of substance-induced psychosis?

- Hallucinations or delusions that are the direct physiological effect of using a substance and are more real than those sometimes associated with no substance use
- Usually, the person does not realise that the hallucinations are related to the substance use
- The symptoms begin during or within a month of substance intoxication or withdrawal and persist as long as the substance use and/or withdrawal continues
- Substance-induced psychosis may look the same as the acute phase of psychotic disorders, but the duration of the symptoms is usually shorter when a substance is used
- In order to receive a diagnosis of substance-induced psychosis, the symptoms must be linked causally to the drug use. Otherwise, a diagnosis of first-episode psychosis (called schizophreniform psychosis) will be given.

Why do people with a mental illness use cannabis?

People with a mental illness use cannabis for the same reasons that other people use cannabis. People generally use drugs:

- to feel relaxed
- to relieve unpleasant feelings or emotions such as worry and boredom
- for social reasons, eg to gain acceptance from one's peer group.

What can family and friends do?

Family members can help the situation by:

- Learning more about drugs and their different effects and learning more about effective interventions for problematic drug users eg stages of change and the process it takes for someone to change their drug behaviour. Also learn about harm minimisation strategies (see Australian Drug Foundation website)
- Setting limits on the person's behaviour such as prohibiting the smoking of cannabis anywhere in the family home. While setting limits is likely to cause some initial anger, it might also minimise the damage done by the drug in the long term.
- Learn to better read the symptoms of drug use so that interventions can be more considered and timely.

Useful references

Australian Drug Foundation
www.adf.org.au
Turning Point Alcohol and Drug Centre
www.turningpoint.org.au
DirectLine 24/7 1800 888 236
Mental Illness Fellowship of Australia
www.mifa.org.au
Mental Illness Fellowship Victoria
www.mifellowship.org
Mental Health Services Website (Vic)
National Alliance of the Mentally Ill (NAMI) (USA)
www.nami.org
Mental Health Council of Australia
www.mhca.com.au
SANE Australia
www.sane.org
Beyond Blue
www.beyondblue.org.au
Family Drug and Alcohol
24 hour Helpline
1300 660 068
SUMITT (Substance Use & Mental Illness Treatment Team
03 8345 7024

Mental Illness Fellowship Australia fact sheets

Understanding psychosis
Understanding dual diagnosis
Family and carer supports and services
What can friends and family do to help a person experiencing mental illness?

Substance use: stages of change model