# Marijuana

Science-based information for the public.



## **Mental Health and Marijuana**

The link between the use of marijuana and mental health problems is an issue that receives a great deal of attention in the research and general media. Although severe illnesses such as schizophrenia have received a large portion of this attention, there is also debate about whether the use of marijuana can lead to more common psychiatric disorders such as depression and anxiety.

There have been a number of studies that have explored the link between marijuana use and mental health symptoms. Strong associations are often found but this is not the same as a causal link (i.e. one causes the other).



#### Does smoking marijuana cause schizophrenia?

Psychosis refers to a number of mental illnesses where people experience difficulty in telling what is real and what is not. Someone suffering from a psychosis might hear voices that are not really there (hallucinations), or believe things that are not true (delusions). Schizophrenia is a form of psychosis.

There have been reports of people experiencing these psychotic symptoms after smoking a lot of marijuana or more marijuana than they are used to. This is rare and the symptoms, although frightening at the time, usually go away if use of marijuana is stopped. Marijuana has been shown to make psychotic symptoms worse in those who already have a psychotic disorder such as schizophrenia.

Some claim that marijuana can cause schizophrenia. Multiple studies have found that, in particular, using cannabis during adolescence increases the likelihood of experiencing symptoms of schizophrenia in adulthood (Arseneault et al. 2002; Parakh & Basu 2013). Evidence suggests that marijuana may somehow trigger schizophrenia in those who are already at risk of developing the disorder, though this connection is not conclusive (Parakh & Basu 2013; Bloomfield et al., 2013). Those with a vulnerability to develop schizophrenia, such as having a family history of the illness, should be strongly advised against using marijuana for this reason.

#### Does smoking marijuana cause depression or anxiety?

The link between marijuana and other more common mental health disorders such as depression and anxiety is confusing, because marijuana is also sometimes used to relieve symptoms of depression and anxiety.

However, while marijuana may seem to help ease depression before the effects of the drug wear off, after that, smoking marijuana may make depression worse. Those who use marijuana have been shown to have higher levels of depression and depressive symptoms than those who do not use marijuana (Lev-Ran et al, 2013; Pacek et al, 2013). This risk may increase for users who use both marijuana and alcohol (Pacek et al., 2013).

Although results are mixed, there is some research to suggest that marijuana use in adolescence, particularly frequent or heavy use, is associated with the development of anxiety disorder in young adulthood (Degenhardt et al., 2013). Studies have also found that frequent cannabis use in teenagers predicts depression, as well as anxiety disorder, later in life as well, with daily users carrying the highest risk. Young women appear to be more likely to experience this effect (Patton et al., 2002). Use of marijuana in adolescence has also been correlated with the development of suicidal ideation, certain personality disorders, and interpersonal violence. Younger age of initiation increases the risk of developing all of these mental health disorders later (Copeland et al, 2013).

#### Are some people more at risk than others?

Generally speaking, those who start smoking marijuana earlier (early adolescence) and smoke heavily are more likely to experience negative consequences. This may in turn lead to mental health problems, but also lead to more general life problems, like conflict at home or school / work, financial problems and memory problems. For more information on marijuana and adolescents, see our <u>Adolescents</u> factsheet.

If you seem to be frequently depressed or anxious after smoking marijuana, or if you are having suicidal thoughts after smoking, marijuana may not be safe for you. Pay attention to your body and emotional responses. Again, for anyone who has a genetic vulnerability or existing mental health issues, marijuana should be avoided.

### What help is available?

Drug and alcohol services and mental health services are available in most areas and ideally, a coordinated approach that will tackle both issues at the sample time can be arranged. Often medication is available to assist with symptoms and this can be managed by a skilled general practitioner. Additionally there are some psychologists and social workers who may have specific training in this area.

For specific information on where to get help -- on the phone, the web, or in person -- please visit our page about Where to Get Help.

#### References:

- Arseneault L, Cannon M, Poulton R, et al. Cannabis use in adolescence and risk for adult psychosis: longitudinal prospective study. BMJ 2002;325:1212-3
- Copeland J, Rooke S, Swift W. Changes in cannabis use among young people: Impact on mental health. Curr Opin Psychiatry 2013;26:325-329.
- Lev-Ran S, Roerecke M, Le Foll B, et al. The association between cannabis use and depression: A systematic review and meta -analysis of longitudinal studies. Psychol Med 2013 (in press).
- Pacek LR, Martins SS, Crum RM. The bidirectional relationships between alcohol, cannabis, co-occurring alcohol and cannabis use disorders with major depressive disorder: Results from a national sample. J Affect Discord 2013;148(2-3):188-95. [doi: 10.1016/j.jad.2012.11.059]
- Parakh P, Basu D. Cannabis and psychosis: Have we found the missing links? Asian J Psychiatr 2013;6(3):281-7. [doi: 10.1016/j.ajp.2013.03.012]
- Patton GC, Coffey C, Carlin JB, et al. Cannabis use and mental health in young people: Cohort study. BMJ 2002;324 (7374):1195-8.