

MARIJUANA: A MEDICAL CANNABIS OR A GATEWAY DRUG

Sanjay Kumar Sah,^{1*} Brijesh Shrestha,¹ Pradeep Kumar Chaudhary¹^{1*}Journal Editor, Medphoenix, Journal of National Medical College, Nepal.**Citation:**

Sah SK, Shrestha B, Chaudhary PK. Marijuana: A Medical Cannabis or a Gateway Drug. Medphoenix. 2024;9(1):1-2

DOI: <https://doi.org/10.3126/medphoenix.v9i1.67245>Available at www.jnmc.com.np

ISSN:2631-1992 (Online); ISSN:2392-425X (Print)



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Cannabis, also commonly known as marijuana or locally weed among other names, is a psychoactive drug from the cannabis plant. Marijuana actually refers to the dried leaves, flowers, stems, and seeds from the Cannabis sativa or Cannabis indica plant. This plant contains the mind-altering chemical tetrahydrocannabinol (THC) and other similar compounds. Extracts to be used in a variety of version can also be made from the cannabis plant.

According to the National Survey on Drug Use and Health, marijuana is one of the most used drugs in the United States of America, and its use is particularly widespread among young people in all around. A data in 2021 refers that 35.4% of young adults aged 18 to 25 (11.8 million people) reported using marijuana in the past year.²

According to the reports from Monitoring the Future survey, rates of past year marijuana use among middle and high school students have remained relatively steady since the late 1990s. In 2022, 30.7% of young graduates reported using marijuana in the past year and 6.3% reported using marijuana daily. Apart from this many young people also use vaping devices to consume cannabis products. In 2022, approximately 20.6% of young graduates reported that they vaped marijuana in the past year and 2.1% reported that they did so daily.³

The concept for legalization of marijuana for medical use or adult recreational use in a growing number of states may bring the different scenario for the its consumption. Though U.S. federal law doesn't allow the use of marijuana, but many states allow medical use to treat pain, nausea and other symptoms. Medical marijuana also is called medical cannabis. Cannabis sativa is the plant containing active chemical compounds. They work in the body in ways that is supposed to ease certain symptoms. The best known such compounds are delta-9 tetrahydrocannabinol (THC) and cannabidiol (CBD). THC is the part of marijuana that acts particularly on the brain and affects mood, behavior and thoughts, called psychoactive.^{4,5}

What is medical marijuana used for?

There are studies reporting about the beneficial use of medical cannabis in conditions of:

- Alzheimer's disease.

- Amyotrophic lateral sclerosis (ALS).
- HIV/AIDS.
- Crohn's disease.
- Epilepsy and seizures.
- Glaucoma.
- Multiple sclerosis and muscle spasms.
- Posttraumatic stress disorder.
- Serious and ongoing pain.
- Serious nausea or vomiting caused by cancer treatment.^{6,7}

But they have also mentioned adverse effects of its regular use. The advantage over its side effect is still a controversial topic for discussion.

The U.S. Food and Drug Administration (FDA) has not approved the use of cannabis as a treatment for any medical condition. But the FDA has approved the cannabinoids cannabidiol (Epidiolex), which comes from the cannabis plant, and dronabinol (Marinol, Syndros), which is human made, called synthetic. Cannabidiol can be used for certain forms of epilepsy. Dronabinol can be used for nausea and vomiting caused by cancer treatment and for not wanting to eat, called anorexia, linked to weight loss in people with AIDS.^{8,9}

Despite the legal issues and the controversies, researchers and drug companies continued to investigate and develop herbal cannabis products. For example, a standardized cannabis product known as CanniMed was developed for medical use in Canada under Health Canada's Medical Marijuana Access Regulations (MMAR), which were enacted in 2001.

Is Marijuana a Gateway Drug?

A gateway drug is a habit-forming substance, such as marijuana, that can lead to the use of more addictive drugs. THC, a chemical compound alters the mental state and can make the user feel high in euphoria that may be reason for addiction towards its use. There are factors such as age, family history, genetics, and environment can have the tendency to increase the risk of addiction. Those exposed to the drug during adolescence are shown to have a higher risk of misusing other substances later in

life. Research on “is marijuana a gateway drug” suggests that many people experiment with a “softer” drug such as marijuana before moving on to “harder” drugs, or even alcohol. Many young people use marijuana because it is cheaper, easily accessible, and less addictive compared to drugs like heroin or cocaine. Others use it due to peer pressure or as a way to cope with family or academic stress.

While gateway theories about cannabis can be dated back to the Reefer Madness of the 1920s and beyond, contemporary work on the gateway hypothesis is largely attributable to Eric and Denise Kandel’s pioneering investigations spanning lines of animal, human, and epidemiological research. In a seminal article in the *New England Journal of Medicine* (2014), the Kandels demonstrate how “one drug affects the circuitry of the brain in a manner that potentiates the effects of a subsequent drug.”^{10,11}

Since the beginning of the 20th century, most countries have enacted laws against the cultivation, possession or transfer of cannabis. These laws have had an adverse effect on cannabis cultivation for non-recreational purposes, but there are many regions where handling of cannabis is legal or licensed. Many jurisdictions have lessened the penalties for possession of small quantities of cannabis so that it is punished by confiscation and sometimes a fine, rather than imprisonment, focusing more on those who traffic the drug on the black market.¹² A Pew Research Center poll found that political opposition to marijuana use was significantly associated with concerns about the health effects and whether legalization would increase cannabis use by children.¹³

The world has failed to come to terms with cannabis as a drug. In some countries, cannabis use and trafficking are taken very seriously, while in others, they are virtually ignored. This incongruity undermines the credibility of the international system, and the time for resolving global ambivalence on the issue is long overdue. There must be constant feedback between research and intervention if our approach to drugs issues is to be sound. In several respects, cannabis is unique among illicit drugs. There exist international advocacy groups promoting legal reform concerning the drug, a phenomenon not seen for cocaine or heroin. Medical use of the active ingredients, if not the plant itself, is championed by respected professionals. It is not surprising that national opinions on this issue have begun to diverge.

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