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CANNABIS...SINNER OR SAVIOUR?

The storm around COVID-19 settles gently and matters more mundane rear their not so ugly heads again. And so, to revisit the clouds and confusion around cannabis.

Google, AI and social media has created a host of experts and along the way fact and fiction have become blurred. The entry of those with vested commercial interests into the debate has further muddied the waters. The confusion relating to the legalisation of recreational cannabis use and decriminalisation persists. The cognitively challenged presume that decriminalisation means safe. And CBD shops have mushroomed everywhere...

History

The tale is not new. Cannabis has been used in its different forms by various groups of people from antiquity. The ancient Egyptians used 'oil from hempseed' to treat vaginal inflammation, the Hindu god Shiva is said to have been given cannabis as an antidote after he was poisoned. Hindu scriptures refer to cannabis as a 'source of happiness'. Followers of the Sufi sect in Islam felt that cannabis helped them gain spiritual insight by the arousal of ecstatic states. The Rastafarians believe that cannabis helps penetrate the truth and brings them closer to God.

THC vs CBD

The cannabis plant (leaves, stems, flowers and buds) contains over 120 active ingredients, cannabinoids. The 2 most abundant are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD). THC binds to CB-1 receptors (found in the central nervous system, heart, testes, and immune system) and modulates the release of the neurotransmitters serotonin, noradrenaline, acetylcholine, glutamate, GABA, dopamine, and the opioid systems. All these transmitters are relevant to psychiatry. Receptor stimulation modulates mood, cognition and appetite and brings a sense of well-being and relaxation. Impaired motor coordination, delayed reaction times and cognitive deficits may also ensue. THC is psychoactive and genetic modification, and the development of hybrid strains has seen the concentration of THC increase from 1 to 5% in the 1980's to 27 to 29% in some strains currently.

The effect of THC on the individual depends on a variety of factors – the manner of ingestion (whether it is smoked, vaped or consumed as edible gummies and brownies), the amount used, the environment in which it is used and its use in combination with other drugs. Individual patient factors (weight,

metabolism) also play a role.

CBD should have no more than 0.3 % THC. It does not cause euphoria and is not psychoactive. It may help relieve pain and inflammation but can also cause diarrhoea, fatigue, and weight loss. The peripheral effects of CBD – bronchodilation and decreased intraocular pressure suggest its use in the treatment of asthma and glaucoma.

Addiction

Cannabis is the most used illicit drug in the United States – in 2021 35.4% of young adults (aged 18 to 25) reported its use in the last year. 9% of those who experiment and 25% to 50% of those who use it daily will become addicted.

Short term effects on health include:

- Intoxication - disturbances in level of consciousness, cognition, and behaviour
- Problems with motor coordination leading to increased risk of injury
- Anxiety, panic attacks, hallucinations
- Acute cardiovascular effects – increased heart rate and blood pressure, myocardial infarction and strokes

Long term use causes dependence which increases health risks.

Magnetic resonance imaging (MRI) studies report structural changes in

the hippocampus, prefrontal cortex and the hippocampus. Hence the problems with memory, decision making and movement. The risk of developing chronic bronchitis and cancer is also increased.

It's unfortunate that the uninformed believe that cannabis is safe to use. There is no documented evidence for the safety / benefit of recreational cannabis. All evidence indicates the contrary. The use of cannabis for medicinal purposes is a different debate. Many people have confused the issues.

Addiction is a complex medical condition and people should be offered treatment rather than punished for using substances. However, to merely decriminalise recreational cannabis use without having appropriate structures in place to educate and to treat is short-sighted and spells disaster.

The risks of the unfettered use of cannabis are many. Cannabis is addictive and its use may lead to dependence and withdrawal. People who use cannabis are at higher risk for developing depression and anxiety. Cannabis may also cause psychosis and lower the age of onset for Schizophrenia. Impaired cognitive function as a result of the use of cannabis leads to poor school performance and diminished achievement.

Adolescents are particularly at risk if exposed to cannabis. During this period of rapid neuro-development cannabis use may impair neural connectivity in specific brain regions concerned with learning and memory.

Limited resources

The decriminalisation of the use of recreational cannabis in private spaces may well lead to the greater abuse of cannabis, increase rates of addiction, and aggravate the myriad of medical, psychosocial and psychiatric problems caused by cannabis.

South African society is marked by inequality and economic disparity. The vulnerable will be more affected by these problems. The poor don't have ready access to resources, medical aids and rehabilitation facilities. In a country with limited resources the provision of an

adequate health service is a constant struggle. Mental health services and treatment for addiction has never been a priority.

Medicinal benefits

There is a growing body of evidence for the medicinal use of cannabis. Evidence has emerged for the use of cannabis in:

- Appetite stimulation in patients with cancer and HIV
- Control of nausea and vomiting in patients undergoing chemotherapy
- Muscle spasm in multiple sclerosis
- Involuntary movements in Parkinsons Disease
- Neuropathic pain in diabetes and fibromyalgia
- Glaucoma

Epidiolex is a CBD product which was approved by the FDA in June 2018 in the USA for the treatment of rare forms of severe childhood seizures – Lennox-Gastaut Syndrome and Dravet Syndrome. The FDA has also approved synthetic THC agents Dronabinol and Nabilone to decrease nausea post chemotherapy and stimulate appetite in HIV patients. In the UK and Canada Sativex spray is available on prescription only for the treatment of pain and spasm in patients with multiple sclerosis.

Politics and the law

Doctors have an ethical duty to get involved in drafting policies in relation to drugs. Often this is left in the hands of politicians, lawyers, and

social workers. The criminalisation of the use of drugs is irrational and causes harm. It encourages a black market and criminal behaviour. In March 2017 the Western Cape High Court ruled that laws that prohibit the production and use of cannabis at home for private use violated the South African constitution. This decision was ratified by the Constitutional Court in September 2018 and Parliament was given 2 years to implement the decision.

In May 2019 then Minister of Health, Dr Aaron Motsoaledi, gazetted an exemption for CBD preparations excluding them from the scheduling system that controls drugs for a period of 12 months. Two conditions applied – the maximum daily use could not exceed 20mg and the products could not claim to treat or cure any condition. CBD products flooded the market. There are no evidence-based quality controls or safety data for these products. Hence the South African Medical Association advises doctors against their prescription.

The Cannabis for Private Purposes Bill was ratified earlier this year but both pro and anti-cannabis lobbies have objected to the provisions in their present form. Further legal challenges loom and the road ahead is uncertain. And again the poor and the marginalised are victims of those who seek to enrich themselves in a commercial cannabis market...

References available on request. MHM

