



## THE MEDICAL ASSOCIATION OF MALTA

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### MAM Position Paper on Recreational Cannabis

#### Summary

MAM calls for the withdrawal of the cannabis whitepaper. This is poorly thought out and presented without the input of health and social professionals who deal with the after effects of cannabis use.

- As Malta recovers from the COVID19 pandemic now is not the time to introduce measures which will burden the health system.
- Cannabis use can have debilitating health effects. Increased use will need increased health infrastructure to cope with it.
- After all the progress we made to tackle smoking and the harm it causes MAM is disappointed to see government proposing regression in this area.
- The proposed law does not address the increase in accidents seen elsewhere nor the consequences of accidental exposure of children to cannabis.
- MAM calls for suitable treatment and support services for those who are affected by mental health consequences of cannabis use, and their families.
- MAM believes the response to cannabis use should be one whereby cannabis users are diverted into education or treatment programs. Law enforcement should target the suppliers of cannabis.

#### Introduction

Cannabis is a drug that comes from the plant *cannabis sativa*. The active chemical, delta-9 tetrahydrocannabinol, (THC) is found in the resin that covers the flowering tops and upper leaves in the female plant. It is the THC that gives the user the alteration in mood and the feeling of a 'high'. Cannabis is referred to as a 'depressant' drug in that it affects the central nervous system, slowing down the messages between the brain and the body.

Cannabis sativa plants come in a variety of concentration of THC. Cannabis plants with a concentration of THC of less than 0.3% are usually referred to as hemp<sup>1</sup>. Over the last 5 decades, increasing THC concentrations have been observed in products available in many countries. In the 1970s, the THC concentration in cannabis found in England and in the

Netherlands was less than 3%. Current varieties contain on average 16% in England and 20% in the Netherlands while new cannabis preparation techniques have led to products containing THC levels of up to 40 percent<sup>2</sup>.

### **Maltese experience with recreational cannabis**

Cannabis is the most commonly used illicit drug among the Maltese adult population aged 18-65 years. According to the 2013 general population study, around 4.3 % of those aged 18-65 years reported having used cannabis during their lifetime, the lowest level in the EU<sup>3</sup>. In contrast 45% of people in France have reported use of cannabis during their lifetime<sup>4</sup>.

Recreational cannabis use in Malta was more prevalent in younger adults, with the prevalence of lifetime use of cannabis at 5.1 % among 18- to 24-year-olds. In general, the use of illicit drugs was more common among males than females. In the 2013 study, among those who had used cannabis during their lifetime, the average age at first use was just under 19.<sup>3</sup>

Cannabis is the most frequently seized drug in Malta, and is the only illicit drug known to be produced in the country (cannabis plant), mostly on a small scale for personal use.<sup>6</sup>

### **Health effect with use of recreational cannabis**

As with most other psychotropic drugs, the health effects of cannabis vary between patients, based on their weight, health condition, other concomitant drugs taken (including alcohol), degree of tolerance to drug and the amount and concentration of drug taken.

Health effect vary from short term to longer term effects and include acute transient psychiatric (including psychotic symptoms) or exacerbation of pre-existent psychiatric conditions.

The most common short term symptoms associated with cannabis use are impaired balance and coordination, slowing down of motor and mental effects (depressant drug), experiencing euphoria or a 'high', difficulties with memory retention, decreased inhibitions and effects on lungs (including exacerbation or worsening of respiratory conditions like asthma or COPD).

Long term effects (if cannabis is taken on a regular basis over a long period of time) include tolerance to cannabis, increased risk of damage to lungs and lung functioning, a decrease in concentration or motivation, difficulties with memory and ability to learn new tasks, decreased sex drive, lowered sperm count in men, irregular menstrual cycles in women and hyperemesis syndrome (persistent vomiting).

### **Recreational cannabis effects**

Intoxicating effects occur within seconds to minutes and can last for three hours; for larger doses the effects last longer;

Effects on thinking and coordination can last up to 24 hours;

Short term memory loss can last for a number of weeks.

Complete elimination of a single dose in a chronic user can take up to 30 days

Psychiatric conditions exacerbated by use of cannabis (including acute psychosis) vary in duration.

### **Recreational cannabis exposure to children, including accidental ingestion**

Reported exposures to children less than ten years of age have sharply increased in Colorado following recreational marijuana legalisation. A retrospective cohort study of hospital admissions and regional poison control centre (RPC) cases between January 1, 2009–December 31, 2015 at a tertiary-care children’s hospital found that the mean rate of cannabis-related visits to the children’s hospital (ages 0–9years) increased from 1.2 per 100,000 population in the two years prior to legalization to 2.3 per 100,000 after ( $P = .02$ ). The median age of exposure was 2.4 years. The majority were exposure to an infused edible product (48%)<sup>7</sup>.

### **Driving under the influence of cannabis**

Laboratory tests and driving studies show that cannabis may acutely impair several driving-related skills in a dose-related fashion, but that the effects between individuals vary more than they do with alcohol because of tolerance, differences in smoking technique, and different absorptions of THC. Driving and simulator studies show that detrimental effects vary in a dose-related fashion, and are more pronounced with highly automatic driving functions, but more complex tasks that require conscious control are less affected, which is the opposite pattern from that seen with alcohol. Because of both this and an increased awareness that they are impaired, cannabis smokers tend to compensate effectively for their impairment by utilizing a variety of behavioural strategies such as driving more slowly, passing less, and leaving more space between themselves and cars in front of them. Combining cannabis with alcohol eliminates the ability to use such strategies effectively, however, and results in impairment even at doses that would be insignificant were they of either drug alone.<sup>8</sup>

In Colorado since recreational cannabis was legalised in 2013, traffic deaths in which drivers tested positive for marijuana increased 109 percent while all Colorado traffic deaths increased 31 percent. Since recreational marijuana was legalised, traffic deaths involving drivers who tested positive for cannabis more than doubled from 55 in 2013 to 115 people killed in 2018. Since recreational marijuana was legalized, the percentage of all Colorado traffic deaths that were marijuana-related increased from 15 percent in 2013 to 23 percent in 2018.

### **Pregnancy and cannabis**

Available studies on cannabis exposure in pregnancy support some degree of developmental disruption, including an increased risk of foetal growth restriction and adverse neurodevelopmental consequences. However, much of the existing prenatal marijuana research was performed in the 1980s, when quantities of THC were lower and the frequency of use was less. Additionally, most human studies are also limited and conflicting as most studies have been observational or retrospective, relying primarily on patient self-report and confounded by polysubstance abuse and small sample sizes, precluding determination of a causal effect

specific for cannabis. Given the paucity of evidence, it is currently recommended to avoid using cannabis while pregnant or when breastfeeding.<sup>9</sup>

### **Mental health effects of cannabis including dependence**

Cannabis use commonly starts in adolescence, a crucial period for brain development. Adolescence is described as "the critical period of addiction vulnerability" because during this period the brain pathways that enable people to experience motivation and rewarding experiences are still developing. During this period adolescents are more prone to risk taking and less prone to impulse control<sup>10</sup>. Since cannabis impacts the trajectory of brain development at such a sensitive stage there is a high potential for adverse effects. One of the main reasons is because crucial processes of brain development and synaptic pruning are ongoing<sup>11</sup>. Indeed, brain development and synaptic pruning continue up to the age of 25<sup>12</sup>.

Clinical and research evidence confirms the negative consequences in various domains of functioning consequent to cannabis use. Repeated exposure of the brain to a range of potent drugs results in dysfunction of its vital and decisive actions that tend to define human nature. It appears that, compared to older adults, the repercussions in those whose brains are still developing are more devastating. Adolescents and young adults who are regular cannabis users manifest a range of cognitive deficits, including impairments in attention, learning and memory, and an inability to switch ideas or responses. These deficits are similar in adults, but in adolescents they are more likely to persist and may recover only after longer periods of abstinence. Adolescent onset cannabis users show greater IQ decline than adult-onset cannabis users; impairment is still evident after cessation of use for 1 year or more<sup>13</sup>.

Cannabis users at any age are at an increased risk of developing psychotic symptoms or schizophrenia like psychotic illness; a recent meta-analysis reported that the odds ratio for developing psychotic symptoms or a psychotic disorder in cannabis users versus non-users reached 3.9 among the heaviest users<sup>14</sup>. Furthermore, recently published research reports that adolescent cannabis use is associated with increased risk of psychosis, which risk is not attributable to family history of psychosis or other substance use<sup>15</sup>. Cannabis use in patients with schizophrenia is associated with poorer outcomes and more prominent negative symptoms. It is also a known fact that cannabis induced psychosis is a harder form of psychosis to treat and sometimes these people never fully recover<sup>16</sup>.

### **Recreational cannabis and the law**

With regards recreational cannabis and legislation, the terms 'depenalisation', 'decriminalisation' and 'legalisation' are often used in the drug control debate. These terms are briefly distinguished as follows.<sup>17</sup>

**Depenalisation:** something remains a criminal offence, but is no longer punished, e.g. now the case may be closed.

**Decriminalisation:** an offence is reclassified from criminal to non-criminal. It remains an offence and may be punished by the police or other agencies, rather than a court.

**Legalisation:** there is a move from a prohibited behaviour (criminal or not) to a permitted behaviour. This is usually used to describe supply, rather than possession, of drugs.

No national government in Europe supports legalisation of cannabis sale for recreational use, and all countries have prison sentences for illegal supply. However, several draft laws have been proposed to national parliaments in the last few years, as well as some initiatives in regions or cities that were rejected at national level.<sup>17</sup>

Countries that have legalised recreational use of cannabis are Canada, Georgia, South Africa, and Uruguay, together with 17 states, 2 territories and the District of Columbia in the United States and the Australian Capital Territory in Australia. Commercial cannabis production and sale is legal nationwide in two countries (Canada and Uruguay) and in all subnational U.S. jurisdictions that have legalised cannabis except Washington, D.C. A policy of limited enforcement has also been adopted in many countries, in particular the Netherlands where the sale of cannabis is tolerated at licensed coffee shops.<sup>18</sup>

1. The Maltese Medical Association (MAM) does not condone the use of cannabis for non-medical purposes.
2. Whilst MAM supports depenalisation and decriminalisation of recreational cannabis for personal use, MAM does not support and is against legalisation of recreational cannabis, cannabis tourism or commercialism of recreational cannabis.
3. MAM believes that cannabis use needs to be viewed in terms of social determinants and the social gradient, whereby people living further down the gradient are at greater risk of drug harms.
4. MAM considers cannabis use to be both a health and social issue.
5. MAM considers cannabis to be a drug that causes a range of health and social harms at the individual and community level.
6. MAM supports a harm reduction approach to cannabis use.
7. MAM believes that the harms associated with cannabis use should be viewed along the continuum of harms caused by both licit and illicit drugs. The mental health and other harms to the individual cannabis user can be debilitating. The absolute risk of harm to users is small but there is a dose-response relationship with the more cannabis consumed the greater the risk of experiencing harm.
8. MAM Association believes the response to cannabis use should be one whereby cannabis users are diverted into education or treatment programs. Law enforcement should target the suppliers of cannabis.
9. MAM supports the development and use of evidence based harm reduction programs. Such programs need to be thoroughly and prospectively evaluated.
10. MAM supports a public education campaign to demonstrate that 'soft' or 'recreational' drugs, as any drug, can have serious and harmful effects. This is particularly relevant for cannabis.
11. MAM supports the widespread availability of appropriate evidence based information and education on cannabis, particularly to young people.
12. MAM recognises that children can have significant neurological effects as a result of accidental ingestion of cannabis. Children should be protected from any exposure to

- cannabis. All doctors should consider cannabis ingestion in a toddler or child with reduced consciousness levels and with or without abnormal neurological findings.
13. MAM believes the current evidence supports cannabis being a component cause in the development of psychosis. The precise strength of this causal relationship is currently unknown. MAM recognises the role for further prospective population based cohort studies, particularly of young people, to examine the strength of this relationship. Cannabis use can aggravate mental illness in those who have a predisposition to it or have pre-existing mental illness.
  14. MAM supports research, from both a genetic and socioeconomic perspective, to identify those young people most at risk of cannabis induced psychosis and the efforts that can be made to reduce that risk.
  15. MAM calls for suitable treatment and support services for those who are affected by mental health consequences of cannabis use, and their families.
  16. MAM believes that doctors have an important role in educating people about cannabis and supporting those with problems associated with cannabis. The MAM calls for better links between primary care and specialist mental health and drug and alcohol services. There is a need to reduce barriers and improve services for those seeking treatment for problems associated with cannabis.
  17. MAM believes that responses to cannabis need to cover prevention, identification, diagnosis, treatment and rehabilitation.
  18. MAM believes that as younger people and those who use cannabis frequently are most at risk of harm, early intervention programs and initiatives to avoid, delay and reduce the frequency of cannabis use are essential.
  19. MAM believes that school based life skills programs that are evidence based can assist in preventing or reducing substance use problems. No child should be denied access to such programs.
  20. MAM believes that cultivation of cannabis plants in homes will make cannabis products more accessible to minors.
  21. MAM calls on government to undertake specific initiatives to reduce the social inequalities that increase the risk of harm from drug use to persons and communities who live further down the social gradient.
  22. MAM calls on government funding and resources for harm reduction to be increased and for more funds to be allocated to mental health and to decrease mental health stigma.
  23. MAM encourages medical practitioners to be aware of dual diagnosis (psychiatric and alcohol and drug disorder) issues and multiple drug use problems when taking patient histories, especially of young people.
  24. MAM calls on the general public not to use recreational cannabis to ease mental health conditions, and to seek professional medical services in such instances.

#### References:

1. R. L. Hilderbrand, 2019. Hemp & Cannabidiol: What is a Medicine? Hemp & Cannabidiol: What is a Medicine?

2. Lafaye, Karila, Blecha et al;.2017 Cannabis, cannabinoids, and health Dialogues Clin Neurosci. 2017 Sep; 19(3): 309–316
3. Malta Country drug report 2019. EMCDDA
4. European drug report 2019. EMCDDA
5. European Monitoring Centre for Drugs and Drug Addiction, 2020. Drug-related hospital emergency presentations in Europe: update from the Euro-DEN Plus expert network. ISBN 978-92-9497-464-8
6. National Report on the Drug Situation in Malta 2019. Malta National Focal Point on Drugs and Drug Addiction. Ministry for the Family, Children’s Rights and Social Solidarity and co-funded by the EMCDDA
7. Brad A. Roberts2019 Legalized Cannabis in Colorado Emergency Departments: A Cautionary Review of Negative Health and Safety Effect. West J Emerg Med. 2019 Jul; 20(4): 557–572.
8. Sewell, Poling and , PhD, Sofuoglu, 2010 THE EFFECT OF CANNABIS COMPARED WITH ALCOHOL ON DRIVING. Am J Addict. 2009; 18(3): 185–193.
9. Thompson, DeJong, Lo 2019 Marijuana Use in Pregnancy: A Review Obstet Gynecol Surv. 2019 Jul;74(7):415-42
10. European Monitoring Centre for Drugs and Drug Addiction. Multidimensional family therapy for adolescent drug users: a systematic review. EMCDDA papers, Publication office of the European Union, 2014.
11. The health and social effects of non-medical cannabis use, World Health Organisation, 2016.
12. Brain’s synaptic pruning continues into your 20’s; Zukermann and Purcell, New Scientist, August 2011.
13. Persistent cannabis users show neuropsychological decline from childhood to midlife, Meier et al, PNAS October, 2012.
14. Meta-Analysis of the association between the level of cannabis use and risk of psychosis, Marconi et al, Schizophrenia Bulletin, Volume 42, Issue 5, 1 September 2016.
15. Adolescent cannabis use, baseline prodromal symptoms and the risk of psychosis, Mustonen et al, BJPsych, Vol212, Issue 4, March 2018.
16. Cannabis use and progressive cortical thickness loss in areas rich in CB1 receptors during the first five years of schizophrenia; Rais et al, European Neuropsychopharmacology, December 2010.
17. EMCDDA. Cannabis policy: status and recent developments. Cannabis policy: status and recent developments | [www.emcdda.europa.eu](http://www.emcdda.europa.eu)
18. The telegraph. Everything you need to know about marijuana smoking in the Netherlands.

<https://www.telegraph.co.uk/travel/destinations/europe/netherlands/amsterdam/articles/ev-erything-you-need-to-know-about-smoking-marijuana-in-the-netherlands/>