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Legalising Cannabis – who will profit from it?

Jürg Barben, MD

Prof. Dr. med., FMH (Swiss Medical Association) Paediatrics and Adolescent Medicine, specialised in pulmonary diseases

Introduction

Forty years ago, it was hard to imagine, today it is reality: Although being classified as an illegal drug on a federal level in the USA, 30 US States approved Cannabis for medicinal use and 10 States declared Cannabis as free to use for leisure purposes [1]. Following Uruguay (2014), Canada now declared its intent to legalise Cannabis for recreational use as well [2]. This is despite the fact that the medical benefits of Cannabis are low and multiple adverse effects have been known to the medical community for years [3–7]. Since mid-2016, marijuana products with a $\Delta 9$ -tetrahydrocannabinol

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(THC) content of less than 1% have been legally available in Switzerland and following the legalisation, 580 companies entered the legal Cannabis business. In 2017, the upturn in these businesses added 15 million Swiss francs to the treasury [8].

In the meantime, an enormous Cannabis industry has emerged in the US, with businesses worth millions [9]. These businesses could rely on the experiences and knowledge of the tobacco industry [10, 11]. In the States that made Cannabis legal, sales reached USD 8 billion in the last year; sales in 2025 are estimated at 24 billion USD [1]. In the process, these states received USD 745 million in taxes last year, and by 2025 they are estimated to be around USD 4.3 billion. However, this revenue will not cover future follow-up costs of Cannabis use such as health costs, occupational losses and social costs, as it was the case with the tobacco epidemic.

The number of Cannabis users in the US aged 12 years and older, is estimated at 22 million. 10% use Cannabis only for medical purposes. The number of Cannabis smokers has increased from 6.2% in 2002 to 8.3% in 2015 [12], Cannabis addicts were estimated at 2.7 mil-

lion in 2014, with 9% of all Cannabis users becoming addicted. This rate increases to 17% if Cannabis use starts in adolescence, and to 25–50% if Cannabis is consumed on a daily basis [1]. Since 1992, the average level of THC, the major psychoactive substance of Cannabis, has increased from 3 to 12% in 2012. THC content in concentrated Cannabis oil can be as high as 75% [1, 13, 14].

Who financed the legalisation of Cannabis?

"National Families in Action" (NFA) published an indepth report, Tracking the money that's legalizing marijuana and why it matters, documenting the money flow used to vote for the legalisation of Cannabis in the US over the past 20 years for the first time [15]. In this report, it becomes clear how the fight for the authorisation of Cannabis for medical purposes was used as a preliminary stage for a subsequent full legalisation. Since 1996, three billionaires - George Soros, Peter Lewis and John Sperling – have contributed about 80% of the money used for the votes on Cannabis matters in multiple US States. Back in 1992, George Soros, who made his fortune as a financial speculator, donated USD 15 million to the legal battle to legalise Cannabis for medical purposes and later used his Open Society Foundation to fight for a full legalisation, starting in Uruguay [16]. Peter Lewis and John Sperling, both deceased today, made their fortunes in the insurance industry and the for profit education movement. All three

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of them saw the opportunity to fully legalise Cannabis by first introducing a legal use for medicinal purposes. In 1993, Richard Cowen, former director of the *National Organization for the Reform of Marijuana Laws (NORML)*, stated in a press conference that "the key to it [full legalisation] is medical access. Because, once you have hundreds of thousands of people using marijuana

Note

As the topic dealt with in this article is currently being intensively discussed at a technical and political level, the editors have invited the Swiss Society for Addiction Medicine (SSAM) to comment on this as well. The contribution of SSAM follows in issue 49.

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medically, under medical supervision, the whole scam is going to be blown. The consensus here is that medical marijuana is our strongest suit. It is our point of leverage which will move us toward the legalisation of marijuana for personal use" [15].

Cannabis as medicine?

Scientific data on the medical use of Cannabis and positive effects is rare. Systematic and high-quality scientific research, in particular prospective, randomized, placebo-controlled, double-blind studies, hardly exist [7]. Back in 1975, *Nabilone* – a fully synthetic derivative of THC – was patented by the US company Eli Lilly as an anti-emetic and tranquilizer. Later it was approved by the US Food and Drug Administration (FDA) for treating anorexia and cachexia in AIDS patients. It was also

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approved to be used as an anti-emetic for nausea and vomiting side effects accompanying cytostatic or radiation therapy in the course of cancer treatment. Another drug containing THC, *Dronabinol*, was approved for the same indications. In Switzerland, medical use is possible with an exemption permit issued by the Federal Office of Public Health (FOPH). The active substance is mainly administered in the form of a solution and may be used for loss of appetite and nausea due to serious illnesses, severe pain and spasticity.

However, the effect of these two THC-containing drugs are low and can easily be achieved with other medications. In 2017, the US National Academies of Sciences (NAS) published a very comprehensive publication on Cannabis: The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research [12]. Analysing a total of 10700 abstracts taken from publications on Cannabis use since 1999, the report concludes that medicinal effects have only been scientifically proven when used for chemotherapy-induced nausea and AIDS-induced cachexia, and partly when used for chronic pain and muscle spasms in multiple sclerosis patients. While the positive effects are low, the NAS points out that Cannabis use increases the risk of traffic accidents and the risk of intoxications, especially in children, as well as the risk of developing schizophrenia, anxiety and psychoses. In addition, the report also points out how Cannabis use results in a limited attention span, memory loss and a decreased learning ability. When used in childhood and adolescence, Cannabis is highly likely to lead to addiction. A recent paper highlights

devastating effects of Cannabis use on the brain development of unborn children and newborns and hence, strongly discourages pregnant women and nursing mothers to use Cannabis [17].

Consequences of legalising Cannabis

Legalising Cannabis for recreational use opens up vast opportunities for commercialisation. Consequences following these opportunities are difficult to foresee [10, 11]. Debates on how to limit health problems caused by the use of Cannabis, for example by means of new regulatory measures, will tie up enormous financial and legal resources [14]. The Cannabis industry might again take notes from the tobacco industry, which managed to turn a cigarette into a perfect nicotine dispenser in the course of the last century. Adding to that, the tobacco industry perfidiously promoted their products and the number of cigarette smokers rose from 1% in 1880 to 50% in 1950 [10, 18, 19]. While only a few will benefit financially from commercialising Cannabis, the legalisation of this drug will, as it was with tobacco, entail a series of unprecedented health and safety issues, as well as financial consequences for individuals affected and for society as a whole [14, 20]. Like alcohol, Cannabis will become a relevant issue in workplaces and on the road. THC has long-lasting effects, which will have an impact on the quality of work; injuries and endangering human lives will become more frequent. THC is stored in adipose tissue due to its high fat solubility which means that it can be released back into the bloodstream hours after use and be detected in urine for days [6]. In addition, an increasing number of young people quit school or apprenticeships due to the so-called, Cannabis-induced "amotivational syndrome" and need the help of social workers and various state institutions to return to a more normal life, or end up needing long-term care [3, 13, 21-23].

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In addition to organic Cannabis products, an increasing number of synthetic cannabinoids have been produced in countless laboratories since the 1980s. Today, these cannabinoids are beyond control and have led to numerous deaths [24, 25]. Cannabinoids are also becoming increasingly popular among young people for "vaping" in modern multifunctional e-cigarettes, which have become particularly popular in France [26].

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Conclusion

Like tobacco, trading Cannabis means to do business with an addictive substance with well-known physical and psychological consequences. To reach the goal of legalisation, the effects of Cannabis have been actively downplayed, and a few are making billions of dollars with it [13]. The Tobacco Framework Convention on Tobacco Control (www.fctc.org) has achieved its first successes worldwide fighting the tobacco epidemic. With the legalisation of Cannabis, a new epidemic will be created, with unforeseeable consequences. For this reason, various medical organisations such as the German Society of Pneumology or the American Thoracic Society published position papers and reports to call attention to the dangers of Cannabis use [7, 27].

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Correspondence:
Prof. Dr. Jürg Barben, MD
Head, Division of Paediatric
Pulmonology & Allergology
Children's Hospital
of Eastern Switzerland
Claudiusstr. 6
CH-9006 St. Gallen,
Switzerland
juerg.barben[at]kispisg.ch