Cannabis
Issues for policy makers
Executive summary
Introduction
Cannabis is the most widely used illegal drug in the world today and at the forefront of the legalisation debate, particularly after marijuana legalisation won a majority in two U.S. state referenda in Washington and Colorado.

Despite a growing evidence base, much uncertainty remains about the effects of cannabis on the health and welfare of the population. There is little doubt that cannabis use correlates with a wide range of negative outcomes, from mental health problems to poor academic achievement, reduced life satisfaction, relationship problems and unemployment, yet it is often difficult to disentangle causes and effects. Nevertheless, a growing body of evidence shows that cannabis in itself is a risk factor for a number of negative health and social outcomes, and also causes harm to others. Moreover, cannabis potency has increased since the 1990s. This change is attributed to new cultivation methods and genetic manipulation. Evidence suggests that higher THC levels can increase the negative effects of cannabis.

Use Patterns
About one in five Europeans between 15-64 years say they have used cannabis at least once in their lifetime. Only 3.6% say they have used it in the last month, and according to estimates around 1% are daily users. Prevalence rates are highest in the 15-24 years age bracket, where around 8% say they have used cannabis the last month. After an increase in use in the 1990s and early 2000s most countries now report stabilising or even decreasing trends.

On the individual level, frequently cited motives for using cannabis include "to relax", "to become intoxicated", and "to enhance activity". However, lesions from other areas of public health show that behaviour is also influenced by a host of social, cultural and economic patterns, often referred to as the social determinants of health. Social acceptability, price and availability are examples of factors that are likely to influence use. Vulnerabilities, protective factors and drug exposure probably interact to explain use and harms.

A number of US states have permitted the use of smoked marijuana for medical purposes. Critics have argued that this sends a mixed message about the risks of cannabis to young people. Empirical evidence shows that risk perception is lower in medical marijuana states and use rates are higher.

Another concern is the diversion of medical marijuana to the black market, to young people and to neighbouring states.

Harms To Users and Young People
Cannabis use is associated with a range of both physical and psychological harm, drug addiction, road traffic accidents, poor learning outcomes, reduced employment opportunities and relationship problems. Cannabis is also linked to serious psychiatric illness, such as psychotic experiences, schizophrenia, anxiety and depression, although the causal relationship is hard to establish. Some evidence suggests that early onset of cannabis use is more strongly associated with negative outcomes, both on mental health and cognitive development. Addiction is a critical time for brain development, and the adolescent brain may therefore be more vulnerable to the toxic effects of cannabis.

A number of studies demonstrate the existence of cannabis addiction. Estimates indicate that about 1 in 9 who try cannabis develop addiction. Among adolescents the rate is 1 in 6. In Europe cannabis is now the second most reported drug among those who seek treatment, and it is the primary drug for 8 in 10 treatment entrants under the age of 20.

The topic of whether cannabis acts as a gateway to other illegal drugs has received much academic and political attention. Critics have argued that unobserved factors may influence both cannabis use and the use of other drugs, and some have even suggested that whatever gateway effect exists is due to the illegal status of cannabis. However, even after controlling for many known confounders, studies have found statistically significant associations between cannabis and further drug use.

Cannabis use may also harm others. Family members and close friends can experience significant stress and suffer health problems as a result of being close to and concerned about someone who uses drugs. While cannabis addiction may not be as debilitating as e.g. heroin addiction, a large number of people are affected.

Even though cannabis is often associated with relaxation, studies have found associations between delinquent and aggressive behaviour and cannabis use. Furthermore, cannabis is associated with a significant risk of being involved in a motor vehicle accident. Studies indicate that cannabis involved driving has increased in recent years. This affects all road users, but family and friends may be particularly exposed to drug driving, perhaps without even realizing it. Similarly, cannabis use may increase the risk of workplace accidents and injuries, and studies also indicate that it is related to absenteeism.

While some studies exist, there is clearly need for more reliable data on harm to others from cannabis.

A Comprehensive Approach To Cannabis
Tackling cannabis use requires a multi-dimensional approach, which includes both person-centred and population level interventions. However, it is important to invest in and prioritise the interventions with the greatest impact. For instance, experience from the alcohol field indicates that the effectiveness of education, communication and awareness raising is much weaker than the population level measures that restrict the physical and economic availability of alcohol.

Furthermore, environmental strategies to restrict use and create protective and normative social environments that curb young people's drug use need to be backed up by a range of interventions that aim to train, persuade and enable people. Much more can be done within the current framework to promote evidence-based interventions and interventions that address social disadvantage, target drug use in families or reach at-risk children. Moreover, there is a lack of services available to young people with cannabis dependency.

Since no country in Europe has legalised cannabis, there is no empirical evidence on the effects of legalisation. However, findings from other fields of public health may provide some guidance. Factors like affordability, availability and acceptability have been shown to influence consumption of alcohol, tobacco and other commodities. The legal status of cannabis is likely to impact on all of these factors. Furthermore, epidemiological studies from other fields also indicate that there is a link between the level of exposure to a risk factor and population health. These findings are likely to apply to cannabis, too.

Changes in the legal framework will probably impact more on young people than on adults, who already have established patterns of use or non-use. Environmental factors such as increased availability, less perceived risk, reduced costs, marketing and advertising and changes in social norms may have significant long-term effects on consumption and use patterns.

Legalisation of cannabis will by definition reduce cannabis related crime. However, it is unlikely to do away with organised crime or eliminate the black market. A regulated cannabis market would still have to be enforced, and regulations would create incentives for illegal sales. Even though alcohol and tobacco are legal, there is still a sizeable black market, particularly in less developed countries.

While small-scale home production would probably weaken incentives for a black market, it would also undermine regulations on quality, price, potency and age limits.

A regulated cannabis market would make it possible to introduce age limits on cannabis use. However, the evidence shows that despite age limits the use of alcohol and tobacco among underage youth is widespread, and both alcohol and tobacco are more easily available than cannabis. There is little to suggest that a regulated cannabis market would reduce cannabis use and availability among young people.

It is generally assumed that laws have a deterrent effect and that a restrictive approach will influence both the availability and price of drugs. However, drug use is not governed by laws alone. Cultural factors such as habits, customs, risk perception, social norms, public acceptance and social equality also play a role. There may even be some interaction between laws and social norms.

Legalisation and regulation of cannabis is 'essentially unchartered waters'. The issue of cannabis instead requires a comprehensive approach which takes advantage of available evidence and experience from other public health fields. Unfortunately across Europe, a comprehensive response to cannabis is not being employed and few EU countries are investing in a wide range of interventions (such as universal, selective, indicated and environmental evidence based prevention programmes) which are at their disposal within a restrictive drugs framework. This has led many to assess that current drug laws are not working, as many rely totally on the laws to reduce demand, without considering the need for a much wider set of measures which would address the environmental, social and personal factors which lead to drug use.

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