Cannabis

Introduction

Cannabis is one of the world's most commonly used leisure drugs; it is estimated that at least one person in ten in the UK has used it and that there are 160 million users worldwide. Its use in human cultures spans millennia, often in religious, mystical or ritual settings. The drug comes from the hemp plant, which grows in a variety of climates and can reach up to 15 feet in height. The leaves are lance-shaped, with saw-toothed edges. In addition to the psychoactive drug, hemp is the source of many other products. There are three subspecies of the plant: Sativa (the most prominent), Indica and Ruderalis.

Cannabis comes in three main forms: cannabis resin (hashish), herbal cannabis (marijuana) and cannabis oil. These different forms are historically associated with different cultures in various parts of the world. Hashish is a sticky brown substance, the compressed resin exuded by the plant, while marijuana is composed of dried leaves. Oil is the concentrated extract of THC, the drug's primary active ingredient.

Cannabis is usually smoked, but can be eaten or consumed in drinks such as coffee. When swallowed, the effect takes longer to come on but is stronger, and may be very strong indeed, causing hallucinations and extreme mental confusion. It is often smoked in a joint, in which the drug is added to tobacco, and can be smoked pure in a pipe or water pipe such as a bong.

In recent decades, the illicit market has partially moved from producing cannabis on large farms in Morocco, Pakistan etc, to growing the plant indoors under artificial lighting and with controlled nutrition; this has produced "skunk", a strong strain with a higher than average THC content. (Skunk was originally a specific crossbred strain of indoor product, but the term is now generic.) Skunk has generated alarm in political circles, and some medical authorities believe that cannabis can cause mental illness. It is likely in such cases that it plays a role in a complex of genetic, social and psychological influences. Those whose nervous systems are maturing or who have pre-existing psychological problems should be wary of heavy cannabis use.

Cannabis is known by the street names puff, draw, weed, herb(s), soap, chronic, skunk, grass, ganja, hash, dope and Bob Hope (among others).

Pharmacology

Cannabis contains over 400 chemicals; some 60 plus of these are chemically unique and are known as cannabinoids. Delt-9 terahydracannabinol (THC) is generally regarded as the alkaloid primarily responsible for the plant's psychoactive effects, though there is ongoing research into the pharmacological action of the spread of cannabinoids. Cannabidiol (CBD) is believed by some users and researchers to modify the effect of THC, and research has been carried out on the anti-psychotic and muscle-relaxant properties of CBD.

Cannabis works by binding to receptors within the cerebral cortex, hippocampus, hypothalamus, cerebellum, basal ganglia, brain stem, spinal cord and amygdala, a very diverse set of locations associated with diverse functions, providing the neurological substrate of the great variety of experiential effects associated with cannabis ingestion. As in the case of opium, the discovery of receptors in the human brain and nervous system for chemicals

derived from plants led to a search for the endogenous alkaloid to which these receptors would naturally bind; an endogenous cannabinoid was duly discovered in 1988 and named *anandamine*, after *ananda*, the Sanskrit word for bliss.

History

The history of the use of cannabis is an ancient one. Native to central Asia, the plant has long been cultivated for hemp, the fibrous material it yields and from which rope can be made, as well as for its psychoactive uses. Present ethnobotanical and archeological opinion dates psychoactive use to the Mesolithic period (8,500- 4000 BC), in the context of shamanic ritual culture. There is no doubt that cannabis use was present in Asia and Europe in the prehistoric era.

It is known that cannabis was cultivated in Anglo-Saxon England around 400 A.D. It is presumed that this was predominantly for hemp fibre, but it is unlikely that cultures with sophisticated knowledge of herbal medicines would not have known about the other uses to which the plant can be put. Like most drugs, it has become the object of a great deal of cultural, medical, artistic and sociological attention during the modern period, with Baudelaire, Balzac, Dumas and other French cultural luminaries of the nineteenth century founding *Le club des Haschischins* in Paris, with the express purpose of exploring the drug's effects. In the UK, cannabis was one of many drugs legally and readily available during the Victorian age; after the introduction of the Dangerous Drugs Acts of the 1920s, occasional cases of possession came to light, until in the 1950s the smoking of cannabis surfaced in the interfacing of youth culture (the beats) with black immigrants. As might be expected, this was a potent mix—the indiscriminate mixing of the races, including young white women dancing and taking drugs with black men—and it drew forth the representatives and judgment of a scandalized tabloid press; a full blown moral panic took shape in the 1960s mass media when the counter-cultural 'youth-quake' that travelled across the West made pot-smoking *de rigueur* for any self-respecting young person with claims to being hip.

Use and culture

Since that time, the use of cannabis has spread beyond the counter-culture and youth cultures to pervade much of mainstream British society. As mentioned above, cannabis can be smoked, eaten, or dissolved in beverages such as coffee. The most popular form of use is to smoke; in the UK, although a wide variety of pipes and bongs are employed, the *joint* has tended to be the customary mode of smoking, and Americans are often amazed to find that Britons put tobacco in their joints. This variation is possibly an historical accident resulting from the British colonial experience in India and North Africa, which led to hashish being the form of cannabis with which Britain was most familiar. Americans were more accustomed to grass or marijuana (dried leaves and buds), which are easy to smoke neat in a rolled cigarette. Hashish was more suitable for pipes, and the cigarette form required the addition of tobacco to make it readily smokeable. In the 1960s, 70s and 80s, hash from the large outdoor cultivations of Morocco, Lebanon, Pakistan and Afghanistan was the most commonly available form of cannabis in Britain. Recent years, however, have seen hash taking a declining share of the market, as more and more cannabis is produced domestically by indoor growing techniques. 'Homegrown' herbal cannabis used to be a cheap and not very strong variety; now, under the generic term "skunk", the indoor strains are amongst the strongest available, and have become increasingly popular. Some studies have found that as much as half the cannabis consumed in the UK is now produced here.

Cannabis is a popular drug because many people enjoy its effects, which are both relaxing and stimulating. Users often smoke in groups, hilarity and profundity emerging simultaneously from their interactions; when the effects have worn off, the reasons for either are no longer readily apparent. Music and other sensory experiences are richly enhanced, while the imagination is unlocked in unusual ways, often resulting in creative expression. Again, in retrospect the creative masterpiece produced while stoned does not always maintain that status the next morning. The cannabis experience can also be anxious and unpleasant, particularly if the drug is very strong and/or taken in high doses by naïve users. As is the case with so many of the drugs we have discussed here, set and setting (see discussion in Use & Culture section of LSD) are as important as the chemical substance itself in deciding the content and quality of the drug experience.

Health

The expansion of high potency indoor strains is one of the factors that have led to increased medical and governmental interest in the health effects of cannabis. There is considerable evidence that, while under the influence of cannabis, short-term memory function, attention and motor-function are affected - most users are aware that their capacity to perform certain tasks is adversely affected while stoned, but this is not necessarily a problem. That said, some studies suggest that driving skills are significantly impaired, and it is definitely a good idea to avoid driving while stoned. In addition, there is much medical concern (and some research evidence to back it up) about the problematic long term effects of heavy cannabis use on individuals with pre-existing psychological problems and those with developing and immature nervous systems (i.e. adolescents). While there is conflicting evidence and the jury is certainly still out on these questions—and also because many of the studies are not methodologically sophisticated, tending to downplay the significance of complex cultural and social factors—there are good grounds for restricting the availability of cannabis to children, adolescents and those with mental health problems. Unfortunately, the current system of regulation does not readily facilitate these kinds of controls, since it leaves the distribution mechanisms in the hands of the black market.

There is also ongoing research to evaluate the effect that smoking cannabis has on the lungs. When smoking with a tobacco mix, it seems likely that one will be exposed to additional tar and other carcinogens, due to the depth of inhaling, the absence of a filter, and so on. On the other hand, there may be some evidence that cannabis possesses an anti-carcinogenic function; again, the research is, so far, inconclusive. The World Health Organization believes that smoking cannabis harms the lungs, and most regular smokers will have experienced the coughing and spluttering that seem to go with the territory. It is likely that what risks there are will be greatly affected by the regularity and intensity of use.