Cannabis:

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An analysis of medical use and prohibition of the cannabis plant in Modern England.

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Introduction

The quote used in the title is from an article by J. Russell Reynolds, the prominent neurologist, pioneer in the understanding of epilepsy and physician to Queen Victoria.[1] It serves to demonstrate the focus of this dissertation: the change in the perception of cannabis.

In nineteenth century England cannabis was used as an anodyne, antispasmodic and an anti-inflammatory. It was available in tincture, pill and extract form. Between 1840 and the 1890s it was championed by a few medical men but was not widely used. Serious flaws, such as unreliability in strength and effect of the drug, the inability to obtain quality and regular supplies of the drug and the stigma that was associated with it were responsible for limited use.

The drug cannabis is simply the dried top of the flowering or fruiting plant however the medicinal agents are primarily found in the resin, which seeps from the tops in warm climes. Technology has now overcome this problem and the plant can be grown under hydroponic lights but in nineteenth century England the drug was imported from India and Egypt.

It was through India that the British medical profession was reintroduced to cannabis but it was also the source of the stigma against the drug. Concerns that recreational use led to insanity promoted research into the drug but also led to restrictions and prohibition. Thus the British began to view the drug with disfavour and associate it with addictive drugs such as opium and cocaine.

[1] J. Russell Reynolds, 'Therapeutical uses and toxic effects of cannabis indica', Lancet, 1890, p638.

The early years of the twentieth century heralded a period of legislation, restrictions and prohibitions on drugs that had enjoyed medical sanction in the nineteenth century. Renamed 'dangerous drugs', opium, and its derivatives, cocaine and cannabis were subject to restrictions implemented through various international and national legislative proceedings. Research into the history of drug prohibition, in particular, into that of cannabis prohibition, has seen less scholarly interest than it deserves. Debate since the 1960s over the legal status of cannabis and its potential and actual medical uses, suggests that, if there is to be further change in its legal status a considered history of its prohibition ought to feature.

This dissertation focuses on legislative and medical history, exploring nineteenth and twentieth century cannabis prohibition in the historical light of several millennia of therapeutic use, and seeking to explain the forces that limited medicinal use of cannabis. Chapter One includes a brief history of medical uses and an examination of reintroduction of cannabis into western medicine. Chapter Two examines the medical uses of cannabis in its heyday. Chapter Three looks at the reasons for decline in its use. Chapter Four demonstrates that the cessation of medicinal cannabis is attributable to legislative restrictions as well as to changing medical fashions.

As with so much modern history, a huge debt is owed to those who laboured in the nineteenth century to collect, collate and disseminate sources: most of the information on cannabis was collected in the 1870s by the Indian Government, and in the 1890s by the British Government in India,

the reports made in 1893-94 known as the Indian Hemp Drugs Commission remain the most cohesive investigation into cannabis to date.

In the course of writing this dissertation, I have examined some of the medical literature of the nineteenth and early twentieth century and combined this with a study of United Nations, World Health Organisation conferences and committees and British Parliamentary Papers in an attempt to demonstrate the reasons for the prohibition of a medical agent. But I have not ignored the alternative press, the scope of the work expands to the response of the lay citizen to the prohibition and the various publications, leaflets, conferences and people I have met over several years, have added a dimension to this work which I believe enhances it. One particular area of study that this refers to is that of the debate and division between the medical and social use of cannabis, in this the underground literature has provided an insight that would be lost if the only sources consulted were official governmental and medical records.[2]

[2] The division between medical and social use is arguably a false one. Whether taken medicinally, as a preventative, a relaxant, for spiritual or social purpose, the use of the drug could conceivably contribute to the well-being and thus the health of a person. The WHO have defined health as 'more than simply the absence of illness. It is the active state of physical, emotional, mental and social well-being'.

Part One

Chapter One

The History of Medical Usage of Cannabis

It has been argued 'there is no medicinal plant in the world that comes close to having as many different uses as hemp'.[3] However, until the 1960s, when recreational use put cannabis into a media and public limelight, cannabis was a little known drug in modern England. Although the nineteenth century saw cannabis gain a reputation as a valuable therapeutic agent, for much of the twentieth century this knowledge was considered archaic, and the foundations of research into cannabinoids not built upon.[4] Although regularly used between the 1830s and 1890s, it never achieved the medical status and lay approval that other common drugs such as opium in the nineteenth century or aspirin and penicillin in the twentieth century achieved.

It is commonly thought that cannabis preparations were introduced into western medicine circa 1840 but in fact cannabis is an ancient drug and as far as humans have records or any archaeological evidence, the use of cannabis has featured. It is thought that this 'was probably the first crop to be grown for reasons other than food production'.[5] Archaeological evidence suggests the Bylony Culture, in Central Europe, may have used cannabis

[3] Christian Rätsch, Marijuana Medicine, A World Tour of the Healing and Visionary Powers of Cannabis, translated by James Baker, Healing Arts Press, Rochester, Vermont, 2001, p181.
[4] Cannabinoids are the active ingredients in cannabis. There are about 460 known chemical constituents of cannabis and more than 60 have the molecular structure of a cannabinoid.
[5] Philip Robson, Forbidden Drugs, Oxford University Press, Oxford, 1999, p66.

7000 years ago.[6] Use of medicinal or narcotic cannabis is found in ancient scriptures and literatures, notably in Arabic and Persian works and in Hindu scripture.[7] It is found in the ancient Greek and Chinese pharmacopoeias and featured in ceremonial, recreational and therapeutic uses in Asia, Africa, Arabia, South and Central America.[8]

Its use in Europe dates back to the ancient Greeks. The 'Father of Medicine' Galen prescribed it and noted its general consumption, as did Hippocrates.[9] In ancient and folk medicine, the roots and seeds of cannabis were used primarily for their antiseptic, antibiotic and analgesic effects; later the potent psychoactive cannabis resin came to be used internally as a sedative.[10] In pre-Christian Europe, cannabis was used for ear-ailments, to induce an ecstatic state, for frostbite, herpes, nipple pains, stiffness, swelling and wounds.[11] Probably introduced to England by the Roman Empire, 'Haenep' became well known and was mentioned in an eleventh century Anglo Saxon Herbarium as an anaesthetic.[12]

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[6] J. Kabelík, Z. Krejcí, F. Santavy, 'Cannabis as a mendicant', UN Bulletin Narcotic, 1960, http://www.undoc.org/unodc/en/bulletin/bulletin_1960-01-01_3_page003.html, accessed 23/03/2005.
[7] George Watt, 'Article on Cannabis Sativa', extracted from the Dictionary of the Economic Products of India, vol. II p103-126, 'Papers Relating to Ganja and other Drugs in India', Parliamentary Papers, 1893-94, pp157158.
[8] Robson, Forbidden Drugs, pp66-7, David Solomon (ed), The Marihuana Papers, The New American Library, New York, 1968, p35, Martin Booth, A History of Cannabis Doubleday, London, 2003, pp19-26, E. G. Balfour, Inspector General of Hospitals, Indian Medical Department, Madras, Fort St. George, in 'Papers Relating to Ganja and other Drugs in India', Parliamentary Papers, vol. LXVI, p80, Ethan Russo, 'History of cannabis as a medicine', in Geoffrey W Guy, Brian A Whittle and Philip J Robson (ed), The Medicinal Uses of Cannabis and Cannabinoids, Pharmaceutical Press, London, 2004, p1, Dr William H. McGlothlin, 'Cannabis A Reference', (1965), Marihuana Papers, The New American Library, New York, 1968, p455-475, George Watt, 'Article on Cannabis Sativa', p157 and Louis Lewin, Phantastica, 1927, translated into English 1931, reprinted Park Street Press, Rochester, Vermont, 1998), p91.
[9] Mr Hem Chunder Kerr, Deputy Collector on Special Duty, 2 April 1877, in 'Papers Relating to the Consumption of Ganja and Other Drugs in India', British Parliamentary Papers, LXVI, p100.
[10] J. Kabelík, Z. Krejcí, F. Santavy , 'Cannabis as a medicament', UN narcotics Bulletin, 1960, www.unodc.org/unodc/en/bulletin/bulletin_1960-01-01_3_page003.html, 23/03/05.
[11] Rätsch, Marijuana Medicine, pp181-184.
[12] Stephen Pollington, Early English Charms Plantlore and Healing, Redwood Books, Trowbridge, 2000, p129 and Giles Emerson, Sin City London in pursuit of pleasure, Granada, London, 2002, pp188-189. The hemp plant was named Cannabis sativa in 1753.

In medieval Europe the root of the plant was used to 'ease the agonies of the gout – pains and wastings of the sinews', and 'to ally inflammations of the head', while tinctures 'help the birth – menorrhagia – cystitis – and the pains of urinary infections'.[13] A twelfth-century abbess, musician, visionary and herbalist, Hildegard von Bingen, described cannabis in her *Physic*. However after a Papal Bull of Innocent VIII in 1484, cannabis was associated with witchcraft and its use went underground. It was 'resurrected under a pseudonym' in Rabelais' *Gargantua et Pantagruelion* in the mid sixteenth century.[14]

When Nicholas Culpeper, a staunch believer in the equality of access to affordable medicine, produced *A Physicall Directory, or a Translation of the London Dispensatory*, an unauthorised translation of the College of Physicians *Pharmacopoeia*, he marked a turning point in the laity's access and knowledge of medicine. This book later to become known as *Culpeper's Herbal* noted that hemp 'is so common a plant, and so well known by almost every inhabitant of this kingdom, that a description of it would be altogether superfluous'. Well-known as a fibre, it was used especially for nautical needs but Culpeper ensured its place in folk medicine as an antiseptic, anti-inflammatory and anti-spasmodic.[15] His vernacular publication of homegrown herbal remedies was deliberately designed as an

[13] Richard Le Strange, A History of Herbal Plants, Angus and Robertson, London, 1977, p65.
[14] Ethan Russo, 'History of cannabis as a medicine', pp3-4.
[15] Residual evidence of cannabis use is found in place names and surnames: Hempton, Hempstead and Hempnall in Norfolk and further afield Northampton, Hemel Hempstead, Hampshire and most famously Hampton Court. Surnames such as Hemp, Hempsall, Hempseed and Hempstead are remnants of a time when hemp played a large role in English life. Hemp was especially used as a fibre, for rope and nautical canvas.

act of Christian charity, and was a somewhat radical approach to the College's monopoly on expensive medicines.[16]

Cannabis was just one of 500 suggested plants; all the remedies were simple and easily accessible for the poor and explanations of the uses take into account illness and disorders most likely to affect the poorer classes. For example: the seed and the root of the cannabis plant were 'a good remedy for a dry cough', for jaundice, colic, bowel troubles, 'it stayeth lasks and continual fluxes' as well as bleeding from the mouth, nose or any other place, as a remedy against worms, to remove insects and earwigs from the ear, as an antinflamatory, to 'easeth the pain of gout, the hard tumours or knots in the joints, the pains and shrinking of the sinews, and the pain of the hips', and as an application to burns.[17] The publication of his herbal gave scope for lay use of the listed remedies.

Culpeper made no mention of the psychoactive abilities of cannabis because when grown in England cannabis is generally not psychoactive. Thus it was with surprise and excitement that the merchant seaman Thomas Bowrey, came across the vision promoting 'blang', a drink of dried crushed cannabis seeds, while on the coast of Bengal. Which he duly recorded in *A Geographical Account of Countries Round the Bay of Bengal, 1669 to 1679*.[18]

Through trade, travel, wars and empire building, Europeans came into contact with a cannabis plant far more potent than that they had at home. And it was through a publication in 1809 by Sylvestre de Sacy, the

[16] Culpepper's Complete Herbal and English Physician, (1826), reprinted by Harvey Sales, Barcelona, 1981, pp70-71 and Roy Porter, The Greatest Benefit To Mankind, HarperCollins Publishers, London, 1997, p210. After Culpeper's publications (in 1649 and 1653) medical books tended to be published in the vernacular rather than Latin.
[17] Culpeper's Complete Herbal, p71.
[18] Emerson, Sin City, p190.

well-known Orientalist, that the resin known as hashish first became known in Europe. It began to be used as a pharmaceutical preparation, or 'electuary' and was taken in the form of a greenish paste.[19] Both the flowering tops and the resin were used in Europe and North America, for their anodyne, antispasmodic, soporific and narcotic effects.

Although in the nineteenth century it was cultivated (and growing wild) in Persia, India, China, Arabia, Africa, America, Brazil and Russia, it was still little known in western medicine and in England the plant was primarily and 'not unfrequently' found 'as a weed, springing up most probably from rejected birdseed', rather than utilised as a medicine.[20]

Cannabis And The Empire

"The most important products of hemp in India are its leaves, flowers, and resin; all used as intoxicating drugs."[21]

It was through the British Empire that the English came into contact with cannabis as an intoxicant and as a strong medicinal agent and this was recorded in medical publications as early as the 1700s. In particular medical men and scientists from the East India Company were interested in

[19] Bo Holmstedt, 'Introduction' in Moreau de Tours, Hashish and Mental Illness, (1845), reprinted, Raven Press, New York, 1973, pxiv-xv.
[20] Watt, p157. This spread of the plant was probably aided not just by birds and wind but also by human trade and settlement. The worldwide growth of the plant has also been aided by the weed-like nature of its ability to spread and in many places it was grown commercially it is to be found growing wild.
[21] Kerr, p105.

cannabis.[22] They were aware that the resinous *Cannabis Indica*, found in India was different from the homegrown *Cannabis Sativa*; characterised as it was by the euphoric and hypnotic effects gained from the psychoactive tetrahydrocannabinol (THC) compound exuded in the resin that seeps from the flowers and leaves in warm climates.[23]

During the nineteenth century psychoactive cannabis became highly sought after by medical practitioners, who were 'cautioned to be particular in obtaining the extract of *Indian* hemp', since 'extract of Indian hemp… made from the plant grown in the neighbourhood of London… possessed but little, if any, of the narcotic properties of the Indian plant'.[24] A warning that echoed sixty years later when an American physician explained; 'medicinal hemp - the hemp with the potent narcotic principles - is *cannabis indica*'.[25]

Psychoactive cannabis was introduced into western medicine by William Brooke O'Shaughnessy an Irish scientist and physician working for the East India Company. In an early attempt to scientifically and empirically analyse the drug, he conducted many experiments with cannabis and produced definitive work on it. In the 1830s he provided the first experimental confirmation of the indigenous uses of cannabis before he 'introduce [d] hemp to the notice of the profession as a medicinal agent'.[26]

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[22] James H Mills, Cannabis Britannica Empire, Trade and Prohibition, Oxford University Press, Oxford, 2003, p25.
Cannabis sativa was more commonly known as hemp until recently. In the nineteenth century it is found referred to in medical literature as Indian hemp or cannabis indica. It seems that there is only one species but it comes to display different characteristics depending where it is grown.
[23] Lewin, Phantastica, p91 and Kerr,'Papers Relating to the Consumption of Ganga', p104.
[24] Editorial after, Andrew Robertson, 'On Extract of Indian Hemp', Pharmaceutical Journal, 1846/7, p71.
[25] Dr Victor Robinson, 1910, cited in Rätsch, Marijuana Medicine, p170.
[26] Balfour, 'Ganja and Other Drugs in India', British Parliamentary Papers, LXVI, p80.

After numerous experiments on animals he treated humans for rheumatism, to alleviate hydrophobia caused by rabies, tetanus, 'infantile convulsions', cholera, 'convulsive disorders', 'delirium tremens', 'convulsive diseases' and neuralgia. So great was his interest, that in 1842, his *Bengal Dispensatory and Companion to the Pharmacopoeia*, included a 25-page section on cannabis.[27]

He believed that; 'in Hemp the profession has gained an anti-convulsive remedy of the greatest value'.[28] He first patented an extract of hashish in alcohol in 1842 with the London pharmacist Peter Squire. Squire's Extract was marketed as an analgesic and James Smith of Edinburgh had a similar product under licence in America, Tilden's Extract. Patent medicines like Squire's Extract became widely used because these tinctures of cannabis unlike opium were not physically addictive.[29] With the publication of O'Shaughnessy's work, pharmacological and chemical investigations into the medical value of cannabis took place. However cannabis did not become as widespread as O'Shaugnessy hoped. This was at least partly due to the unavailability of the drug. Almost 20 years after Squire had first made his patented extract, J Russell Reynolds was writing on the difficulties of obtaining pure cannabis and confirming that Squire in Oxford Street was the only source of pure cannabis he knew in England.[30]

Many British doctors in India were encouraged by O'Shaughnessy's work to try cannabis on their patients. Andrew Robertson, Professor of

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[27] Mills, Cannabis Britannica, pp39-46.
[28] James H. Mills, Madness, Cannabis and Colonialism The 'Native-Only' Lunatic Asylums of British India, 1857-1900, Macmillan Press, Basingstoke, 2000, p45.
[29] Booth, Cannabis, p92.
[30] J, Russell Reynolds, 'On Some Of The Therapeutical Uses Of Indian Hemp', Archives of Medicine, Vol. 11, London 1861, p154.

Chemistry to the Medical College in Calcutta, claimed in the *Pharmaceutical Journal* in 1846, that he had manufactured a 'deep green' extract that offered 'six times the activity' of Dr O'Shaughnessy's brown coloured one,[31] demonstrating the speed with which the medical profession began to explore cannabis, and the Imperial connection with British domestic use of drugs. And in 1842 Doctor W Ley's article *'On The Efficacy of Indian Hemp in some Convulsive Disorders'*, recommended 'the use of the resin of the garden hemp as a narcotic and antispasmodic'. A woman who had a 'spinal disease' and suffered from spasms and pain, experienced instant relief and could sleep and straighten her limbs. Similarly Doctor Copland gave it 'to an hysterical female complaining of sleeplessness; with her it had produced giddiness and slight nausea, but she slept soundly'. [32]

In large part thanks to O'Shaughnessy, the Pharmacopoeia of India reported that cannabis 'has been used with advantage in tetanus, hydrophobia, delirum tremens, ebrietas, infantile convulsions, various forms of neuralgia, and other nervous affections… rheumatism, hay fever, asthma, cardiac, functional derangement… skin diseases… pruritus… with a view of inducing uterine contractions…and cholera'.[33]

But medical opinion of the drug was divided; some believed that it was injurious to physical health and some to mental health as well (discussed in chapter two). There was concern over its excessive, and non-medicinal uses, which produced 'emaciation, general debility… and a

[31] Andrew Robertson, 'On Extract of Indian Hemp', Pharmaceutical Journal, 1846/7, vol. 6, pp70-71. By the 1890s C. R. Marshall, believed Robertson to be erroneous in this assertion.
[32] W. Ley, 'On the Efficacy of Indian Hemp in some Convulsive Disorders', Provincial and Surgical Journal 4 (1842), 407-9 and Royal Medico-Botanical Society February 22 1843, 436-8 cited in Mills, Cannabis Britannica, p69-71.
[33] Watt, 'Cannabis Satvia', 'Ganja and Other Drugs in India', British Parliamentary Papers, LXVI, p171.

tendency to diarrhoea or dysentery'. It was also alleged that 'that ganja-smokers suffer from dyspepsia, and are liable to phthisis and haemoptysis'.[34] The Civil Surgeon of Bassein, Colloway Nisbet, had 'long discontinued its use in consequence of it having produced in two cases in rapid succession symptoms of a decidedly maniacal a tendency as rendered its employment unjustifiable, in spite of its admitted styptic action in certain alimentary and uterine discharges'.[35]

Although others found that there was no basis for such accusations from their personal experience, the decline in the use of cannabis as a medicant was apparent by the end of the nineteenth century and it was generally perceived to be a drug, both medical and intoxicant, confined to the native Indians, while the Europeans had recourse to other, presumably better drugs. Thus in the 1880s George Watt wrote that: 'the use of Indian-hemp in European practice has greatly decreased of late years, owing to a feeling of insecurity as to the quality of the article. It is commonly reported that no reliance can be put upon the uniformity in strength'.[36] O'Shaughnessy himself had experienced this problem in the 1840s, when samples he had brought from India to Britain had to failed to produce the results he anticipated and the actions of the drug were considered 'very unsatisfactory and imperfect' by the medical profession generally.[37]

Although medical and governmental interests were at odds, in 1870 concerns that cannabis was a cause of insanity provoked the Government of

[34] Balfour, 'Ganja and Other Drugs in India', pp82-83.
[35] A Colloway Nisbet, Civil Surgeon of Bassein, 'Ganja and Other Drugs in India', British Parliamentary Papers, LXVI, p40.
[36] Watt, 'Cannabis Satvia', p171.
[37] Comments following article by Andrew Robertson, 'On Extract of Indian Hemp', pp71-72.

India to conduct an inquiry into it. Medical concern over cannabis was focused on fears of the harm it could do to the patient, the variations in the quality and efficiency of the drug and the non-medicinal use in India. On the governmental side the revenue gained from cannabis and other drugs was significant enough for the British to wish to continue the trade and taxation of it. In particular political control of India meant that the British had an almost unrivalled access to most of the opium in the world and also controlled the world's largest producer of and market for cannabis products.[38] But while opium was shipped around the world, cannabis was regarded as a more domestic affair. The 1870 inquiry did not result in prohibition but in restricted consumption, which was taxed at increasingly higher levels. Prohibition was enacted in Burma, but not considered feasible in India, where the cannabis plant grew wild and was used in various indigenous systems of medicine.[39] While revenues were increased, the escalating tax evasions evoked criminal associations in the minds of colonial officials.[40]

Twenty years later, medical concern had a popular base in the temperance movements and interest in use and abuse of cannabis in India had increased. Questions were asked in the House of Commons, in the early 1890s, that alleged cannabis was 'far more harmful than opium' and that 'the lunatic asylums of India are filled with ganja smokers'.[41] In response the Indian Hemp Drugs Commission (IHDC) was established and its reports,

[38] Mills, Cannabis Britannica, p153.
[39] 'Papers relating to the Consumption of Ganja and other Drugs in India', Parliamentary Papers, 1893-94, vol. LLLXVI, p6-7.
[40] Mills, Cannabis Britannica, p67-68.
[41] Despatch from Secretary of State for India to Governor General of India in Council, 6th August 1891, 'Consumption of Ganja and other Drugs in India', PP, 1893-94, vol. LXVI, p3.

published in 1893-94, remain one of the most thorough, objective and empirical studies to the present day. The IHDC found that moderate use was not injurious to mental or physical health, but unlike the contrary opinion, this was not to become popular or medical thought.

Fears of the link between cannabis and insanity were not confined to India. In Egypt Dr John Warnock, the Medical Director at the Egyptian Hospital for the Insane in Cairo wrote in the *Journal of Mental Science* in 1903 on 'Insanity from Hasheesh'. He believed that cannabis 'frequently causes insanity' and that 'Cannabis Indica in Egypt seems to have graver mental and social results that in India, and is responsible for a large amount of insanity and crime'.[42] A much later article in 1928 restated his opinion that cannabis was a cause of insanity, a subject discussed in the next chapter.

Interest was concentrated on the harmful nature of cannabis when used socially rather than medically. Thus interest was focused on the Empire especially India, rather than England, where there was no recreational use of the drug to speak of. However concern was infectious and despite the lack of scientific evidence to confirm cannabis was harmful, its reputation was somewhat marred. Concerns about the link with cannabis use and mental illness continue to the present day and may yet prove to have some founding.

[42] John Warnock, 'Insanity from Hasheesh', Journal of Mental Science, 1903, vol. 49, pp109-110.

Chapter Two

Medical Uses In Nineteenth Century England

"The most valuable medicine we possess."[43]

There was a resurgence in interest in the drug between 1840-1900 and over 100 articles recommending cannabis for various disorders were published in Europe and America.[44] Respected physicians William Brooke O'Shaughnessy and Moreau de Tours observed the use of the drug in India and Egypt and began to experiment with it. They were enthusiastic about its properties as a valuable therapeutic agent. Not only was cannabis endowed with the mystique and excitement of a 'newly found drug'; it was also considered to be something exotic, foreign and potent, something that brought on fantastic visions.[45] Empirically justified by scientific medicine, the drug entered the pharmacopoeia and doctors prescriptions in the mid nineteenth century.

Despite incomplete knowledge about the chemistry of the drug, cannabis preparations were on the market and 'largely used', including T and H Smith's cannabine (isolated 1846), Merck's cannabinon, ethereal extract and cannabis resin, and preparations by Bombelon, Denzel and

[43] J. Russell Reynolds, 'Therapeutical Uses and Toxic Effects of Cannabis Indica', Lancet, March 22 1890, p637.
[44] Dr Robert Walton, 'Therapeutic Application of Marihuana', Marihuana Papers, The New American Library, New York, 1968, p449.
[45] As captured in Louise May Alcott, *Perilous Play*, (1864) in Unmasked Collected Thrillers, Northeasten University Press, Boston, 1995, p687.

Gastinelli.[46] The preparations were tinctures; pills and extract of the plant, all were delivered orally.

After O'Shaughnessy had scientifically assessed the therapeutic use of cannabis in treating tetanus and found that the drug had remarkable anti-convulsive properties, cannabis was found to have other significant attributes by several doctors. Among them Dr John Clendinning, a physician at St. Marylebone Infirmary, saw cannabis as a rival to opium. He found it could alleviate pain, whether neuralgic, spasmodic or inflammatory and promote sleep, yet had none of opium's side effects. Using it with great success, as a soporific and hypnotic, an anodyne, antispasmodic and a stimulant to the nervous system, and the appetite, he was the first to find it particularly useful in treating migraine.[47]

Two years later in Ireland Michael Donovan pioneered its use for neuropathic and musculoskeletal pain and praised it as 'a medicine possessed of a kind of energy which belongs to no other known therapeutic agent… capable of effecting cures hitherto deemed nearly hopeless'. A scientist involved in chemistry, he had written the *Annals of Pharmacy and Materia Medica*, published in 1830, which had detailed the latest discovers in that area and was campaigning for changes in pharmacy laws in Ireland. He believed that 'if the history of the Materia Medica were to be divided into epochs… the introduction of Indian hemp into medicine would be entitled to the distinction of a new era'. Believing that cannabis would one day 'rank in importance with opium, mercury, antimony, and bark', he

[46] C. R. Marshall, 'The Active Principles of Indian Hemp, A Preliminary Communication', Lancet. January 23, 1897, pp236-237.
[47] Dr John Clendinning, 'Observations On The Medical Properties Of The Cannabis Sativa Of India', Medico-Chirurgical Trans, 1843, 26, pp188-210.

showed the limitations of the physicians' repertoire of cures. He was able to experiment with the drug because he was in contact with O'Shaugnessy who sent him 'a large quantity of resinous extract' of which he had supervised the growth and preparation of in Calcutta.[48]

In the same year the use of cannabis to treat insanity was first mooted by Dr Jean Moreau at the Bicêtre Hospital in Paris in his publication *Du haschish et de l'aliénation mentale*.[49] (Discussed in more detail later) Moreau was the first psychiatrist with an interest in psychopharmacology. He was a student of the famous psychiatrist Jean Etienne Dominique Esquirol, both were pioneers (from the school of Philippe Pinel) in humane reformations in the treatment of the insane.[50] Moreau, who considered first hand experience invaluable empirical evidence, first tried hashish while accompanying a patient to North Africa, and championed its use both therapeutically and as an intoxicant. Like O'Shaughnessy he was instrumental in bringing cannabis to the attention of the western medical profession but surprised it was not already in use lamented: 'knowledge about hashish in the medical world is limited, at most, to recognition of the word for it'.[51]

Moreau first consumed the resin orally but Donovan was more interested in finding a preparation to administer to patients than to himself. He found cannabis insoluble in water and noting that in a 'pillular form, it is likely to pass undissolved through the intestinal tube', and so dissolved the

[48] Michael Donovan, 'On the physical and medicinal qualities of Indian Hemp (Cannabis Indica); with Observations on the best Mode of Administration, and Cases illustrative of its Powers', Dublin Journal Medical Science, 26, 1845, pp368-402, 459-461.
[49] J.J. Moreau, Hashish and Mental Illness, Raven Press, New York, 1973, English reprint of Du haschish et de l'aliénation mentale, 1845.
[50] Bo Holmstedt, Introduction to, J.J. Moreau, Hashish and Mental Illness, pviiii-xxi.
[51] J.J. Moreau, Hashish and Mental Illness, p1.

resin in rectified spirit, as O'Shaughnessy had done, creating a tincture. This made an easily administered and fairly reliable preparation, which passed into the pharmacopoeia.[52]

Fleetwood Churchill, an authority on diseases specific to women and children, pioneered the use of cannabis to ease childbirth in modern medicine when he noted it in his tract *Essays on the Puerperal Fever and Other Diseases Peculiar to Women* published in 1849.

This initial interest in the drug established its use as an anti-convulsion, anti-spasmodic and anodyne with antibacterial qualities. However, not all doctors recommended it. In 1848, Dr Williams in his lectures at University College London advised his students to discontinue its use because it was unreliable in action and had distressing toxic effects. It was also hard to get hold of, even Squires 'the most distinguished pharmaceutist of the time' was unable to obtain usable specimens.[53]

Despite the initial 'belief that Indian hemp will one day or another occupy one of the highest places amongst the means of combating disease', the drug did not experience widespread use in western medicine.[54]

By the 1860s, pleas from eminent doctors for the profession as a whole to experiment with it attracted a limited response.[55] Compared with opium; the great nineteenth century drug relied on so heavily by the medical profession, it is clear that cannabis never achieved the same status in the medical world and was neither so well regarded nor so well used.

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[52] Michael Donovan, 'On the physical and medicinal qualities of Indian Hemp', pp369-370, 400.
[53] Reynolds, 'Therapeutical and Toxic Effects of Cannabis Indica', p637.
[54] Donovan, p379.
[55] J. Russell Reynolds, 'On Some Of The Therapeutical Uses Of Indian Hemp', Archives of Medicine, Vol. 11, London 1861, p154.
Although, Reynolds was a champion of the drug, there is as yet there is no evidence that he administered it to Queen Victoria.

Interest was not confined to the discovery of the drug, as the most famous advocate of cannabis was J. Russell Reynolds, physician to Queen Victoria's household, who used and praised it between the 1860s and 1890s. He believed; 'Indian hemp, when pure and administered carefully, is one of the most valuable medicines we possess'.[56] In his capacity as the Assistant Physician to the University College Hospital, he wrote on the therapeutic uses of cannabis in 1859, commenting that through experiments, he found, that although cannabis was useful as an anodyne, its value was 'still greater in the treatment of spasm of some kinds'.[57]

Although 'for the relief of certain kinds of pain' he thought 'there is no more useful medicine within our reach',[58] he did not believe it was a universal panacea. Demonstrating the limits of the medical profession, he felt that 'the value of the medicine' was 'enhanced' because 'limitation of its action will, I trust, enable us hereafter, to apply it with scientific selection, and thus with that power which is the highest to be reached by art, viz., the predication of results'.[59]

In order to ascertain whether cannabis was effective in treating disorders, doctors experimented directly on patients. Random double blind placebo controlled trials were a thing of the future as empirical medicine was still somewhat in its infancy. Animal testing had its limitation as extrapolation of the results from animals to humans was difficult.

[56] J. Russell Reynolds, 'Therapeutical Uses and Toxic Effects of Cannabis Indica', Lancet, 1890, p637.
[57] J. Russell Reynolds, 'On some the Therapeutical Uses of Indian Hemp', Archives of Medicine, Vol. 2, London 1859, pp154-160.
[58] Ibid.p155.
[59] Ibid. p160.

O'Shaugnessy had tested on animals but once ascertained that a fatal dose was impossible the real test for human illness had to be on humans.

Many patients suffered adverse reactions, became intoxicated or were even unaffected by it. Yet despite the problems attendant with cannabis use it is significant that the best medical minds concerned themselves with the drug, which was considered not just as a treatment but as a cure.

During the 1860s there was an increase in the medical literature discussing and recommending cannabis in the treatment of various other illnesses and diseases. In the treatment of diarrhoea, dysentery and cholera, Dr Turner of the Holloway Dispensary recommended to readers of the *Lancet* in 1866, a mixture including tincture of 'Cannabis Indicae'. A Dr S. J. Rennie called attention for its use in dysentery, in the Indian medical press in 1886. A year later Frederick F. Bond and B. E. Edwards recommended the use of cannabis tincture in diarrhoea, 'especially in the type known as summer diarrhoea or English cholera', in an article in the *Practitioner*. They used a mixture of tincture of Cannabis Indicae, Liquoris Morphine, Spiritus Ammoniae Aromatici, Spiritus Chloroformi and Aquam ad., which was administered every one, two or three hours according to circumstances, meanwhile, the patient was given no food but instead a little brandy and water. It was believed the astringent and anodyne properties of the morphine had a stimulating effect on the nervous system to overcome depression and exhaustion, while the cannabis markedly accelerated the return of the digestive system, counteracting the bilious action of morphine and loss of appetite. In the case of a 13-year female patient with subacute

gastro-enteritis, treated with cannabis mixture, her symptoms quickly subsided, the vomiting and diarrhoea were checked, the pain ceased and her appetite returned.[60]

Noting use of a cannabis mixture in the treatment of diarrhoea was not new, Bond and Edwards referred to the 1866 *Lancet* article and to 'an old dispensing chemist' who had informed them 'that some twenty years ago he knew it to be frequently prescribed; but probably from the introduction of many new remedies and from good specimens of the drug having been not always obtainable, it has with many other valuable remedies been temporarily forgotten'. But otherwise, they could 'find no mention of it in modern works on medicine'.[61]

As opium and morphine addiction began to be perceived as a serious issue in the latter decades of the nineteenth century, cannabis was utilised in the treatment of opium addicts. In 1885 Dr J B. Mattison recommended 'the fluid extract of cannabis indica in the treatment of the opium habit where the characteristic restlessness or insomnia is manifested after the withdrawal of the opium'. He suggested full doses of sixty minims be given every hour or less as required as he thought the small doses recommended in the books were not enough. He recommended use of the patented Squibbs fluid (tincture of cannabis), to the benefit of the manufactures of that particular brand.[62] Later, in 1891, he wrote on *Cannabis Indica as an anodyne and hypnotic*.

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[60] Frederick F. Bond and B. E. Edwards, 'Cannabis Indica in Diarrhoea', Practitioner, 1887, Vol. 39, p8-10.
[61] Ibid., But they did not find it useful in cases of tuberculosis diarrhoea or in the excessive diarrhoea in typhoid fever.
[62] J. B. Mattison, 'Cannabis Indica in the Opium Habit', Practitioner, Vol. 35, London, 1885 p58.

As a hypnotic, cannabis was useful for insomnia, although a common problem as Reynolds noted was variations in the plant and in individual tolerance to all vegetable based medicines sometimes resulted in adverse reactions. For example in one case, of 'a highly nervous and diabetic individual' cannabis did not cure his insomnia.[63] The unreliability was one of major drawbacks of cannabis and it would lead to the discontinuation of its use.

For women, cannabis was used for 'disorders of the uterine functions', recommended for dysmenorrhoea and menorrhagia and to relieve metritis or inflammation of the uterus. It was particularly recommended in place of morphia or opium in cases where they provoked sickness.[64]

Before the invention of aspirin, migraines and headaches were often treated with cannabis. Following Clendinning's lead, Richard Green, then Assistant Medical Officer at Sussex Lunatic Asylum at Hayward's Heath, suggested cannabis be used to treat the condition, in the early 1870s. He confessed that he kept few notes on the cases of his patients but he claimed to have used cannabis in the treatment of migraines for several previous years and was convinced 'that though the Cannabis Indica may often fail to cure, it scarcely ever fails to effect some improvement'. He recommended, 'the best preparation is the alcoholic extract' although 'its purity cannot be too strongly insisted on', but described the tincture as 'a faulty preparation', due to its 'villainous taste' and because a deposit often

[63] J. Russell Reynolds, (ed)., A System of Medicine, Macmillan and Co, London, 1879 and J Russell Reynolds, 'On Some of the Therapeutical Uses of Indian Hemp', Archives of Medicine, 1859, 2, p159.
[64] Reynolds, A System Of Medicine, p695, 697, 740.

formed at the bottom which probably contained active ingredients but which was often left there.[65]

Greene's articles in the *British Medical Journal* and the *Practitioner* inspired American doctors to prescribe it for migraines. A pamphlet was published in 1878 on the subject and a paper was read before the Buffalo Medical Club advocating the use of the drug. Its use in Britain was much less however, and Greene complained in the *Practitioner* that 'even in Neale's *Digest*, "a book from which not much is missing", I can find no reference to cannabis indica in migraine'.[66] One article in the *British Medical Journal* in 1887 describes the use of cannabis for headaches. Among several cases reported, 'quinine was prescribed in conjunction with the Indian hemp, under the idea… that malaria might have a share in the production of the headache', but in other cases 'Indian hemp alone sufficed to remove the complaint'. The method of dosage was pills containing grains of 'extract of cannabis indica'.[67] A later article in the *Practitioner* in 1888, written by the Medical Superintendent of the Berry Wood Asylum in Northampton was highly supportive of the use of cannabis to treat migraine but again noted that the treatment was not widely used.[68] Reynolds found it successful if taken 'at the moment of threatening, or onset of the attack'.[69]

[65] Richard Greene, 'Cannabis Indica In The Treatment Of Migraine', Practitioner, Vol. 9, London, 1872, p267-70.
[66] Richard Greene, ' The Treatment of Migraine with Indian Hemp', Practitioner, Vol. 41, London 1888, p35-38.
[67] The British Medical Journal, January 15 1887, London 1887, p98.
[68] Greene, 'The Treatment of Migraine with Indian Hemp', Practitioner, 1888, pp35-8.
[69] Reynolds, Lancet, 1890, p638.

Cannabis and Insanity

A particularly interesting use of cannabis was in the search for a treatment of insanity. The nineteenth century saw an optimistic hope of curing madness through drug treatment, nutrition and the asylum. As mentioned before Moreau de Tours pioneered the use of cannabis in the search for a cure. He 'saw in hashish, or rather in its effects upon the mental faculties, a significant means of exploring the genesis of mental illness', he thought it 'could solve the enigma of mental illness and lead to the hidden source of the mysterious disorder that we call *"madness"'*. He noted that: in 'the way in which it affects the mental faculties, hashish gives to whoever submits to its influence the power to study in himself the mental disorders that characterise insanity, or at least the intellectual modifications that are the beginning of all forms of mental illness'. He believed that 'there is not a single, elementary manifestation of mental illness that cannot be found in the mental changes caused by hashish, from simple manic excitement to frenzied delirium, from the feeblest impulse, the simplest fixation, to the merest injury to the senses, to the most irresistible drive, the wildest delirium, the most varied disorders of feelings'.[70]

He used hashish in various cases as a treatment but found that the few cases he could present in 1845 were not sufficient evidence to conclude that hashish was effective treatment for any specific mental illness.[71] Only a few hundred copies of Moreau's 1845 book were published and he was not

[70] Ibid., p15-18.
[71] Ibid., p213.

awarded the prize he had entered the book for at the French Academy of Medicine. The book fell out of medical knowledge and was not reissued until the 1973 English translation. Although he published many more tracts including *De l'emploi du hachisch dans cholera-morbus* (1848) and *De l'emploi du hachisch dans le traitement de la rage* (1852), his work was not recognised to the extent it perhaps should have been in his lifetime.[72]

Despite some interest in cannabis in France, trials in England appear to owe little directly to the French and rather more to W.B. O'Shaughnessy. This interest in cannabis should be taken in the context of the wider search for more treatments and drugs but also in reaction to the use of opium, then the primary treatment.[73] In 1869, Henry Maudsley wrote that 'among the drugs on which we rely in the treatment of insanity, opium undoubtedly occupies the foremost place'.[74] By the 1870s cannabis was being used in the treatment of the 'insane' and at Sussex County Lunatic Asylum at Hayward's Heath there is documentation of the drug being used to treat mania. It was more commonly used for migraines and the asylum superintendent Mr S. Williams produced a report of his trials with cannabis in the *Practitioner* in November 1872, commenting that; 'several years ago we were induced to make a trial of the Indian hemp and have since used it frequently and have nearly always seen it productive of more or less benefit to the patient'.[75]

Thomas Clouston most famously championed the use of cannabis in asylum medicine, and in 1870 he won the Fothergillian Gold Medal of the

[72] Dr Bo Holmstedt in J.J. Moreau, Hashish and Mental Illness, 1973, p226-239.
[73] Virginia Berridge, Opium and the People, Opiate Use and Drug Control Policy in Nineteenth and Early Twentieth Century England, Free Association Books, London, 1999, pp211-212.
[74] Henry Maudsley, 'On Opium in The Treatment Of Insanity', The Practitioner, 1869, Vol. 2, p3.
[75] S. Williams, *Sussex County Lunatic Asylum, Fourteenth Annual Reports for the Year 1872*, 44-7 cited in Mills, Cannabis Britannica, pp73-75.

Medical Society of London for his essay reporting his work with cannabis in the treatment of mental illness at the Cumberland and Westmoreland Asylum in Carlisle. His experiments led him to conclude; 'that the bromide and Indian hemp combined approached more nearly by far than any other drug to our great desideratum in treating acute excitement of the brain' and thus allowed the patient to 'cease to exhaust all his bodily energy in muscular movement and constant wakefulness, and will at the same time allow the reparative effects of rest and food to act quickly in restoring the normal nutrition of the cerebrum'.[76] Although Clouston claimed cannabis was far better than opium in treating insanity, only one patient actually recovered; the others were quietened but not cured by the treatment.[77]

After Pinel's challenge to the widespread mechanical restraint used in asylums, a replacement in the form of chemical restraint had come to be used, in an attempt to cure or at least quieten patients. Drugs in the repertoire of sedatives used in the nineteenth century asylums included: chloral, hyoscyamus, bromide of potassium, opium and cannabis. By the 1870s, this approach was also challenged. Most famously Henry Maudsley, the President of the Medico-Psychological Association and the Professor of Medical Jurisprudence at University College in London, published a critique of the widespread use of chemical restraint, which featured discussion of the use of cannabis. Maudsley felt that attempts to cure patients with drugs only worsened their conditions, but had used cannabis indica and bromide of

[76] T. S. Clouston, 'Observation and Experiments on the Use of Opium, Bromide of Potassium and Cannabis Indica in Insanity, especially in regard to the effects of the two latter given together', British and Foreign Medico-Chirurgical Review, 1871, vol. 47, pp203-220. It is of interest that a 1960 report noted that 'cannabis greatly increases the hypnotic effect of barbiturates', Kabelík, Krejcí, Santavy, 'Cannabis as a medicament', UN Narcotic Bulletin, 1960.
[77] H. Maudsley. 'Insanity and its Treatment', Journal of Mental Science, Vol. 17, London 1871/2, pp311-34.

potassium to treat a man with acute and violent mania who recovered within a week rather than in months, as anticipated. Maudsley used the same mixture of cannabis and bromide of potassium that Dr Clouston recommended, but he noted that 'it is quite possible that a patient's appetite may improve, that his temperature may fall, and that his weight may increase, without his mind improving'. Maudsley's sceptical attitude towards the use of cannabis was not specific to that drug, as he pioneered attempts to treat patients without chemical sedation and compare sedative use to treatment without it.[78]

Concern that cannabis could cause rather than cure insanity was also widespread, particularly in France. By 1860, in London, a curator at the India Museum, published *The Seven Sisters of Sleep: Popular History of the Seven Prevailing Narcotics of the World*, warning that 'the incautious use of hemp is also noticed as leading to, or ending in, insanity, especially among young persons who try it for the first time'.[79]

A survey undertaken by the Government of India in the 1870s, using asylum and other institutional records concluded that cannabis was indeed associated with insanity. The Inspector General of Prisons, W. P. Kelly commented that: 'its abuse does induce, and directly produce madness', and that 'the prolonged abuse of ganja enfeebles both mind and body, and deprives man of courage'.[80] Others commented that 'the natives generally

[78] Ibid., pp311-34.
[79] Mordecai Cubitt Cooke, *The Seven Sisters of Sleep: Popular History of the Seven Prevailing Narcotics of the World*, Blackwood, London, 1860, cited in Mills, Cannabis Britannica, pp77-79.
[80] W.P. Kelly Esq Inspector General of Prisons, British Burma, 12 March 1872 in 'Ganja and other drugs in India', PP, Vol. LXVI, 1893-94, p43. Ganja was the Indian term for the dried flowered plant. It was usually mixed with tobacco and smoked in a hooka or eaten.

are of the opinion that continued indulgence inevitably leads to permanent insanity'.[81] Dr Rice the Superintendent of the Asylum at Jabalpur concluded that 'the abuse of ganja, blang and charas injures the constitution in the same way as excessive indulgence in any other narcotic drug would' but that 'it does not necessarily cause insanity, except in those pre disposed to it'. He warned that 'indulgence in it certainly renders men rough in manner and in speech, quarrelsome, and reckless of behaviour'.[82]

Overall, the report concluded: 'it does not appear… to be specifically proved that hemp incites to crime more than other drugs or than spirits'. There was 'some evidence to show that on rare occasions this drug, usually so noxious, may be usefully taken', although there was 'no doubt that its habitual use does tend to produce insanity'. It stated that 'the total number of cases of insanity is small in proportion to the population and not large even in proportion to the number of ganja smokers: but of cases of insanity produced by the excessive use of drugs or spirits, by far the largest number must be attributed to the abuse of hemp'.[83]

As a result of this report the Government of India prohibited the cultivation and use of the drug in Burma from 1873-74 and encouraged British India to discourage and restrict the drug. However, while accepting that it was desirable to control cultivation and preparation of ganja and bhang, this would be impractical. Moreover, with the exception of the Chief

[81] Lindsay Neill Esq., Officiating Assistant Secretary to the Chief Commissioner, Central Provinces, 19 August 1872 in 'Ganja and Other Drugs in India', PP, Vol. LXVI, 1893-94, p10.
[82] Ibid., pp9-10. James Mills argues that the data from the asylums did not prove this, as it was somewhat suspiciously collected in Mills, Cannabis Britannica.
[83] Letter from Secretary to Government, Bengal, No. 3863, 31 August 1872, 'Ganja and other drugs in India', PP, Vol. LXVI, 1893-94, p92.

Commissioner of British Burma, local governments were reluctant to enforce complete prohibition.

Despite evidence in the 1870s reports refuting the claim that cannabis use led to insanity, the medical press began to record the connection as factual, linking cannabis use with madness, violence, poison and death. Thus an autopsy report in the *Lancet* in 1880 concluded; 'death resulting from Indian hemp, some preparation of which the deceased had been accustomed to smoke for many years', with remarks that the patient 'was delirious for a fortnight before his death. On the day he died he tried to hammer a nail into his temple, and then expired suddenly'.[84]

As the nineteenth century wore on, the British psychiatric establishment took note of Moreau's work. William Ireland noted in 1878 that 'the condition following the use of cannabis, or Indian hemp, closely resembles the delirium of insanity'.[85] However, the drug was not used in order to gain an understanding of mental illness, as Moreau had attempted to do, but simply linked to insanity and consequently the idea that cannabis caused insanity prevailed.

Reports to the House of Commons in the 1890s claimed a clear relationship between cannabis and madness, murder, suicide, immoral sexual passions and violent crime, although this was contested.[86]

Although the link with insanity had been due to social not medical use of the drug, the association continued until the Indian Hemp Drugs Commission in 1893-1894 concluded that; 'as a rule these drugs do not tend

[84] 'Poisoning by Indian Hemp: Autopsy', Lancet, 1880, 1, p585.
[85] W. Ireland, On Thought Without Words And On The Relation Of Words To Thoughts, Journal of Mental Science, 1878, p431.
[86] 'Ganja and other drugs in India', PP, Vol. LXVI, 1893-94, pp92-189.

to crime and violence'. It also noted that; 'there is no trustworthy basis for a satisfactory and reasonably accurate opinion on the connection between hemp drugs and insanity in the asylum statistics appended to the annual reports'.[87] Moreover 'moderation in the use of hemp drug is not injurious', and 'the moderate use of hemp drugs produces no injurious effects on the mind', although 'the *excessive use* indicates and intensifies mental instability; it tends to weaken the mind; it may even lead to insanity'.[88] Nevertheless, cannabis was falling out of medical favour. There may have been suspicions that 'the commission's findings might have been skewed by the fact that cannabis, like opium, was a key source of revenue to the Raj'.[89] Cannabis production was certainly profitable, and a commission that found in favour of the use of cannabis guaranteed revenues from it. The British government, like the Raj, continued to exploit cannabis use in India by taxation and the subject was generally forgotten.

In Egypt where cannabis was prohibited, the British took the idea that cannabis caused insanity very seriously. Dr John Warnock, the Director of the Lunacy Division and Director of the Abbasiya Hospital for the Insane in Cairo, noted that Egypt had a low rate of insanity compared to England. In 1920 0.88 per 10 000 of the population was certified insane, while in the same year in England 6.2 per 10 000 were certified. Warnock suggests that this low rate may be 'chiefly due to the simple life of the fellah'.[90]

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[87] Report of the Indian Hemp Drugs Commission 1893-4, pp237&258 cited in Mills, Madness, Cannabis and Colonialism, p63.
[88] Indian Hemp Drugs Commission 1893-94, Vol. I, p186, p264 cited in J. Warnock, 'Insanity from Hasheesh', Journal of Mental Science, 1903, 49, p107, (their italics).
[89] Roy Porter, The Greatest Benefit To Mankind: A Medical History Of Humanity From Antiquity To The Present, HarperCollisPublishers, London, 1997, p666.
[90] John Warnock, 'Twenty-eight Years' Lunacy Experience in Egypt (1895-1923)', Journal of Mental Science, 1924, 70, pp380-410.

'Hasheeshism' was regarded as a kind of insanity: seven of the 161 convicted patients between 1912 and 1921, were cases of Hasheeshism, ninety further patients were accused of hasheeshism. Warnock commented that; 'the hashasheen… commit thefts and acts of violence, murders etc'. This article on 'insanity from hasheesh', in the *Journal of Mental Science* suggested; 'my experience does not confirm the Indian Commission's belief that Cannabis Indica only *sometimes* causes insanity. In Egypt it *frequently* causes insanity'. Moreover 'the use of Cannabis Indica in Egypt seems to have graver mental and social results than in India, and is responsible for a large amount of crime and insanity in this country'.[91]

Concern that cannabis caused insanity played a large role in the medical profession's reluctance to use the drug and eventually to that limited use decreasing. Medical concern laid the foundations for twentieth century concerns about the implications of drug use on the mind of both patients and recreational users.

The idea that cannabis causes mental illness is one that persists to the present day. An article in the BMJ in 1995, warned doctors of an increasing availability of cannabis with a high THC content; thought to cause psychotic episodes from the consumption of relatively small amounts. Fifty patients attending a methadone programme in Glasgow were surveyed in 1994 and eight reported using 'skunk'.[92] Three reported 'paranoid delusions and visual illusions', two had 'visual and auditory hallucinations' and one experienced 'pronounced derealisation and depersonalisation together with thought broadcast', two associated 'severe anxiety' with use of the drug. A

[91] J. Warnock, 'Insanity from Hasheesh', Journal of Mental Science, 1903, 49, pp109-110.
[92] 'Skunk': a variety of cannabis selectively crossbred to produce high amounts of THC.

familiar problem is that cannabis contains varying amounts of THC. In cannabis resin seized between 1984-9 the THC content ranged from 5.7% to 11.3%. Psychotic symptoms are thought to be common in users of all cannabis not just 'skunk'. There is little published data confirming psychotic symptoms relating to the use of cannabis.[93] There is relatively little data relating to general knowledge of cannabis and most data remains imperfect.

Cannabis and the laity

There is little evidence that ordinary people used cannabis in traditional ways or gained access to the drug by gathering it wild or even growing it. In the second half of the nineteenth century there was a marked change since Culpepper wrote in the seventeenth century about the plant: possibly because the industrial shift of people from the land and rural, communal lives into the slums of the growing cities affected the use of traditional medicines. Wild or hedgerow plants were much less readily available and perhaps the traditional knowledge and use of cannabis was lost in the move to the city.

However, lay people had access to cannabis preparations through pharmacies, apothecaries and doctors and patented medicines became a primary source of the drug. Contemporary literature notably Fitzhugh Ludlow's autobiography, *The Hasheesh Eater*, published in 1857 suggests this. It details his experiences and experiments with hashish after he had

[93] A. S. Wylie, R. T. A. Scott and S. J. Burnett, 'Psychosis due to "skunk"', BMJ, vol. 311, 8 July 1995, p125 and Andrew J McBride and Huw Thomas, 'Psychosis is also common in users of "normal" cannabis', BMJ, vol. 311, 30 September 1995, p875.

been introduced to the drug by his doctor who had acquired some extracts of cannabis indica prepared by Tilden and Co. Described as 'a preparation of the East Indian hemp, a powerful agent in case of jaw-lock', Ludlow found the untried drug to be an 'olive-brown extract, of the consistency of pitch, and a decided aromatic odor'. He reported that the 'hasheesh eater' initially takes a dose of 10 grains and over the ensuing weeks gradually increases it to 30 grains before he feels any 'effects' i.e. hallucinations and visions, from the drug.[94]

In Louise May Alcott's short story *Perilous Play*, published in 1864, all the characters take hashish, after the young Doctor Meredith introduces the drug to his circle of rich indolent friends. The drug is presented in the form of 'bonbons' or 'sugarplums', 'bean-shaped comfits with [a] green heart'. Alcott's Doctor comments that he had 'tried many experiments, both on the sick and the well, and nothing ever happened amiss, though the demonstrations were immensely interesting'.[95]

From the mid nineteenth century, tincture of cannabis, like tincture of opium (laudanum) was available from any pharmacist, without a prescription. They were cheaper than brandy, whisky, gin or tobacco, so they would have been accessible to the poor as well as the better off. It was usually available as a patent medicine, for example Dr. J. Collis Browne's Chlorodyne, contained morphine, chloroform and tincture of cannabis. In America there were also many patented cannabis cures, such as Eli Lilly's Dr Brown's Sedative tablets. Similarly 'pills of hashish coated with sugar to

[94] Fitzhugh Ludlow, The Hasheesh Eater Being Passages from the Life of a Pythagorean, Harper and Brothers Publishers, New York, 1857, pp17-18.
[95] Louise May Alcott, 'Perilous Play', (1864), in Unmasked Collected Thrillers, Northeasten University Press, Boston, 1995, pp686-687.

sweeten the taste and prevent them from adhering to each other were widely sold as common painkillers' and a mixture of cannabis and tobacco was advertised as an asthma cure. Cannabis and Turkish tobacco cigarettes were advertised in *The Illustrated London News* in 1887.[96]

There is however no evidence that cannabis played a large part as an intoxicant in nineteenth century Britain; Europeans generally favoured alcoholic beverages. In the 1840s Moreau commented that while hashish was widely used in Arabic countries, it was opium that was used by the Turks and Chinese and alcohol by the Europeans as an intoxicant.[97] In intellectual circles there was some use of it. Victor Hugo, Baudelaire and Balzac, among others, gathered at the *Club de Haschischins* in Paris, where hashish induced intoxication rather than medical study was the focus of the gatherers.

Generally, drug use was considered to be something foreign and the drug was usually opium. Laurie Lee writing of impressions of London in the mid twentieth century captures this perfectly when described 'slit-eyed Chinamen smoking opium on the pavements'.[98] On the continent, especially in France, cannabis was used as an intoxicant, mainly in bohemian artistic circles. In the 1930s, Anais Nin records the uses of hashish in her journals.[99]

[96] Martin Booth, Cannabis, pp94-95.
[97] J.J. Moreau, Hashish and Mental illness, (1845) English reissue, p2.
[98] Laurie Lee, I Can't Stay Long, Penguin Books, Harmondsworth, England, 1978, p26.
[99] Anais Nin, Henry and June, (Journal started in 1931), Penguin Books, London, 1990, p28.

Some conclusions

By 1899, cannabis was used for 49 different conditions, the list was very wide and covered the therapeutic areas now treated with benzodiazapenes, analgesics, antiepileptics and treatments for migraines.

Several proprietary preparations of the drug were available including Cannabine Tannate, which was used to treated hysteria, delirium and nervous insomnia as well as other similar conditions, a dose, between 0.25 to 0.5 grams was given at bedtime and powdered with sugar. Cannabinon was used as a sedative to relieve sleeplessness, mania and hysteria.[100] The cannabis preparations were primarily alcohol tinctures or formed into pills.

The doses recommended in the pharmacopoeia were small and not employed in reality. A typical dose in pill form being between ¼ and 1 grain, 1 grain was 0.0648 grammes, and so the dose would have been between 0.0162 and 0.0648 grammes. The alcohol tincture contained one grain in 20 minium and a typical dose was between 5-20 minims.[101]

Some early patients experienced intoxication, giddiness and other problems from large doses, while small doses were often ineffective. One of Donovan's patients who suffered from sciatica was prescribed twelve grains of the 'weak resinous extract' to be taken in three pills throughout the day. After two more pills he heard voices, felt stupid and fatigued and the next

[100] Brian A Whittle and Geoffrey W Guy, 'Development of cannabis-based medicines: risk, benefit and serendipity', in Guy, Whittle and Robson (ed), The Medicinal Uses of Cannabis and Cannabinoids, pp432-433 and M. H. Beers and R Berkow, Merck's 1899 Manual of the Materia Medica, New York, Merck and Co, 1899, p19. See Appendix 1 for uses of cannabis in 1899.
[101] The General Council of Medical Education and Registration in the United Kingdom, British Pharmacopoeia 1864, Spottiwoode and Co, London, 1864, p430.

day after another twelve grains, was too tired to undress himself.[102] This was a fairly common experience, but doctors had little choice when in search of remedies if opium failed to work. Reynolds was prescribing a third of a grain to one and half for adults in 1861 and Greene about the same for migraines in 1872. But by 1885 Mattison was recommending that small doses were useless and to treat opium withdrawal recommended sixty minims repeated every hour or less if not required, and Reynolds noted that quantities had to be gradually increased.[103]

Although cannabis was used, serious drawbacks meant that by the early years of the twentieth century its use was in decline. This will be discussed in the next chapter.

[102] Michael Donovan, 'On the physical and medicinal qualities of Indian Hemp', pp384-385.
[103] J. Russell Reynolds, 'On some the Therapeutical Uses of Indian Hemp', p154, Greene, 'Cannabis Indica in the Treatment of Migraine', p268, Greene, 'Cannabis Indica in the Opium Habit', p58 and Reynolds, 'Therapeutic Uses and Toxic Effects of Cannabis Indica', Lancet, 1890, p638.

Part Two

Chapter Three

The decline of cannabis

At first glance, the cessation of the medical use of cannabis in 1928 is remarkable for its suddenness; cannabis was not generally included in the debates over the dangerous nature of narcotic drugs. However its decline reflects forces that impacted on both the medical profession and the state.

As a medicine, it was on the decline by the end of the nineteenth century and by the early twentieth century not a trace of cannabis was to be found in any of the widely available patented medicines.[104] Medical concern over patented medicines resulted in the 1909 British Medical Association's report, *Secret Remedies*, which analysed the contents of many of the available patented medicines.[105] This produced consternation in the House of Commons and led to the Select Committee Report on Patent Medicines, published in 1914.[106] This concern had been triggered by earlier interest in the US: in 1906 The American Medical Association (AMA) published a report detailing anxieties of claims that certain patent medicines could cure consumption. The AMA noted that cannabis was to be found among the ingredients in several patent medicines. Mr W. A. Noyes who had been marketing 'Cannabis Sativa Remedy' since the 1860s, and Piso's Consumption Cure which contained cannabis in analysis before the

[104] Although cannabis and cannabis preparations were used for many disorders. See Appendix 1 for a list.
[105] British Medical Association, Secret Remedies What They Cost And What They Contain, British Medical Association, London, 1909.
[106] Report from the Select Committee on Patent Medicines, H.M.S.O, London, 1914.

1870s and continued to after, although after 1872 it had not contained morphine or anything derived from opium.[107]

The general use of cannabis, as with other 'narcotic' drugs namely opiates and cocaine had declined. It has been noted that American narcotic drug use peaked in the early 1890s and declined rapidly thereafter as users who became addicted in the 1860 and 1870s began to die off.[108] Medical developments were similar in America and Britain, and it is probable that a similar trend occurred in England. From the 1890s there were fewer therapeutic addicts because narcotic drugs were harder to procure and more cautiously administered by physicians. Decline in the use of these drugs reflects a genuine medical concern over the legitimacy of using addictive and possible physically harmful substances; it also reflects state and social concerns about addiction, lifestyle, debauchery, and the moral and physical deterioration of the stock of the Empire's motherland.

However, a decline in the medical use of the drug is not necessarily indicative that it had ceased to be used. Drug addiction in the nineteenth century was 'largely confined to therapeutically addicted, middle-class, middle-aged persons', but in 'the early twentieth century, many more "recreational" drug users began to appear'.[109]

Concern over narcotic drugs in the first two decades of the twentieth century was primarily directed at morphine and cocaine. After the political and social concern in the 1890s, attention to cannabis died down in England

[107] Samuel Hopkins Adams, The Great American Fraud V –Preying On The Incurables, Colliers, January 13 1906, pp18-19.
[108] Terry Parssinen, Secret Passions, Secret Remedies. Narcotic Drugs in British Society 1820-1930, Manchester University Press, Manchester, 1983, pp104-105.
[109] Ibid.

and was not revived until the 1960s. Cannabis use was not perceived to be a problem; the temperance and anti-opium lobbies were concerned with the widespread use of opium and alcohol amongst the working classes. The government was concerned over the use of alcohol; Lloyd George famously said during World War One that they were fighting two wars, one against the Germans, the other against drink.[110] The media was concerned with Chinese opium smokers and the use of cocaine; it was responsible in playing a large part in demonising drug use. Quick to pick up on the patterns in the change of drug use from therapeutic to recreational, the newspapers ran sensational stories about the debauchery of white women in Chinese opium dens in London and other tales, focusing primarily on the risk of inter-racial relationships fostered though drug taking.[111]

It is likely that concerns in the 1890s that cannabis was a cause of insanity and possibly addiction harmed its reputation. However the decline in the use of cannabis is more easily attributed to its unreliable nature as a drug, the fact the strength of the drug could vary dramatically. The usual dose was between a quarter and one grain, but this was particularly unreliable when taken orally.[112] The potency of cannabis products was variable, responses to it were erratic and unpredicted, and it was not soluble in water and therefore not possible to administer by injection. After the hypodermic syringe was invented in the 1850s, water-soluble drugs were easily administered by injection for fast pain relief. There was an increase

[110] Kohn, Mareh, Dope Girls The Birth Of The British Drug Underground, Lawrence and Wishart, London, 1992, p28.
[111] Ibid.
[112]The General Medical Council of Education and Registration in the UK, British Pharmacopoeia 1864, Spottiswoode and Co, London, 1864, p37, BP 1867, p68, BP 1885, BP 1898, p105 and 340 and Booth, Cannabis, p95-96.

in opiate use due to its solubility and this accounted for the general lack of enthusiasm about administering cannabis.

Towards the end of the nineteenth century synthetic drugs appeared on the scene. In the 1880s painkillers such as aspirin, chloral hydrate and barbiturates were more chemically stable than cannabis and thus more reliable.[113] These new drugs largely replaced the analgesic and hypnotic functions cannabis had fulfilled, and although they too had their attendant problems, the deaths resulting from their use did not promote a return to cannabis. Cannabis has a lethal-to-effective dose ratio of 40 000 to one, the ratio for aspirin is ten to one.[114] In this age of scientific optimism, these new drugs seemed to herald an advance for medical science.

By the late 1890s 'the want of uniformity in the preparations of Indian hemp has so often led to serious consequences in practice that many practitioners have discarded the drug as worthless or dangerous'. Those who had found it useful, were keen to see the drug standardised or the active principle of the plant isolated.[115] Pharmacological investigations attempted to do both for much of the nineteenth century. The breakthrough came in 1896 when Wood, Spivey and Easterfield isolated cannabinol.[116] It was seen to have potential therapeutic use as a hypnotic, and possibly an analgesic and was believed to be the primary active ingredient of cannabis, but although purer and more reliable that other cannabis products on the market, it did not appear to have any other advantages over them. C. R.

[113] Lester Grinspoon and James B Bakalar, Marijuana The Forbidden Medicine, Yale University Press, Yale, 1993, p7-8.
[114] Booth, p295.
[115] C. R. Marshall, 'The Active Principles of Indian Hemp, A Preliminary Communication', Lancet. January 23, 1897, p235.
[116] Ibid., p237.

Marshall ran tests on the cannabinoid and W.E. Dixon, who later became Reader of Pharmacology at Cambridge and a member of the Rolleston Committee on Morphine and Heroine Addiction advocated use of it.[117]

This was the last pharmacological breakthrough before cannabis was restricted in 1928. Failure to isolate other cannabinoids, meant that although the drug was in use, doctors were unsure of how and why it worked. Although there was some discussion of cannabis at the British Pharmaceutical Conference in 1902, calls for the potent and stable charas to be included in the pharmacopoeia were ignored.[118] Charas known as hashish or cannabis resin had been employed in tinctures; failure to include it in the pharmacopoeia demonstrates that cannabis had fallen out of medical favour significantly in a relatively short time. It is possible that charas was associated with intoxication in India, where it was mainly smoked for pleasure or religious purposes rather than used medicinally.

Nonetheless cannabis was used as a narcotic and an anodyne until 1928, although medical books warned it 'may give peculiar dreams and even delirium', it was used to treat: chordee, asthma, as an aphrodisiac, for migraine, dysmenorrhoea, incipient delirium tremens, nausea, paroxysmal colic, supraorbital neuralgia, cough of phthisis and for whooping-cough.

'It is of great use combined with strychnine, with chloral in chorea in mental worry and restlessness. Should be given in small and frequent doses. It is *the* remedy for menorrhagia. In gonorrhoea (urethritis acuta anterior)

[117] C. R. Marshall, 'A Contribution To The Pharmacology of Cannabis Indica', American Medical Association, October 15,1898, pp882-891 and C. R. Marshall, 'A Review Of Recent Work On Cannabis Indica', Pharmaceutical Journal, August 16th 1902, p182. The Rolleston Committee was a response to the perceived need to deal with drug addiction. It met in 1925 and was followed by the similar Brian Committees in the 1960s.
[118] Ibid.

Cannabis internally with Hyoscyamus is useful before the patient is in condition for injections'.

It was also a 'useful hypnotic' and was 'specially valuable in nervous sleeplessness and in acute mania'.[119]

In the 1932 edition of the British Pharmacopoeia cannabis was omitted.[120] Although there was some pharmacological research of cannabis during the early decades of the twentieth century; for example, cannabidiol was isolated in the 1930s, the failure to find the principal active constituent of cannabis coupled with the restrictions placed on the drug led many to believe that its use was outdated.[121]

If not invaluable to the medical profession, cannabis was nonetheless a therapeutic agent in current usage. Although the cessation of its use did not come about because it was proved to be therapeutically harmful or inactive, it was a victim of changing fashions in drug use. In the 1920s narcotic drugs were replaced with other newly synthesised drugs that could perform the same role but had no perceived risk. At this time the fostering of the relatively new pharmaceutical industry was a concern to the British state, due to competition with Germany who was leading the way in that area. This mothering paid off and by 1965 the pharmaceutical industry

[119] W. H. Martindale, revised by, Martindale and Westcott, The Extra Pharmacopoeia, Vol. 1, London 1928, p266-267.
[120]The 1928 Extra Pharmacopoeia noted that cannabis would cease to be included in further publications when the Dangerous Drugs Act 1925 came into practice: *'Cannabis, Resins and preparations of the resins are included in the 1925 D.D.A., but the Act is not in operation at the time of going to Press'*. W. H. Martindale, The Extra Pharmacopoeia Martindale and Westcott, Vol.1, London, 1928. The Medical Council of Education and Registration of the UK, British Pharmacopoeia 1932, Constable and Co, London, 1932, p1.
[121] Cannabidiol had no psychoactive capability, which the main component was believed to have.

contributed £60 million to Britain's export trade and was believed to have made 'enormous contributions to our society'.[122]

The inclusion of cannabis under the terms of the Dangerous Drugs Acts reflected medical concern about addiction and physical harm to the patient and the interests of government, temperance and anti-opium lobbies, media, and pharmaceutical industries'; rather than a scientific assessment of its use and effects as a drug.

The international and especially the American attitude to drugs influenced the British perception of drugs. In the case of cannabis although it was a relatively minor drug in terms of medical or social usage, various states in America took action 'against the abuse' of the drug in the early twentieth century, for example in 1915 California introduced prescriptions for cannabis. By 1937 the Marihuana Tax was introduced and physicians had to obtain a special licence and pay a dollar fee annually to legally administer cannabis preparations. By 1938 there were still twenty-eight pharmaceutical preparations containing cannabis available.[123] Although it was still in use, various reasons, including the determination of the Narcotic Bureau in ignoring the wishes of the American Medical Association, meant that by '1941, some thirty hemp preparations were removed from the pharmacopoeia'. Consequently cannabis was regarded as obsolete in western medicine.[124]

So despite its 'interest to commerce and industry as a source of a valuable fibre and of a useful oil, and [its] importance to pharmacy and

[122] Sir Derrick Dunlop, 'Use and Abuse of Drugs', BMJ, 21 August 1965, p438.
[123] 'Cannabis Indica in Pharmaceuticals', Journal of the Medical Society, New Jersey, January 1938, pp51-52.
[124] Rätsch, Marijuana Medicine, p171.

medicine as a source of a potent but curiously unreliable drug', cannabis ceased to be used medicinally.[125]

It did remain available in pharmacies for use in psychiatric indications until its absolute prohibition under the terms of the Misuse of Drugs Act (1971).[126] It seems that 'as public policy changed, the medical profession changed its tune respecting the dangers of narcotics. Doctors had once thought rather well of cannabis, as of opium'.[127] But they ceased to regard it so favourably, and it was rarely prescribed. Between 1925 and 1973 there was a gradual process of eliminating the use of cannabis medically, as restrictions placed on the drug increased.

Cannabis was not reinstated in the British Pharmacopoeia or similar medical tomes.[128] Interest in it revived sporadically during the twentieth century. There was some concern that cannabis caused 'toxic psychosis'.[129] Only occasional articles detail uses of cannabis. A letter in the *BMJ* in August 1939 claims 'a simple method of treating herpes zoster with the extract of cannabis indica is not so generally known as it deserves to be'. It reported that 'an elderly female patient admitted with severe pains following herpes zoster' was treated with the drug and 'in two days she was completely cured'. Similarly when 'cases of shingles came under my care I used the drug with invariable success. The extract was prescribed in pill

[125] Sir David Prain, 'Useful Plants of India', BMJ, November 21st 1925, vol. 2 London 1925, p963.
[126] Robson, Forbidden Drugs, pp69-70.
[127] Porter, The Greatest Benefit To Mankind, p665.
[128] The General Council of Medical Education and Registration in the United Kingdom, The British Pharmacopoeia 1948, Constable and Co, London, 1948, pxI.
[128] British Pharmacopoeia, 1953, The Pharmaceutical Press, London, 1953 and BP, 1968, The British Encyclopaedia of Medical Practice, Second Edition 1967, Butterworths, London, 1967, BP 1973, and BP 2003,
[129] Dhunjibhoy, Jal Edulji, 'A Brief *Resume* Of The Types Of Insanity Commonly Met With In India, With A Full Description Of 'Indian Hemp Insanity" Peculiar To The Country', Journal of Mental Science, April 1930, pp254-264.

form, ¼ to ½ grain, according to age, three times a day'. The author also suggested that as there is a 'close relationship between herpes zoster and varicella', the latter could perhaps be treated with cannabis indica.[130]

The greatest progress in the research of the chemical components of cannabis was made between 1940 and 1942 by American and British researchers, who determined the chemical structure of the 'red oil', (cannabinol, cannabidiol and tetrahydrocannabinol) and identified the tetrahydrocannabinols (THC) as the active principles of the drug.[131] Investigations in Germany and Czechoslovakia between 1955 and 1960 discovered some other components possessing different biological activity, and found that the cannabidiolic acid had sedative and antibacterial qualities. The WHO decided that there was not enough evidence to make cannabis available for the extraction of antibiotic substances.[132]

Comparisons were drawn between the active constituents of cannabis and penicillin. Experiments made in clinical practice, particularly in stomatology, otorhinolaryngology, gynaecology, dermatology, phthisiology, with some pharmaceutical preparations containing antibacterial substances from cannabis were undertaken. For example, Scaron?rek experimented with hemp seeds in the treatment of tuberculosis. Other medicines were combined with substances derived from cannabis to treat otitis; staphylococcus infected wounds and staphyloderma; rhagades on the nipples of nursing women and prevention of staphylococcic mastitis; sinusitis and

[130] British Medical Journal, August 19 1939, Volume 2, London, 1939, p431-432.
[131] The Mayor La Guardia of New York at the height of national concern commissioned the other significant research in 1940 over cannabis.
[132] Ljubi?a Grlic, 'Recent Advances in the chemical research of cannabis', 01/01/1964, United Nations Office on Drugs and Crime, Bulletin on Narcotics, 1964, Issue 4, found at http://www.unodc.org/undoc/en/bulletin/bulletin-1964-01-01_4-pages.005.html accessed 02/02/05.

caries. These were clinically tested and it was assumed they would be made available for production. Cannabis was again mooted in veterinary medicine, especially as a preventative medicine for anthropozoonosis.[133]

Despite this the therapeutic usefulness of cannabis was contested. World Health Organisation reports consistently condemned the drug.[134] In 1952 the WHO Expert Committee on Addiction-producing Drugs resolved that 'there is no justification for the medicinal use of cannabis', describing preparations of the drug as 'practically obsolete' in western medicine and noting that they were not included in the International Pharmacopoeia nor in many national pharmacopoeias. In 1953 the UN Commission on Narcotic Drugs requested that the WHO prepare a study on the subject. The study demonstrated the harmful and dangerous nature of the drug, which was reiterated by the Economic and Social Council in 1954.

At its twelfth session in 1957 the Commission on Narcotic Drugs adopted a resolution that all governments who had not done so to date should abolish all legal consumption of the drug, except for medical and scientific purposes. Two years later it requested the summaries and conclusions of the WHO study, which were used in the drafting of the Single Convention on Narcotic Drugs. This prohibited the production, distribution and use of cannabis except for scientific purposes or for medical purposes in the Ayurvedic, Unani and Tibbi systems of Medicine in the Indian-Pakistani sub-continent. Adopted on 30 March 1960 the convention did not enforce mandatory prohibition on the production, distribution and use of cannabis,

[133] J. Kabelík, Z. Krejcí, F. Santavy, 'Cannabis as a medicament', UN Narcotics Bulletin, 1960, http://www.unodc.org/unodc/en/bulletin/bulletin_1960-01-01_3_page003.html.
[134] See Chapter 4 for more details.

but it classified cannabis, cannabis resin, cannabinol and its derivatives as Schedule I drugs. Cannabis and cannabis resin were also included in Schedule IV of the convention, which allowed countries to subject the drug to special measures of control due to its dangerous nature, and to prohibit it, if countries considered it to be in the best interests of public health and welfare.[135]

Despite this, medicinal usage of cannabis experienced resurgence in the 1960s. The *Lancet* published a leading article, stating that it was 'worth considering' legalising the drug.[136] In 1967, *The Times* published an advert signed by many prominent people, which called for the legalisation of cannabis.[137] By 1969 many countries had; 'extensive experience of cannabis as a drug, though knowledge of it is not well systematized and scientific research into it is sparse'.[138] Although there were some experiments on the therapeutic uses of cannabis, most of the energy dedicated to the drug was focused on psychosocial problems and illicit consumption.[139] Doctors complained that; 'pharmacological research on man is at present severely limited by the existing drug laws and regulations, through this may be modified by the passage of the Misuse of Drugs Bill'.[140]

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[135] United Nations Office on Drugs and crime Bulletin on Narcotics 1962 Issue 4, 004 found at http://www.unodc.org/undoc/en/bulletin/bulletin-1962-01-01_4-pages.005.html, accessed 02/02/05.
[136] Lancet, 9 November, 1963, cited in The Times, 24 July, 1967, found at http://ukcia.org/politicsandlaw/times67a.html, accessed 25.04.05.
[137] SOMA Advert, The Times, 24 July,1967.
[138] BMJ, January 18 1969, London 1969, p133.
[139] 'The cannabis problem: A note on the problem and the history of international action', UN Narcotics Bulletin, 1962, www.unodc.org/unodc/en/bulletin/bulletin_1962-01-01_4_page004.html, 02/02/05. T. Asuni, 'Socio-psychiatric problems of cannabis in Nigeria', UN Nar Bull, 1964, www.unodc.org/unodc/en/bulletin/bulletin_1964-01-01_2_page003.html, 23/03/05. Oswald Moraes Andrade, 'The criminogenic action of cannabis (marihuana) and narcotics', UN Nar Bull, 1964, www.unodc.org/unodc/en/bulletin/bulletin_1964-01-01_4_pages004.html, 23/03/05. M. I. Soueif, 'Hashish consumption in Egypt, with special reference to psychosocial aspects', UN Narcotics Bulletin, 1967, www.unodc.org/undoc/en/bulletin/bulletin_1967-01-01_2_pages002.html, 223/03/05.
[140] BMJ, December 5 1970, p610.

Due to the laity self-medicating with cannabis in significant numbers, the therapeutic use of it is not entirely obsolete. Anecdotal reports from young cancer patients, from the 1970s, were asserting that the drug relieved nausea and vomiting caused by chemotherapy treatment.[141] It has since been accepted by much of the medical profession that 'cannabinoids have antiemetic effects'.[142] Since the 1990s synthetic preparations of cannabis have been partially available. There is a preparation of synthetic THC in sesame oil called 'marinol' or 'dronabinol' that can be taken orally. This can be prescribed by doctors but only on a named-patient basis, as it is unlicensed and has to be imported from the USA.[143] A synthetic cannabinoid called nabilone is available in Britain under a licence, which restricts its use to the treatment of severe nausea and vomiting in cancer patients who are given cytotoxic drugs, and it is only used when patients have proved to be resistant to other treatments.[144] There is scientific evidence 'that no other medicine is as easily tolerated and as effective in treating both glaucoma and the side effects of chemotherapy as THC.'[145]

It was permissible for doctors to prescribe cannabis in tincture form until 1973. However the official line on cannabis was summarised in a 1970s Department of Health report: 'benefits have been claimed from cannabis, but trustworthy reports have been few and vague', and 'there are still a few who assert the therapeutic value of the drug'.[146] Under the 1971 Misuse of

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[141] http://bioteach,ubc.ca/Journal/V02101/Cannabis.pdf, accessed 28.02.2005.
[142] Glyn Volans and Heather Wiseman, Drugs Handbook, Palgrave, Basingstoke, 2003, p18.
[143] House of Lords Select Committee for Science and Technology Session 2000-2001 2nd Report, The Therapeutic Uses of Cannabis, The Stationary Office, London, 2001, p7.
[144] Robson, Forbidden Drugs, p75.
[145] Rätsch, Marijuana Medicine, p177.
[146] Department of Health and Social Security, Reports on Public Health and Medical Subjects No. 124, Amphetamines, Barbiturates, LSD and Cannabis their Use and Misuse, H.M.S.O, London, 1970, p34.

Drugs Act, it was placed under Schedule I, for drugs with no recognised therapeutic value. Cannabinol and derivatives were classified as Class A drugs and cannabis and cannabis resin were classed as Class B drugs. After complete prohibition under this Act, almost all official medical sources ceased to refer to it as a medical agent.[147]

Since 1971, cannabis products have been investigated experimentally as treatments for alcoholism, heroin and amphetamine addiction, emotional disturbances, muscle spasms and glaucoma.[148] Tinctures and liquid extracts made from cannabis resin were used to relieve depression, pain and to induce sleep in those suffering nervous disorders.[149]

It is difficult to know how many people were using cannabis medicinally. The 1968 Wootton Report estimated 300 000 people. A television show in August 1973 noted that in a survey four million people admitted to using it. Surveys in the early 1970s show that about 10 per cent of young people in their mid to late teens had used cannabis.[150] Between 1965 and 1981 more than five thousand people were imprisoned for possessing cannabis and nearly 90 000 were convicted for cannabis offences.[151] Although none of these figures are of medicinal usage specifically, it is possible that many of these people used cannabis medicinally.

The report 1970 on cannabis was in fact simply a copy of an earlier report; 'reproduced with permission from 'Cannabis' – Report by the Advisory Committee on Drug Dependence – 1968', (piv).

[147] British Herbal Medicine Association, British Herbal Pharmacopoeia, Part One, 1976, London, 1976, (reprint of 1971), Part Two, 1979, London, 1979, (reprint of 1971) and Part Three, 1981, London, 1981, (reprint of 1971). A discussion of these laws can be found below.

[148] Rätsch, p171.

[149] Richard Le Strange, A History of Herbal Plants, Angus and Robertson, London, 1977, p65.

[150] John, Auld, Marijuana Use and Social Control, Academic Press, London, p34.

[151] W.T. West, Drug Laws, Chichester, 1982, p3.

For the layperson, the concern over the illegality of cannabis has varied and many patients have run the risk of arrest in order to self-medicate. MS suffers have been at the forefront of the campaign to legalise cannabis for their condition. The therapeutic movement for cannabis really began in the early 1990s, when in 1992 Clare Hodges, an MS patient, wrote in *The Spectator* about her use of cannabis for her condition. Her neurologist put her in contact with some other users and they formed the Alliance for Cannabis Therapeutics. Geoffrey Guy, a physician with twenty years experience in pharmaceutical developments, was recruited to their delegation to the Department of Health in 1997, which requested a licence to research the benefits of cannabis. Subsequently Guy founded GW Pharmaceuticals, which will potentially make a huge fortune if it can produce a legal drug. The market for cannabis-based products was estimated in 2003 to be worth about £250 million.[152] Also in 1992, the Legalise Cannabis Alliance was formed, to campaign to use medicinal cannabis and to maximise the many other uses of the plant, notably its potential to form plastic. In America the movement for the therapeutic use of cannabis started about the same time, promoted by the publication of Grinspoon's *Marihuana The Forbidden Medicine* in 1993. Soon afterwards the NORML was formed, to fight for legal access to medicinal cannabis.[153]

In 1995 the World Health Organisation advised the United Nations to reschedule dronabinol/marinol (synthetic THC) to a Schedule II classification to allow it to be prescribed on a named patient basis only, because of

[152] David Rowan, 'Pot Chocolate', Daily Telegraph, Saturday February 22 2003.
[153] Grinspoon and Bakalar, Marihuana The Forbidden Medicine. NORML stands for The National Organization for the Reform of Marijuana Laws. Set up in 1994, it is a non-profit lobby group that believes recreational and medical use of marijuana should not be prohibited.

empirical evidence that the drug benefited patients suffering from nausea and vomiting induced by cancer chemotherapy. Although dronabinol was rescheduled, cannabis and cannabinoids remained under Schedule I. Dronabinol was rescheduled in Britain to Schedule II in 1995. This revived interest in cannabis resulted in reviews of the medical and scientific evidence. In 1997 the British Medical Association published a report, the Department of Health commissioned three reviews at the request of the Advisory Council on the Misuse of Drugs; and in America the US National Institute of Health and the American Medical Association also published reports.[154]

On July 8 1997, a symposium on the therapeutic applications of cannabis was held at the Royal Pharmaceutical Society of Great Britain. Its objectives were: to survey the medical uses of cannabinoids; to review the history, chemistry and pharmacology of cannabinoids; and to clarify the legal position on using cannabinoids therapeutically. The topics under discussion were: the ability of cannabis to relieve chronic pain and discomfort of multiple sclerosis and the easing of physical symptoms and psychological symptoms of HIV/AIDS.[155] It was organised by the Society's Pharmaceutical Sciences Group and the Multiple Sclerosis Society of Great Britain and Northern Ireland and supported by the British Medical Association. The British Medical Association delegates voted in approval for the medical use of cannabis. The Home Office was also understood to be

[154] British Medical Association, Therapeutic Uses Of Cannabis, Harwood Academic Publishers, 1997 and Prof C. H. Ashton, Cannabis: Clinical and Pharmacological Aspects, Dr A. Johns, Psychiatric Aspects of cannabis Use. Dr P Robson, Therapeutic Aspects of Cannabis and Cannabinoids and NIH Report on the Medical Uses of Marijuana, August 1997 and AMA Medical Marijuana, December 1997.
[155] Conference held at Royal Pharmaceutical Society of Great Britain, Therapeutic Uses of Cannabinoids, July 8 1997.

willing to issue licences for research into cannabis and cannabinoids, when it commented that it was not opposed to scientific research and would reschedule any cannabis-based product gaining a product licence.[156]

In response to the BMA report, the 1998 House of Lords Select Committee on Science and Technology carried out a review of the scientific and medical evidence on the use of cannabis and recommended that clinical trials for the treatment of multiple sclerosis and chronic pain 'should be mounted as a matter of urgency'.[157] A licence was issued to GW Pharmaceuticals, and clinical trials on MS and cancer patients with synthetic cannabinoids were initiated in 1999 under the direction of Dr Norcutt, a consultant anaesthetist and the pain relief advisor to the Eastern Region, at the James Paget Hospital in Gorleston, Norfolk.

The committee also recommended that cannabis and cannabis resin should be moved from Schedule I to Schedule II of the Misuse of Drugs Regulations (1971), so that doctors could prescribe appropriate preparations of cannabis, although the prescription power remained on a named patient basis only. This change in Schedule also allowed research to be undertaken without a special licence from the Home Office.

The BMA report and subsequent 1998 Select Committee Report marked a turning point in the government's attitude. The desire to remain condemnatory of illegal drugs, especially in the international arena, and the fear that to approve medicinal use would automatically lead to increased recreational use remains, but the Home Office did modify its attitude

[156] Alan MacFarland, Chief Inspector, Home Office Drugs Branch, at the Conference held at Royal Pharmaceutical Society of Great Britain, Therapeutic Uses of Cannabinoids, July 8 1997.
[157] House of Lords Select Committee on Science and Technology, Cannabis: the scientific and medical evidence, The Stationary Office, London, 1998, para 8:3.

slightly. Not only did it grant licences to enable research into cannabis, it was also 'helpful' to the researchers 'in planning their trials'.[158]

The scientific research on cannabis is still in its infancy. There are more than 460 known compounds in cannabis, of which more than 60 have the 21-carbon structure typical of cannabinoids.[159] The cannabinoids have been the group of compounds studied the most; the most thoroughly studied being delta-9-THC, delta-8-THC, cannabidiol (CBD), and cannabinol (CBN).[160] In 1998 the cannabinoid receptor in the human brain was isolated and the focus on a molecule christened 'anandamide' (from a Sanskrit word meaning bliss), thought to be the endogenous ligand that binds the receptor, 'infused new energy in the field of cannabinoid pharmacology.'[161]

Companies demonstrated a renewed interest in cannabis after the receptor system was discovered. Pharmos is currently investigating the neuroprotective effect of dexanabinol, a non-psychoactive synthetic isomer of THC, in traumatic brain injury and has conducted studies of cannabimimetic molecules in treating neuro-inflammatory conditions. Invdevus Pharmaceuticals is researching anti-inflammatory and analgesic properties of adjulemic acid, a synthetic non-psychoactive THC derivative. Unimed intends to produce an inhaled version of marinol. Oxford Natural

[158] House of Lords Select Committee on Science and Technology, session 2000-2001 2nd report, Therapeutic Uses Of Cannabis, The Stationary Office, London, 2001, p6.
[159] Grinspoon and Bakalar Marihuana The Forbidden Medicine, p2.
[160] Denis J Petro, 'Pharmacology and Toxicity of Cannabis', in Mary Lynn Mathre, ed., Cannabis in Medical Practice A Legal, Historical and Pharmacological Overview of the Therapeutic Use of Marijuana, McFarland and Company, Jefferson, 1997, p56.
[161] Ibid., p60.

Products is developing a suppository containing a prodrug ester of THC, dronabinol hemisuccinate.[162]

In the 2000-2001 Session, the House of Lords Select Committee, in a second report on the therapeutic uses of cannabis, recommended that it was 'undesirable to prosecute genuine therapeutic users of cannabis'. The government commented that the number of such prosecutions was small and that each case had to be dealt with on a unique basis, as circumstances differed and in some cases false or unsubstantiated claims to therapeutic use were made. [163]

By this time the Medical Research Council had approved over £1.5 million to fund two trials involving cannabis. One to 'assess the efficacy of cannabis extract and tetrahydrocannabinol (THC) in the treatment of spasticity in people suffering from multiple sclerosis'; and the other to 'assess the efficiency of cannabis extract and THC as postoperative analgesics'. The MRC also awarded £600,000 to basic cannabinoid research. Under Home Office licence G.W. Pharmaceuticals conducted research into cannabis-based medicine, especially into treatment of multiple sclerosis and spinal cord injuries. The company has developed a 'sub-lingual spray, this method of administration avoids the dangers inherent in smoking herbal cannabis, and the difficulties in controlling the dose during oral administration'.[164]

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[162] Alice Mead, 'International control of cannabis: changing attitudes', in Guy, Whittle and Robson, The Medicinal Uses of Cannabis and Cannabinoids, p415.
[163] House of Lords Select Committee on Science and Technology, session 2000-2001 2nd report, Therapeutic Uses Of Cannabis, p4.
[164] Ibid., p5-6.

The police have reacted to the increased interest in medicinal cannabis by expressing disquiet. Three quarters of officers interviewed in 1999 believed that the legislation criminalized individuals that they would otherwise not come into contact with. In 1999 about one in seven people passing through the police system did so as a result of illegally using cannabis. Since 1974, a year after cannabis had become entirely prohibited, the police had seen a ten fold increase in cannabis possession offences, compared to an increase of about a quarter for all other offences, causing serious concern.[165]

In 1999 a police report into the misuse of drugs concluded that cannabis was less harmful than other illicit drugs and that the law was no deterrent in preventing use. It requested the government reclassify cannabis to a Class C and move it from Schedule I to II of the Misuse of Drugs Regulations, this would have allowed supply and possession for medical use. The government rejected this request.[166]

Apart from licensed trials, people who self-medicate with cannabis are still criminalized, in 1998 alone there were 89 000 cases in courts involving cannabis. It is not possible to get exact figures of how many were therapeutic users as the Home Office does not maintain a record of those who are prosecuted for cannabis use that claim therapeutic use as a defence. The government claims that this is a small number.[167]

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[165] Speeches by Ms Tiggey May and Chris Lee at the ACPO Drugs Conference at Blackpool, 5 September 2002.
[166] Ibid., p422.
[167] House of Lords Select Committee on Science and Technology, session 2000-2001 2nd report, Therapeutic Uses Of Cannabis, p7.

Very recently some courts have recognised the legitimacy of the use of medical cannabis. On October 9 2002, Brad Stephens became the first person in Britain to plead not guilty and to be found not guilty, when magistrates accepted that his use of cannabis was a medical necessity. He suffered from cervical spondylosis and was dependent on ever increasing doses of morphine to allow him pain relief but he self medicated with cannabis because it had the same anodyne effects without taking the same toll as morphine on his body.[168] Other court acquittals began in October 1993 with Dr Anne Biezanek, who pleaded that she used cannabis to combat her MS.[169] Charges were dropped in July 2003 against Gyyn Roskell on condition that she agreed to hand over the hydroponics equipment that she used to grow cannabis plants. Roskell suffered a back injury during a car accident in 1978 and had used holistic medicines since her faith in conventional medicine waned after she suffered unpleasant side effects.[170]

But confirmation of the legitimacy of medicinal cannabis use has not been the norm by any standards. Most users who find themselves on the wrong side of the law are fined and some sent to prison. Ra Rawle, accused of cultivating cannabis plants, pleaded the medical necessity of cannabis as a withdrawal agent from Class A drugs such as cocaine and ketamine. He proved that cannabis was medicinally helpful by having a job instead of relying on the Incapacity Benefit he would otherwise be entitled to and the judge gave him a conditional discharge for twelve months.[171]

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[168] Simon de Bruxelles, 'Cannabis Smoker Wins Medical Use Victory', The Times, October 10, 2002, from web source http://www.telegraph.co.uk, February 22 2003.
[169] Medical defence information from Cannabis Legal Support Service, http://www.clcia.org/legal, accessed 22/01/2005.
[170] 'Cannabis User Found Not Guilty at Gloucester Crown Court', The Forester, 17 July 2003.
[171] Ibid., 4 July 2003.

On October 29 2003 the House of Commons voted to downgrade cannabis from a Class B drug to Class C, by 316 votes to 160. A similar vote in the House of Lords was carried by 63 to 37 and the legal downgrading became effective from January 29 2004. The change responded to medicinal claims and also with the re-focusing of the 'War on Drugs' on Class A drugs such as heroin and cocaine. The government was also convinced that its anti-drug message lacked credibility and one way to regain it was to classify cannabis more sensibly.[172] In October 2003 the figures for those addicted to Class A drugs stood at 250 000 and it was claimed that this quarter of a million people were responsible for 60% of 'acquisitive crime'.

The recent reviews of cannabis from the government, the police, the medical profession and the newspapers have combined with popular opinion to produce a renewed attempt to re-establish cannabis as a medicine. While it is unlikely the authorities are going to go as far as the Dutch government who allow cultivation of the plant for personal consumption, success in placebo controlled, randomised, double-blind trials is likely to result in acceptance of synthesised cannabis based drugs.

GW Pharmaceuticals is currently leading the way in trialing and developing synthetic cannabis based drugs, under license from the UK Home Office to work with various controlled drugs for medical research purposes. The company announced in November 2002 significant results from clinical trials. The four randomised, double-blind, placebo controlled phase III trials involved 350 patients suffering from Multiple Sclerosis. The drug Sativex achieved statistically significant reductions in Neuropathic Pain in

[172] Minister Caroline Flint, House of Commons Debates Reclassification, 29 October, 2003.

comparison with the placebos and showed statistically significant improvements in the other symptoms of Multiple Sclerosis, most notably spasticity and sleep disturbance. The medicine, which is a spray used in the mouth of the patient, is an extract of the whole plant containing Tetranabinex extract (which is THC) and Nabidiolex extract (which is cannabidiol or CBD). On 21 December 2004 GW Pharmaceuticals received Qualifying Notice for approval in Canada for Sativex. The drug will be used for the relief of neuropathic pain in Multiple Sclerosis only but GW Pharmaceuticals hopes to expand the usage of it.

Currently 50 000 people in Canada are diagnosed with MS. While approval is still awaited in the UK, MS patients are not waiting for the legalisation of the drug and have been taking it for a decade or so. The *Daily Telegraph* ran a story in February 2003 about a couple, one of whom suffered from MS who made chocolate containing cannabis and distributed it, in an altruistic move, to certified MS sufferers. 85 000 people suffer from MS in Britain and while Mark and Lezley Gibson only supply chocolate to about 300 people, it is a positive start, in an attempt to improve the quality of the lives of those who suffer from MS.[173]

The move to legality is being pushed from various sides and, while some continue to self medicate illegally, trials continue with legal backing. On the 19 January 2005, GW Pharmaceuticals announced positive preliminary results with Sativex in Phase III of their cancer pain trial.

There is reason to believe that cannabis will one day re-enter the British Pharmacopoeia as GW Pharmaceuticals now has the backing of more

[173] David Rowan, 'Pot Chocolate', Daily Telegraph, Saturday February 22 2003.

established players in the pharmaceutical arena as GW has sold the exclusive right to market Sativex in the UK and Canada to the pharmaceutical conglomerate Bayer AG.[174] There is some support from the medical profession for the reinstatement of cannabis; surveys have indicated 'that most doctors believe that cannabis and its derivatives should once again be available on prescription'.[175] When the safety and efficacy of the drug is proved with evidence, professionals will be far more likely to recommend it, but Alice Mead, from GW Pharmaceuticals has found that the medical profession has entered the cannabis controversy 'with caution and trepidation', not least due to fear of governmental sanctions.[176]

[174] GW Pharmaceuticals – News and Media –Press Release Statement, 19th June 2003, www.gwpharm.com accessed 24/01/2005.
[175] Robson, Forbidden Drugs, p75.
[176] Mead, p413.

Chapter Four

The Logistics Of Prohibition

"Government is quite right. Never could a reasonable state subsist if hashish could be freely used. It produces neither warriors nor citizens".[177]

"Part I. Of the Dangerous Drugs Act, 1920, (which restricts the importation and exportation of, and gives power to regulate dealings in, raw opium), shall, as amended by this act, apply to coca leaves, Indian hemp and resins obtained from Indian hemp and all preparations of which such resins form the base, as it applies to raw opium".[178]

The prohibition of cannabis is arguably the greatest cause of the decline of medicinal cannabis use in modern England. This chapter explores the origins of prohibition and its effect on the decline of medical cannabis use.

Drug control can be attributed to a growth in nation states and concern over social control, although this chapter will note also: an increasing 'middle class' intolerance towards intoxication; medical concepts of addiction; international trade issues and expansionism, and suggest that, historically, there is no evidence that prohibition reduces use of the prohibited substance.[179]

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[177] Charles Baudelaire, On Wine and Hashish, first published 1851, translated by Andrew Brown, Hesperus Press, London, 2002, p26.
[178] Dangerous Drugs Act 1925, The Law Reports – Statutes Vol. II 1925 15&16 George V, London 1925, p1591-1592.
[179] See Appendix 3.

The first recognition in modern western medicine of the problem of addictive drugs occurred in 1725 in Germany: when a decree prohibited chemists from making up prescriptions for unregistered medical men. In 1800 a decree interdicted the sale of opium and its preparations to the general public and in 1801 another decree ensured prescriptions containing opium were not to be repeated without the knowledge and renewed order of the respective physician.[180] Doctors were also noticing patient's languor if not prescribed opium regularly once accustomed to it.

However modern drug prohibition can be said to have started in the nineteenth century with a change in medical perceptions of the powerful drugs they employed and legislation that attempted to control consumable substances.[181] In England, the Pharmacy Acts of 1852 and 1868 put substances into 'schedules'. The 1868 Act put 'Opium and all Preparation of Opium or of Poppies' in 'Schedule A'; the section 'deemed to be poisons'. 'Chemists and Druggists' were required to be qualified and registered and poisons had to be labelled.[182] 'Over the counter' medicines were restricted partly to prevent public harm but also to control new substances, a perceived necessity for a specialised healing profession.

Although doctors across Europe were aware of the dangers of opium, the risks from the chemical production of morphine, (extracted from opium

[180] Edward Levinstein, *Die Morphiumsucht*, translated by Charles Harrer, Morbid Craving fro Morphia A monograph founded on personal observation, Smith Elder and Co, London, 1878, pp126-127.
[181] Arguably it was initiated with the Apothecaries Act 1815, which was the first attempt to set standards of education and medical professionalisation. The Medical Act 1858, established a register of all approved and qualified practitioners, under the General Medical Council and only those on the register could be employed by the state.
[182] The Pharmacy Act, 1868, published in The Law Reports – Statutes Vol. III 1868 31 and 32 Victoria, London, 1868.

in the 1820s) were not immediately recognised. The introduction of the hypodermic syringe in the 1850s led to increased morphia usage and eventually doctors became more aware of patients' dependency on and cravings for the drug. A similar situation arose in 1898, when Bayer introduced Heroin, although the company initially claimed it had the 'ability of morphine to relieve pain, yet is safer'.[183] However, whatever problems were attended with opium, for doctors in the nineteenth century it was the mainstay in their repertoire.

Nevertheless, eventually the European medical profession began to study addiction in the late half of the nineteenth century. It came to be regarded as a direct result of the pharmacological properties of the drug, that idea being reinforced by the physical withdrawal experienced by addicts when deprived of the drug.[184] Addiction became part of popular as well as medical culture and concern that addictive drugs led to 'physical and mental degeneracy' became current.

This idea had roots in a degenerationist model that two French psychiatrists J. Moreau de Tours and Benedict Augustin Morel drew up in the 1850s.[185] Morel saw insanity as a degenerative process, starting with an acquired characteristic such as alcoholism or narcotic addiction, which would then become hereditary, worsening over successive generations to produce imbecility, dementia or sterility.[186] Concern about the degeneration of the 'stock' of the British Empire became a recurrent theme

[183] Porter, The Greatest Benefit to Mankind, p663.
[184] Edward Levinstein, Morbid Craving fro Morphia, 1878.
[185] Morel turned the idea into an 'influential explanatory principle', in his *Treatise on Physical and Moral Degeneration* published in 1857.
[186] Edward Shorter, A History of Psychiatry, John Wiley & Sons, 1997, pp94-95.

amongst the medical profession and the lay public. Hereditary drug addiction was regarded as beyond individual control, a problem that could only be dealt with by specific institutions, the medical profession and the state. Institutions were created, such as *The Society for the Study and Care of Inebriety*, founded in 1884, to study the disease of alcohol and drug addiction; membership was originally confined to the medical profession.

Social and moralistic pressure for prohibition was greatly increased by the early twentieth century. 'Dangerous drugs' were in wide circulation and sometimes taken for social reasons, not least by members of the medical profession itself. Such non-medicinal use of drugs was captured in the contemporary literature of the time. Sherlock Holmes, Sir Arthur Conan Doyle's brilliant detective, was a renowned morphine and cocaine addict, but as his sidekick Doctor Watson warned: 'your brain may… be roused and excited, but it is a pathological and morbid process, which involves increased tissue-change, and may at last leave a permanent weakness. You know too what a black reaction comes upon you'.[187]

Countries such as the USA, Finland, Norway, Iceland, Sweden, Denmark, Canada, New Zealand, Australia and Scotland all experimented with forms of prohibition and, in England, the temperance movement was at it most noticeable and influential between the 1870s and the 1890s. Its focus was on opposition to alcohol intake but the anti drugs movement was

[187] Sir Arthur Conan Doyle, 'The Sign of Four', (London 1890), The Complete Illustrated Sherlock Holmes, London 1986, p54.

in many ways a spin off.[188] 'Narcotics' rather than 'harmless' drugs such as tea, coffee and cocoa were targeted.[189]

Unlike the European powers America had no direct commercial interests in the drug trade, but had employed moralist prohibition at home and had international aspirations.[190] By 1906 the non-medicinal use of drugs was formally regarded as a problem and the USA started to contact governments involved in the drugs trade, with a view to an international conference, eventually held in Shanghai in 1909.

This was the first in a series of conferences to be held before World War One and Shanghai, a city renowned worldwide for excessive opium use, must have appeared a particularly fitting location. Most of the fourteen countries represented had vested commercial interests in the opium trade. The American delegates attended with pre-prepared resolutions, but these were rejected and new ones were drawn up that 'involved few commitments and plenty of diplomatic hot air'. Objectives included 'the gradual suppression of opium smoking', prevention of opium smuggling - and control of the sale, manufacture and distribution of morphine, but nothing more concrete was decided. [191]

A second conference, the International Opium Conference, was held in 1912 at The Hague. This 'determined to bring about the gradual suppression of the abuse of opium, morphine, and cocaine' and to 'confine to medical and legitimate purposes the manufacture, sale, and use' of these

[188] Interestingly the anti alcohol lobby had roots in the change of the British national beverage from beer to tea and coffee in the seventeenth century.
[189] Although there were medical writings on the addiction of caffeine, the consumption of this drug had become social acceptable and this idea remains to the present day.
[190] The United States had developed prohibitionist tendencies throughout the latter half of the nineteenth century and by 1906 this had developed into a determined and strident anti-opium stance.
[191] Mills, Cannabis Britannica, pp152-154.

substances. Signatories were to 'co-operate with one another to prevent the use of these drugs for any other purpose'. [192]

Cannabis was also included at the request of the Italian and South African delegates who argued that it was as dangerous and addictive as opiates.[193] The final Conference Protocol, considered it 'desirable to study the question of Indian hemp from the statistical and scientific point of view, with the object of regulating its abuses, should the necessity thereof be felt, by internal legislation or by an international agreement'.[194]

The conferences were not designed to prohibit medicinal or scientific use of opium, morphine, and cocaine but it was hoped that issuing licences would prevent other less desirable uses. The result was essentially that government monopolies came into being: worldwide trade interests were involved, after all. It was due to her drug trade that Britain was involved in the opium conferences. The American invitation had been hard to refuse. Britain had already reduced trade in opium but not in cannabis: India was still the biggest producer and consumer of cannabis. But as cannabis was not really a player in the global drug trade, without the anti-opium legislation cannabis would perhaps not have been prohibited.

In Britain, medical and governmental pressure weighed against commercial interests and restrictions were considered necessary 'for the purpose of preventing the improper use of the drug'.[195] But Britain was not eager to initiate international drug controls, beyond tighter national restrictions and a government monopoly, which offered the opportunity to

[192] International Opium Convention, Signed at The Hague January 23 1912, London 1912, p10, 13.
[193] Booth, Cannabis A History, p117.
[194] International Opium Convention, 1912, p19.
[195] DDA 1920, The Law Reports – Statutes 1920 10&11 Geo V, London 1920, ch. 46 p300.

increase revenue significantly. In India, the British and the Raj taxed cannabis heavily, while claiming this would reduce usage, although increased smuggling resulted. [196] Noticeably Britain also criticised Germany, a key producer and exporter of morphine, heroine and cocaine. Although the German pharmaceutical industry was eager to use the opium conferences to protect its trade from rivals in Switzerland, the Netherlands, Peru, and Bolivia, Britain insisted that morphine and cocaine be included in the discussions and Germany subsequently refused to participate. The British Delegates W. G Max Müller and William J Collins played lip service to the drug controls, 'in which all civilised nations are interested' and claimed that it was vital to have 'international co-operation in questions affecting the welfare of humanity', but their correspondence was full of comments about other producer nations who have 'come into line' and concern that producer countries would continue to benefit from drug trade.[197]

Although the international opium agreement was signed, it did not come into effect until after World War One. Meanwhile drug smuggling was not adversely affected by the war. Egypt had been subjected to cannabis restrictions for over a century by this time, but it was 'an open question whether the drug laws…profited any one but smugglers and government employees who… built a fortune out of *baksheesh*'. There were said to be 'tremendous profits in hashish', especially in Egypt. because 'the hashish trade became lucrative only after the drug was declared contraband'. 'Practically all the hashish smuggled into Egypt by various underground

[196] International Opium Convention, January 23 1912, H.M.S.O, London, 1912.
[197] Correspondence respecting the Second International Opium Conference, held at The Hague, July 1913.

routes passed through the hands of a powerful syndicate with offices in Alexandria and Cairo', and friends among the chiefs of Customs and the police.[198]

In May 1916 the first restriction on cannabis in England was enacted by the British Army which forbade the sale or supply of cocaine, opium, codeine, heroine, morphine or Indian hemp to a member of the armed forces, unless it was a doctor's written prescription, dated, signed and marked 'not to be repeated'. Wider regulations followed on 28th July 1916 under the Defence of the Realm Act Regulation 40B, which confirmed the restrictions on soldiers, sought to prevent opium being smuggled from China to Britain, and represented the first prohibition of drugs to apply to all people in England. The import of opium and cocaine except under Home Office Licence was also prohibited, although cannabis was not mentioned in the regulation.[199]

The Home Office found support from the press, the police and the magistrates, in fighting for drug restriction. Cases such as the deaths of the Yeoland women from cocaine in 1901 and the actress Billie Carleton in 1918 were big stories in the newspapers, which invoked the image of the white girl degraded by drugs supplied by foreign men.[200]

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[198] Henri De Monfried (collected and written down by Ida Treat), Pearls Arms And Hashish Pages From the Life of a Red Sea Navigator, London, Victor Gollancz, 1930, p165, 203, 166, 186-87, 303. In Monfried's experience the Egyptian Customs never interfered with the activity of the syndicate, occasionally they would arrest a small smuggler or engineer a false arrest in order to look officious.

[199] Berridge, Opium and the People , pp250-253 and Mills, Cannabis Britannica, pp191-192.

[200] Marek Kohn, Dope Girls The Birth of the British Drug Underground, Lawrence and Wishart, London, 1992.
Women were often associated with drugs, either as the ones taking or selling them or as the ones fighting against their use. Women were associated with drug policing, after women were permitted to join the police after the 1916 Police Act, the Metropolitan Police Commissioner announced he would engage women patrols to investigate the sale of cocaine to soldiers by prostitutes. Women police had emerged from voluntary patrols mounted during the war. Women were also associated with drug trials. In the mid nineteenth century, treatment of women with cannabis seemed to be particularly popular.

After the 'Great War', the international control of drugs was re-asserted, with the topic of opium addressed at the Treaty of Versailles. The League of Nations established an Advisory Committee on the Traffic of Opium and other Dangerous Drugs, to 'collate international intelligence on drugs and supervise international conventions on control'. Although the South African government attempted to get the Convention to ban cannabis, the British, protective of their tax revenue in India, vetoed this effort.[201] However, British domestic laws were passed in line with international opinion. The 1920 Dangerous Drug Act, was primarily concerned with opium; 'prohibiting the production, possession, sale or distribution… except by persons licensed or otherwise authorised'.[202] Part III of the 1920 Act also regulated the issue by medical practitioners of prescriptions containing any such drug and the dispensing of any such prescriptions', which confined legal use of the drug to doctors under government control.[203] Subsequent Acts in 1923 and 1925, added more restrictions and more substances. Between 1921 and 1924 there was a consistent Home Office attempt to impose a penal policy and 'the established medical view of addiction and the freedom of the profession itself was to be subordinated to this type of approach'. Although the Ministry of Health expressed concern for the liberty of the medical profession, this was disregarded, as was the 'extensive grass roots opposition in the medical profession, which found expression in parliamentary pressure and opposition of backbench MP's'.[204]

[201] Booth, Cannabis A History, p117.
[202] DDA 1920, The Law Report – Statutes1920 10&11 Geo V, London 1921, ch. 46.
[203] Ibid., p300.
[204] Berridge, Opium and the People, pp264-266.

Although the Union of South Africa sought to include cannabis at the next opium conference as early as November 1923, Egypt was the driving force at the 1924 Conference.[205] Delegate El Guindy argued that 'in small doses, hashish perhaps does not offer much danger, but there is always the risk that once a person begins to take it, he will continue… the illicit use of hashish is the principal cause of most of the cases of insanity occurring in Egypt'.[206] Britain objected on the grounds that the matter was not on the conference's agenda, with support from China, the USA and Turkey. India complained that the drug was vital to its social and religious culture, and of the infeasibility of enforcing prohibition on a plant that grew wild.[207] Both objections were overcome and a general ban of export of cannabis to countries that had prohibited its use was approved.[208]

In the UK, the *BMJ* saw the conference resolutions as a step toward 'the limitation of the production of harmful drugs to the world's medical and scientific requirements' and 'a very valuable advance in the struggle to bring under control the legitimate use of these drugs'.[209] It failed to see that these restrictions of drugs might mark a trend towards medical

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[205] The Union of South Africa sent its letter to the League of Nations on 28th November 1923 but the Advisory Committee did not make an official note of the government's replies to the suggestion until 17th August 1925. http://www.unodc.org/unodc/en/bulletin/bulletin_1952-01-01_4_page007.html, 29/03/05.

[206] Ei-Guindy's statistics from the British director of Egyptian lunatic asylums; John Wainwight, were very probably flawed, the connection between cannabis and lunacy being based largely on his own uncertain diagnosis of what had triggered his patients mental illness.

[207] BMJ, September 13th 1924, vol. 2 London 1924, p480 and International Opium Conferences 1924-25. Report of the Indian Delegation, p59.

[208] Appendix 2, International Opium Conference 1924-25, in H. Bailey, The Anti-Drug Campaign, P. S King and Son, London, 1935. and International Opium Conferences 1924-25, Report of Indian Delegation.
Conferences was signed by Albania, Germany, Belgium, British Empire, Australia, France, Greece, Japan, Luxembourg, Netherlands, Persia, Poland, Portugal and Siam. These members with the addition of Bolivia, Hungary and Spain signed the final act.

[209] BMJ, August 8th 1925, vol. 2, London 1925, p273.

subordination to the state. The addition of cannabis to the list of restricted drugs merited little attention.[210]

When the 1925 Dangerous Drugs Act became operative in 1928, cannabis was restricted along with opium and its derivatives. The Act stipulated that the same restrictions would 'apply to coca leaves, Indian hemp, and resins obtained from Indian hemp and all preparations of which such resins form the base, as it applies to raw opium', including 'any extract or tincture of Indian hemp'.[211]

By then medical concern over cannabis had mounted, and groups began to study it, the Church of England Temperance Society for example opened 'an institution for the study and treatment of alcoholism and drug addiction in men' at Caldecote Hall, near Nuneaton in 1925. Treatment costs of 25 shillings a week suggested a better-off clientele.[212]

Subsequent legislation was limited to a consolidatory Act in 1932 and Pharmacy and Poisons Acts in 1933, but cannabis barely featured, perhaps because its use in Britain was felt to be limited in scope. Not until the 1951 Dangerous Drugs Act Regulations were stricter restrictions on cannabis imposed.

The 1932 and 1935 Annual Reports to the UN, felt that the use and traffic of cannabis 'appears to be confined to Arab and Indian seamen'.

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[210] BMJ, February 2nd 1924, vol. 1 London 1924, p221, BMJ,, "the International Control of Drugs of Addiction", March 28th 1924, vol. 1, p618, BMJ, October 11th,1924, vol. 2, p678 and BMJ, March 28 1925, vol. 1, p618.

[211] DDA 1925, The Law Reports – Statutes 1925 15&16 Geo V, London 1925, ch. 74 p1591-1592.

[212] BMJ, July 18 1925, p152.

Between 1921 and 1938 at least 1 out of every 10 citizens of working age was unemployed, in the worst years it was one out of 5. The average wage of employed male workers was £3 a week. 25 shillings would have been over a third of man's weekly wage, it seems unlikely that during this period of depression any man lucky enough to have a job would spend such a large amount on curing his drug addiction. (E. J. Hobsbawm, Industry and Empire, Pelican, Harmondsworth, 1978, p208, 212, 221.)

'Mainly Orientals… [who] bring in small quantities for the use of compatriots resident in the United Kingdom'. In 1946 it was still thought that 'traffic in Indian Hemp is practically confined to two Negro groups in London'.[213]

However the first real indications of a social use of cannabis became apparent, when the British government described a 'serious increase' in cannabis seizures to the United Nations in 1947.[214] Prosecutions for the importation of opium had fallen but those for hemp rose from 6 in 1944 to 86 in 1950.[215] That year a ship's steward who had concealed cannabis in boxes of chocolates informed the police about a jazz club known as 'Club Eleven'. A police raid found up to 250 black and white men and women, packets of cannabis, cocaine, prepared opium and an empty morphine ampoule. The authorities were forced to admit that cannabis use had spread to the 'indigenous' inhabitants of Britain and in 1951 the first white teenager was prosecuted for possession of cannabis.[216] Meanwhile, it became the norm for newspapers and writers to link an anti-drugs message with an anti-immigration and racist one, thus; 'thousands of these

[213] Annual Reports of the U.K to the U.N. cited in H. B. Spear, 'The Growth of Heroin Addiction in the United Kingdom', British Journal of Addiction, vol. 64, 1969, p249.
[214] Ibid., p249. In America cannabis did however come into popular use in the 1920s. Smoke parlours emerged in New York, where you could obtain cannabis for twenty-five cents. (Norman H. Clark, Deliver Us From Evil An Interpretation of American Prohibition, W. W. Norton and company, New York, 1976, p157.)
[215] The *United Kingdom Annual Report to the United Nations on the Drug Traffic in 1950* cited in Donald McI. Johnson, Indian Hemp A Social Menace, Christopher Johnson, London, 1952, pp49-50, and the same figures can be found in the BMJ in 1952. See Appendix 2 for a full table of figures on drug offences from 1921-1968.
[216] Spear, 'Growth of Heroin Addiction', pp249-254 and Raymond Thorp, Viper: The Confessions Of A Drug Addict, Robert Hale, London, 1956, p71. It seems that cannabis was not widespread as a recreational drug in England until, arguably, increased immigration from the Caribbean brought the drug with it. 'Ganja' was supposedly used in some form by over 70% of Jamaica. (Robson, Forbidden Drugs, p171).

immigrants are pouring into Britain every year. A majority of them smoke hemp. They do not leave their vice at home – they bring it with them'.[217]

By the 1950s it was regarded as an established fact that cannabis had no medicinal value.[218] The 3rd report of the WHO Expert Committee On Drugs Liable To Produce Addiction concluded that 'cannabis preparations are practically obsolete' and that there was 'no justification for the medical use of cannabis preparations'.[219]

It was generally agreed that 'marihuana (*Cannabis sativa*) and hashish (*Cannabis indica*) cannot be regarded in the true medical sense as drugs of addiction, since they do not cause withdrawal symptoms or lead to addiction to other drugs'.[220] Something of a 'smear campaign' was effective in linking cannabis use not only with addiction but also with violent crime and sex offences, echoing similar associations with opium. In the early 1950's the medical press was reporting stories that the 'capacity to produce maniacal states' was demonstrative that cannabis use 'may be a causative factor in major crimes and sexual offences' and that 'prolonged use leads to physical and mental degeneracy'.[221] Medical books such as Clark's Applied Pharmacology, (1955) placed the drug under the title 'Analgesics and Drug Addiction' claiming, that 'Hashish is probably the oldest drug of addiction'.[222] There is no significant evidence that cannabis was physically addictive and while Raymond Thorp's *Viper: The Confessions of a Drug*

[217] Derek Agnew, 'Last Words', in Raymond Thorp, Viper: The Confessions Of A Drug Addict, p191.
[218] J. Bouquet, Cannabis (concluded), Narcotics Bulletin United Nations, 1951, p23.
[219] World Health Organization Technical Reports Series No. 57, Expert Committee On Drugs Liable To Produce Addiction, Third Report, World Health Organization, Palais Des Nations, Geneva, March 1952, p11.
[220] BMJ, July 5 1952, Vol. 2, London 1952, p28.
[221] BMJ, July 5 1952, Vol. 2, London 1952, p28.
[222] Andrew Wilson and H. O. Schild, Clark's Applied Pharmacology, Eighth Edition (1952), London 1955, p277.

Addict is full of anecdotes about people who tried the drug and became addicted it makes only one reference to medical assistance for cannabis addiction, thus leading to the question of whether they believed it was addictive rather than it actually being so.[223] That it was addictive neither sustained medical credibility, nor concerned the Drug Addiction committees or legislation in the 1960s. Although knowledge about the drug was spare, one author commenting, the 'main gap in our armour of protection is the lack of general medical knowledge in this country as to the effects of this drug'.[224]

Medical autonomy was being eroded and in 1951 a consolidatory Dangerous Drugs Act, Part V section 14, allowed a constable or person authorized by Secretary of State to enter the premises of a person dealing in listed drugs (which included cannabis) to inspect books and stocks and a justice on sworn information could issues a search warrant that authorised entry of premises, search and seizure of any drugs or documents.[225] But as cannabis was out of medical favour this law had little impact on the profession and both the Dangerous Drugs Regulations of 1953 and the Therapeutic Substances Act of 1956 had few implications for the legality of cannabis, because it was considered to have no medicinal value.[226] The real concern was still opium and while the 1953 Opium Protocol stipulated that only seven countries could produce opium for export, national legislation brought up the rear by ensuring legal access to the drug was extremely

[223] Raymond Thorp, Viper: The Confessions Of A Drug Addict, p134.
[224] Johnson, Indian Hemp., p51.
[225] W. T. West, Drugs Law, Barry Rose Publishers, Chichester, 1982, p8.
[226] Ibid., p9.

limited.[227] Cannabis was simply caught up in anti-opium legislation and although there were suggestions that it should be used, the conditions created by the drugs laws and the enforcement of them were not conducive to use of, or research into, cannabis.[228]

Not until the 1960s was the inclusion of cannabis among restricted drugs contested. The 'hippie' or youth movement helped to popularise cannabis and there was a surge of public and medical interest in the drug as a medicine. Cannabis came to be consumed en masse 'not only for its euphoric effects but as a symbol of bohemianism and rebellion against an unjust system.'[229] It became the most popular drug among Western youth, who generally believed it to be less harmful that tobacco and alcohol, smoking it as an act of rebellion against those who had banned it.[230] Use of the drug entered all strata of society, notably in artistic circles.[231] The medical press noted that its use 'has spread as a drug of abuse since the end of the Second World War'.[232] On evidence of convictions the illegal use of cannabis had grown dramatically, with 51 cannabis convictions in 1957 compared with 3071 by 1968.[233]

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[227] This international agreement came into force a decade later in 1963. The 7 countries were; Bulgaria, Greece, India, Iran, Turkey, the Former Soviet Union and Yugoslavia.
[228] WHO, Technical Report Series No.116, Expert Committee on Addiction-Producing Drugs, Seventh Report, WHO, Geneva, 1957.
[229] Jock Young cited in John Auld, Marijuana Use and Social Control, Academic Press, London, 1981, pxi.
[230] Eric Hobsbawm, Age of Extremes The Short Twentieth Century 1914-1991, Michael Joseph, London, 1994, p333.
[231] Such as the Beats; Alan Ginsberg, Jack Kerouac; folk musicians like Bob Dylan; and pop musicians such as the Beatles. Ginsberg wrote *Howl and Other Poems* and Kerouac *On The Road*, both very much about cannabis, as are many of Bob Dylan's songs. The Beatles signed the 1967 *Times* advert and later Mike Jagger was found guilty of possession and Paul McCartney was arrested for cannabis possession in Japan in 1980.
[232] BMJ, January 18 1969, London 1969, p133.
[233] W.D.M. Paton and June Crown (ed), Cannabis and its Derivatives Pharmacology and Applied Psychology, Oxford University Press, London, 1972. See also Appendix 2.

The frequency of the World Health Organisation reports indicates a growing international concern.[234] WHO reports continued to condemn cannabis as 'a drug of dependence'. In the UK the Brain Committee confirmed the tendency to view addiction as a mental health matter rather than a criminal one. To cease cannabis use, one needed a psychiatrist not a police officer.[235] Civil authorities were confused because although the 'medical need for cannabis as such no longer exists… the non-medical use of this substance persists and has been increasing in a number of countries'. The WHO 'strongly affirm[ed]… that cannabis is a drug of dependence, producing public health and social problems'. At the same time it was 'generally recognised that more basic data on the acute and chronic effects of cannabis on the individual and society are needed to permit accurate assessment of the degree of hazard to public health'. For example the isolation and synthesising of tetratydrocannabinols would enable basic research into tolerance, dependence potential, abuse liability, and specific acute and chronic toxic effects of cannabis.[236]

Concern over the rise in cannabis consumption was in large part due to the widespread use of cannabis among white middle class youth in the

[234]WHO Technical Report Series No. 116, Expert Committee on Addiction-Producing Drugs, Seventh Report, WHO, Geneva, 1957.
The WHO Expert Committee on addiction forming drugs had its second session in 1950 and its seventh session in October 1956, the concern over additive drugs being great enough to provoke several sessions in just 6 years. In the same time there was just one report on diphtheria and pertussis vaccination, and one report on antibiotics. In fact the only rival in numbers of reports, in that time space, was the nine reports on biological standardization.
[235] Department of Health and Social Security, Treatment and Rehabilitation. Report of the Advisory Council on the misuse of drugs, H.M.S.O., London, 1982, pp9-10. The second Brain Committee held in 1965 was concerned as the Rolleston (1926) and Brian Committees before it with the problem of addictive drugs and how addicts should be treated.
[236] WHO Technical Report Series No. 407, WHO Expert Committee on Drug Dependence,16th Report, WHO, Geneva, 1969, pp19-20.

mid-1960s. Time, money and energy was devoted to eliminating or at least containing its growth.

In 1961 the United Nations Conference for the Adoption of a Single Convention on Narcotic Drugs was held in New York, aiming 'to replace by a single instrument the nine existing international treaties… adapting them to the economic and social changes which had occurred over the years'. The conference attempted to design a universal, but flexible code that would obliterate the need for further conferences. It prohibited 'the flowering or fruiting tops of the Cannabis plant (excluding the seeds and leaves when not accompanied by the tops) from which the resin has not been extracted, by whatever name they may be designated' and 'the separate resin, whether crude or purified, obtained from the Cannabis plant'.[237]

The complete prohibition of cannabis (excepting cultivation of its fibre) was agreed as was the view that legislative and police time should be transferred from opium to cocaine and cannabis.[238] Mr Green of the British delegation commented that as cannabis was not grown or used medicinally in the United Kingdom, the government was not worried about it.[239] European delegates generally accepted that cannabis had no medicinal value, although the French expressed concern that the convention should allow for potential medicinal uses of cannabis to be explored and utilised, recognising its use in indigenous systems and veterinary medicine.[240]

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[237] Single Convention On Narcotic Drugs, 1961, Art. 1, para. 1.
[238] United Nations Conference for the Adoption of a Single Convention on Narcotic Drugs, New York 24 January-25 March 1961, Volume 1: Summary Records of plenary meetings, United Nations, New York, 1964, p1.
[239] Ibid., pp58-62.
[240] Ibid.

When the convention came into force in 1964 national law followed suit with a spate of Dangerous Drug laws. They focused on ensuring that cannabis was penalised as opium had been. For example the law passed in June 1964, an amendment to the 1951 Act, was designed specifically to: 'create certain offences in connection with the drug known as cannabis and to penalize the intentional cultivation of any plant of the genus cannabis'.[241] The 1964 Drugs (Prevention of Misuse) Act penalized possession and restricted importation, exportation, possession, sale, manufacture and distribution of drugs further, making it illegal to possess cannabis (or other scheduled substances) without a prescription either from a doctor, dentist or a vet or a licence for manufacturing or dealing in 'scheduled substances'.[242] It was essentially tightening up previous laws and although government had asserted authority over drug control, this act appeared to confirm the medical professions legitimate right in the process of drug control, an idea that remained under the 1965 Dangerous Drug Act.

It was the 1967 Act that finalised the subordination of the medical profession to the state. Drug addiction was perceived to be rife, drug addicts were frequently prescribed more drugs than they needed and often sold these on to other non-registered addicts, thus the 1967 Act was 'to provide for the control of drug addiction'; prohibiting any medical practitioner from supplying persons addicted to dangerous drugs with the

[241] DDA 1964, The Law Report – Statues 1964 Part 1 12 and 13 Elizabeth II, London 1964. The drug was now officially known as cannabis rather than 'Indian Hemp'.
[242] Drugs (Prevention of Misuse) Act 1964, The Law Report – Statues 1964 12 and 13 Elizabeth II, London 1964, p1117.

substance, except under the authority of the Secretary of State.[243] Because it was not perceived to be a physically addictive substance, no cannabis addicts were registered, nor was cannabis subject to the controls that the more addictive drugs were.

The drug addict was increasingly seen as mentally ill and abnormal, even partially dehumanised by addiction. For the cannabis user the only conceivable solution was complete rehabilitation under the guidance of the psychiatric profession, according to the Home Office.[244] In 1968 a Department of Health and Social Security report concluded that: 'it is widely accepted that dependence on the drug calls for medical treatment… in the case of cannabis where the dependence is purely psychological…[t] he majority of writers are in favour of psychiatric treatment.'[245]

A specific investigation into cannabis, by the Hallucinogens Sub-Committee of the Home Office Advisory Committee on Drug Dependence, headed by Baroness Wootton was also published in 1968. It concluded, as the Indian Hemp Drugs Commission did in 1893-4, that 'there is no evidence that this activity is causing violent crime or aggression, anti-social behaviour, or is producing in otherwise normal people conditions of dependence or psychosis, requiring medical treatment'. Cannabis was not as dangerous as opiates, amphetamines, barbiturates or alcohol, but, 'in the interest of public health it is necessary to maintain restrictions on the availability and use of this drug' as there was still much research to be done

[243] DDA 1965, The Law Report – Statues 1965 Part 1 13 and 14 Elizabeth II, London 1965, ch. 15, p244 and DDA 1967, The Law Report – Statues 1967 15 and 16 Elizabeth II, London 1967, ch. 82, p1907.
[244] The Rehabilitation of Drug Addicts, Report of the Advisory Committee on Drug Dependence, Home Office, London 1968, p17.
[245] Department of Health and Social Security, Amphetamines, Barbiturates, LSD and Cannabis, Their Use and Misuse, (1968) reprint, London, 1970, p48.

on it. In the meantime cannabis and its derivatives should be available on prescription for purposes of medical treatment and research.[246]

The report received a lot of negative attention, especially over the legalisation issue, which Wootton described as a 'hysterical reaction'. She commented that taking serious arguments in favour of legalization into consideration was the duty of the report.[247] Nevertheless the Home Secretary James Callaghan 'believed the Wootton committee had been over-influenced by the existence of the lobby in favour of legalising cannabis' and he confirmed the government's previous position, that 'to reduce the existing penalties for possession, sale, or supply of cannabis would be bound to lead people to think the Government takes a less than serious view of the effects of drug-taking'. He reiterated the position of the United Nations Convention on Narcotic Drugs, which the British government had accepted in 1968, 'that all countries concerned increase their efforts to eradicate the abuse and illicit traffic in cannabis'. Callaghan thought 'the law was unsatisfactory' and 'suggested there should be as single comprehensive code to rationalize and strengthen the Government's powers', so that it could tackle 'the difficult and dangerous problems likely to arise in the years ahead'.[248] This came in shape of the 1971 Misuse of Drugs Acts, which demonstrably the Wootton Report had no influence over, as cannabis was prohibited under its terms.

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[246] The Wootton Report, 'Cannabis', Report by the Advisory Committee on drug Dependence, United Kingdom, Section VI General Conclusions and Recommendations, found at http://www.druglibrary.org/schaffer/library/studies/wootton/sec6.htm.
[247] Robson, Forbidden Drugs, p71, and BMJ, 5 April 1969, p61.
[248] BMJ, 1 February 1969, p326 and the Single Convention on Narcotic Drugs, 1961, http://www.inch.org/e/conv/1961/.

Between the 1920s and the 1960s there had been no significant contestation of the assumption cannabis was a 'dangerous drug', the 1967 law changed this and provoked a reaction from the medical profession. An amendment to the Misuse of Drugs Bill (1971) suggesting that cannabis be put into a separate category, with lighter penalties for use was rejected. Lord Brock described the 'whole of the drug-taking business [as] bad and miserable', a 'pernicious and foul disease [that] had attacked the country and was spreading'.[249] In 1972 Sir Harry Greenfield commented that: 'the spread of drug abuse has continued, to the extent that it is becoming more and more a world phenomenon, giving rise to deepening concern'.[250]

Others were 'doubtful whether cannabis had not passed the point of no return. It was now in too general use, present in to great a quantity, and too easy to make', it was doubted whether it could be controlled. Some thought it was not a drug of addiction and 'taken in moderation it did not reduce efficiency'.[251]

In 1971 the law made 'new provision with respect to dangerous or otherwise harmful drugs and related matters', drugs 'which are being or appear…likely to be misused and of which the misuse is having or appears… capable of having harmful effects sufficient to constitute a social problem', were targeted.[252] The Act, which came into practice on 1st July 1973, forbade the use of the drug and then made exceptions for medicinal uses, in contrast to previous drugs laws, which had made provisions for medicinal

[249] BMJ, 13 February 1971, p413.
[250] Sir Harry Greenfield, cited in, Paton and Crown (ed), Cannabis and its Derivatives Pharmacology and Applied Psychology, pxi.
[251] Mr R. T. Paget, BMJ, 25 July 1970, p232.
[252]Department of Health and Social Security, Treatment and Rehabilitation. Report of the Advisory Council on the misuse of drugs, H.M.S.O., London, 1982 and The Misuse of Drugs Act 1971, in The Law Reports – Statues 1971 Part 1 19 and 20 Elizabeth II, London, 1971, ch.38, p639.

use and then restricted other usage. The Government argued prohibition was 'in the public interest' as 'improper use of drugs' was a 'social problem'.[253]

Provision was supposedly made for the medical use of cannabis but it was put under Schedule IV: for substances with virtually no therapeutic value. This list included hallucinogenic substances; LSD (acid), Mescaline (peyote) and Psilocin (magic mushrooms).[254] Doctors were still able to administer and prescribe cannabis until 1973, when under the terms of the 1971 Misuse of Drugs Act the licence that allowed medicinal use was not renewed. The Medicine Control Agency said there was 'insufficient evidence' to support medical use of the tincture.[255] Thus apart from sporadic experiments, the legal medical usage of cannabis in England entirely ceased until 1995.[256]

Perhaps the British government was 'obliged to be seen to be responding to a growing drugs menace' and sensed that 'capital was to be made out of scapegoat'.[257] But this created a problem, in that the criminality associated with drugs now became a reality. State legislation did not prevent cannabis users but was successful in creating criminals. Howard Becker warned that 'society, by labelling the cannabis user a criminal, can initiate a self-fulfilling prophecy'.[258] A legal crackdown on users and a

[253] The Misuse of Drugs Act 1971, in The Law Reports , p644, p653, p247.
[254] The Misuse of Drugs Regulations 1973 classified controlled drugs in four schedules, which related to different levels of controls.
[255] Cannabis The Scientific and Medical Evidence, Report by the Select Committee on Science and Technology, House of Lords Session 1997-98, London, 1998, p8.
[256] As seen above, dronabinol/Marinol (synthetic THC) was rescheduled in 1995 and administered to a few patients on a 'name patient' basis.
[257] Porter, The Greatest Benefit to Mankind, p666.
[258] Howard Becker in *Marijuana Papers* edited by David Solomon paraphrased in The British Medical Journal, 6 June 1970, p590.

tirade of anti-cannabis propaganda duly followed, with one drug squad officer echoing Ei Guindy's warnings of 1924 almost fifty years on, that taking cannabis 'in stronger doses brings on a sort of delirium, which can take a violent form in a person of violent character'. Commenting that 'the person would be by this time addicted. He would suffer physically and mentally and would eventually lose his sanity. It is well to realize that cannabis contains a poisonous substance with no known antidote'.[259]

It is now generally agreed that cannabis is not addictive. It is thought to produce a state of tolerance and psychological dependence in the taker, but not physical dependence.[260] Ironically far from being a physically addictive substance, as noted in chapter two, cannabis was actually used in the nineteenth century and has been proved in that usefulness in the twentieth century as a withdrawal treatment for alcohol and opioid addiction.[261]

Since 1995 in response to illegal selective breeding of cannabis, concern that the increased THC content may lead to mental health problems, such as psychosis and schizophrenia has been debated.[262] Despite concerns, in October 2001, a private members bill to legalise cannabis was

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[259] Detective Constable Jack Beck quoted in the *Bedfordshire Times* on 29th January 1971 cited in John Auld, Marijuana Use and Social Control, Academic Press, London, 1981, p3. His words were basically a repeat of Ei-Guindy's speech in 1924: 'Chronic hashishism is extremely serious, since hashish is a toxic substance, a poison against which no effective antidote is known'.

[260] Volans and Wiseman, Drugs Handbook, p18.

[261] For example Drs S. Allentuck and K. M. Bowman found there were no harmful effects after administering cannabis and proposed its utilization to alleviate the effects of weaning opium and morphine addicts, in the *American Journal of Psychiatry*, 99, 1942, p248, noted in J. Bouquet, Cannabis (concluded), UN Narcotics Bulletin, 1951, p9.

[262] A. S. Wylie, R. T A. Scott and S. J. Burnett, 'Psychosis due to "skunk", BMJ, 8th July 1995, p125. Andrew J McBride and Huw Thomas, 'Psychosis is also common in users of "normal" cannabis', BMJ, 30th September 1995, p875. Nigel Hawkes, 'Cannabis can slow narrowing of arteries', The Times, 7th April 2005, www.timesonline.co.uk, accessed 07/04/05.

put before the Commons, although it failed to be made legislation, cannabis was reclassified in January 2004, from a Class B to a Class C drug.[263]

The Success of Prohibition

In 1997-98 it was estimated that 25% of the United Kingdom population had used illegal drugs at some point in their lives, 10% in the previous year and 5% in the last month. Some 21% of the population had tried cannabis and 5% were using it every month. Cannabis was responsible for 80% of all reported drug use. In the previous ten years there was a 97% increase in cannabis seizures made by customs.[264] Between 1945 and 2002 there were around 1.23 million convictions for cannabis, the majority in the last ten years.[265] These figures speak for themselves: the huge proportion of the population using drugs, especially cannabis, show that cannabis use is not something that can be stamped out with legislation or anti-drug propaganda.

Since the establishment of prohibition in the 1970s, calls for the legalisation of cannabis have been numerous, but, as yet ineffective. The revaluation of medicinal cannabis, due to dramatically increased non-medicinal use in the 1960s and 1970s, has resulted in a slow and limited reintroduction of medical cannabis, and, the prospect of its wider acceptance officially in the community.

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[263] Reclassification of cannabis was first recommended in 1979. Class C, is the least harmful regulated drugs and includes prescription drugs, anti-depressants and steroids. Class A is the most harmful (morphine, heroin and cocaine); B is an intermediate class (amphetamines and barbiturates).
[264] Report by the Comptoller and Auditor General, HM Customs and Excise The Prevention of Drug Smuggling. Session 1997-98, National Audit Office, 15 July 1998.
[265] Independent drug survey, http://www.idmu.co.uk/taxukdm.htm, accessed 12.05.05.

Despite condemnations of reformist policies towards cannabis from the International Narcotics Control Board (INCB), globally the US 'anti-rational' approach to cannabis is waning. Several countries have rethought their policies on cannabis. The Netherlands pioneered decriminalised use of cannabis in 1976. Since 1999 Canada has allowed some medicinal use of the drug. Several states in Australia have urged the government to allow medicinal use. Switzerland is considering decriminalizing use, and in November 2001, representatives from 10 European countries met to exchange information about medicinal cannabis, all indicating governmental interest in or support for clinical trials.[266]

Under the terms of the 1961 Single Convention on Narcotic Drugs, medical and scientific uses are allowed, although these terms were not defined, it is reasonably assumed that once clinically proven to be a valuable medicine cannabis will once again be utilized.

[266] Alice Mead, 'International control of cannabis: changing attitudes', and Brian A Whittle and Geoffrey W Guy, 'Development of cannabis-based medicines: risk, benefit and serendipity', in Guy, Whittle and Robson (ed), The Medicinal Uses of Cannabis and Cannabinoids, Pharmaceutical Press, London, 2004.

Conclusion

Cannabis having been a therapeutic substance in numerous different systems of medicine for several millennia was readopted into western medicine in the early nineteenth century by men such as de Sacy, O'Shaugnessy and Moreau. The best medical minds quickly took up the drug and experimented with it to ascertain its therapeutic potential. By the end of the nineteenth century it was a well known and well used remedy but the drug was at the peak of its success and from there its reputation disintegrated as it became associated with insanity and the addictive opium, morphine and heroin and its use declined rapidly in the face of new synthetic drugs.

Slow pharmacological developments in isolating and synthesizing cannabinoids precipitated its medicinal decline by the early twentieth century, but it was subsequent legislation that ensured cannabis was not medically utilized for eighty years. Despite some advances, such as the isolation of cannabinol in the 1930s, THC in the 1940s and suggestions for anti-bacterial, anti-spasmodic and anti-epileptic uses, the western led global community ignored and even reviled the drug.

The end of medical use coincided with the beginnings of social use but it was not until the 1950s and 1960s that the social or recreational use of cannabis exploded and cannabis began its rise to becoming the most widely used illegal drug. This sheer quantity of people using cannabis has demonstrated the failure of the prohibition and figures from the police, law

courts, and customs bludgeon that point home. The 1925 decision to restrict cannabis may not have appeared significant at the time, as by then it had fallen out of medical usage. Despite the limited research over the ensuing decades, ironically cannabis became recognised as a useful medical agent about the time that the 1971 Misuse of Drugs Act prohibited it. Had this not been the case, then the medical use of it may have had a very different history. Legislation has shown itself to be a hindrance to millions of patients globally.

'The War on Drugs' as yet continues, with America leading the way, but it will need to redefine the drugs it penalises if it is to succeed, and it would seem to be fighting a losing battle as even harsh penalties will not prevent the use of drugs.[267] While cannabis has been associated for over a century with mental illness, there is as yet no firm scientific evidence to prove it and although long term excessive use may be harmful, moderate use of it as a medicine is unlikely to be more dangerous than currently used drugs such as aspirin. The movement to legalise therapeutic use now has many significant supporters, among them well-respected medical people such as Norcutt and Guy. It is possible that governments will take their cue from widespread demands, rather than trying to enforce the unenforceable.[268]

While cannabis is not a panacea, it can and presumably will, be used to alleviate the suffering of MS, MD, cancer, AIDS and glaucoma patients,

[267] For example in some states in America, users of cannabis face life sentences in prison. In other countries the death penalty.

[268] While the drug appears relatively harmless, in moderate amounts, it is still undecided as to whether it triggers latent psychosis and other mental illnesses or is the cause of them. Certainly for the majority of people, moderate use of cannabis does not promote significant problems but this is certainly something that needs to be monitored if or when medicinal cannabis becomes available to the public. (I refer to oral use of the drug rather than smoking, as smoke is doubtless a carcinogenic.)

because it is an anti-inflammatory, an anodyne and an anti-spasmodic drug of no little value. It is interesting to note that cannabis was primarily used when there was little pharmacological evidence about how and why it worked. Despite this, it now appears that those who utilised cannabis in the nineteenth century and noticed its value were right, and their utilisation of botanical medicines, used since antiquity, such as opium and cannabis were advanced because these plants mirror systems within the body to control inflammation and pain.[269] The twentieth century move away from plant-based medicines to single synthetic molecules may not have been so wise, but the pharmacological revolution is still in it infancy, and if it is possible to develop a synthetic whole cannabis extract, the problems of unreliability and variability will be solved and the drug may well come into its own, something only time and perhaps history will tell.

[269] Whittle and Guy, 'Development of cannabis-based medicines: risk, benefit and serendipity', p463.

Appendix I

Uses of cannabis in 1899

Albuminuria	Hiccough
Ascites	Hydrophobia
Asthma	Hysteria
Irritable bladder	Impotence
Bronchitis	Inflammation
Chordee	Insomnia
Chorea	Labour
Climateric disorders	Locomotor ataxia
Coughs	Mania
Cystitis	Melancholia
Delirium	Menorrhagia and metrorrhagia
Delirium tremens	Migraine
Diarrhoea	Nephritis, acute
Dropsy	Neuralgia
Dysmenorrhoea	Opium habit
Dyspepsia	Ovarian neuralgia
Dysuria	Ovaritis
Epilepsy	Pain
Exophthalmos	Paralysis agitans
Gastralgia	Phthisis (tuberculosis)
Gastric ulcer	Sea sickness
Gonorrhoea	Tetanus
Headache	Tic douloureux
Haematuria	Trismus
Hemicrania (migraine)	Uterine cancer [270]

[270] M. H. Beers and R Berkow, Merck's 1899 Manual of the Materia Medica, New York, Merck and Co, 1899, pp99-225.

Appendix II

Drug Offences*

Year	Opium	Cannabis	Manufactured drugs	Year	Opium	Cannabis	Manufactured drugs
1921	184	Not controlled in	67	1945	206	4	20
1922	94		110	1946	65	11	27
1923	167		128	1947	76	46	65
1924	48		50	1948	78	51	48
1925	35		33	1949	52	60	56
1926	50		45	1950	41	86	42
1927	27		33	1951	64	132	47
1928	41		21	1952	62	98	48
1929	39	3	31	1553	47	88	44
1930	16	1	48	1954	28	144	47
1931	26	3	40	1955	17	115	37
1932	37	6	43	1956	12	103	37
1933	17	6	32	1957	9	51	30
1934	39	14	33	1958	8	99	41
1935	13	15	33	1959	18	185	26
1936	17	8	36	1960	15	235	28
1937	9	3	27	1961	15	288	61
1938	6	18	35	1962	16	588	71
1939	13	1	36	1963	20	663	63
1940	14	3	37	1964	14	544	101
1941	201	-	25	1965	13	626	128
1942	199	-	27	1966	36	1119	242
1943	147	2	40	1967	58	2393	573
1944	256	6	32	1968	73	3071	1099

*From 1921-1953 inclusive figures relate to prosecutions
From 1954, figures relate to convictions [271]

Most of these prosecutions were made under the jurisdiction of Scotland Yard within the Metropolitan area of London. Although cannabis use must have been more widespread than London there are no figures.

The number of heroin addicts was also increasing, the number therapeutically addicted was falling while those non-therapeutically addicted was increasing. For example 1958 62 heroin addicts 19 therapeutically addicted 43 not, by 1968 2240 addicts, 8 therapeutically, 2232 not.[272] The medical profession was thus absolved from any

[271] Table of drug offences, H. B. Spear, 'The Growth of Heroin Addiction in the United Kingdom', British Journal of Addiction, vol. 64, p246.

responsibility in the creation of addicts, while claiming the right to treat the apparently increasing number of addicts.[273]

[273] Spear, Br. J. Add, 1969, p250.

Appendix III

Some Example of Prohibition Failure

Attempts to control substances have happened throughout history, for example in 1378 Emir Soudoun Sheikouni attempted to end cannabis consumption by destroying all the plants and imprisoning all hemp-eaters in Joneima. He ordered that those convicted of eating the plant should have their teeth pulled out. By 1393 it is recorded that use of the plant had increased.[274]

In Egypt in 1800 the French prohibited the use of cannabis, but it did not reduce consumption; the drug was smuggled in from Greece. Egypt has kept it prohibition, on cannabis, almost consistently since then, and consumption has risen not fallen.[275]

In America in the 1920s the Supreme Court ruled that it was medically illegitimate to supply prescriptions to addicts, and overnight previous law abiding addicts became criminals. By 1923, 75 percent of women in federal penitentiaries were there as a direct result of the Harrison Act.[276] Regardless of this early failure America steamed ahead in pioneering drug prohibition. Prohibition and restrictions were taken up first by the League of Nations, latter the United Nations and by a significant number of nation states.

Finally a amusing poem originally written about alcohol prohibition in America, perhaps appropriate and applicable to all prohibition experience:

Prohibition is an awful flop,

We like it.

It can't stop what its meant to stop,

We like it.

It's left a trail of graft and slime,

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[274] Louis Lewin, Phantastica, pp89-90 and Charles Baudelaire, On Wine and Hashish, first published 1851, translated by Andrew Brown, Hesperus Press, London, 2002, p26.

[275] See Reports from Her Majesty's Representatives in Egypt, Greece and Turkey on Regulations Affecting the Importation and Sale of Hashish, PP LXXXIX, pp279-375 and H. Monfried, Pearls Arms and Hashish and Hashish: A Smugglers Tale.

[276] Norman H. Clark, Deliver Us From Evil An Interpretation of American Prohibition, W. W. Norton and Company, New York, 1976, p223, p157.

It don't prohibit worth a dime,

It's filled our land with vice and crime,

Nevertheless, we're for it.[277]

[277] Poem published originally in World, New York, 1931, cited in Michael Woodiwiss, Organised Crime, USA: Changing Perceptions from Prohibition to the Present Day, British Association for American Studies, Brighton, 1990, p11.

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