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# REGULATED PRODUCTION, SALE AND USE OF CANNABIS FOR MEDICINAL AND RECREATIONAL PURPOSES PROPOSAL

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## ABSTRACT

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Cannabis has been used for tens of thousands of years across the globe for its medicinal and recreational uses. This is a proposal to form a policy that would permit government regulated, production, sale and use of Cannabis for medicinal and recreational use legal in the United Kingdom. The proposal will consist of what cannabis is, the history, origin, culture and beliefs that surround the plant. Comparing on how it's been viewed from a sacred herbal healer to a gateway drug inducing madness murder and rape, back to being an herbal medicine in a more advanced and innovative manner shown by the growth in medicinal legislation around the world in the last 5 years.

I will then go on to outline the practicalities of such a policy reform such as; potential dangers and benefits of legalising cannabis, who in our country consumes cannabis. As we know it's not a perfect drug but over the last decade or so through science we have learnt to appreciate and grow our knowledge about this plant. Realising that if legalised and regulated in the appropriate manner it could help society rather than hurt it. This document will also entail a proposed medical bill, the economic and social benefits and implications for Great Britain if such a policy reform was to take place.

To bring forward a holistic approach to this, I will also comment on how to end black market trade of cannabis, why the war on drugs is a lost and a battle that is greatly out of touch. For a substance that is substantially safer than alcohol with fruitful number of uses

From this I aim to highlight that cannabis is not at all harmful, if individuals possess knowledge on its potential dangers, doses, and have a self-awareness of their mental health and to some extent their family's mental health. Along with this heavy government regulations and a regulation authority, would help utilise the many benefits of cannabis, for our country financially and medicinally.

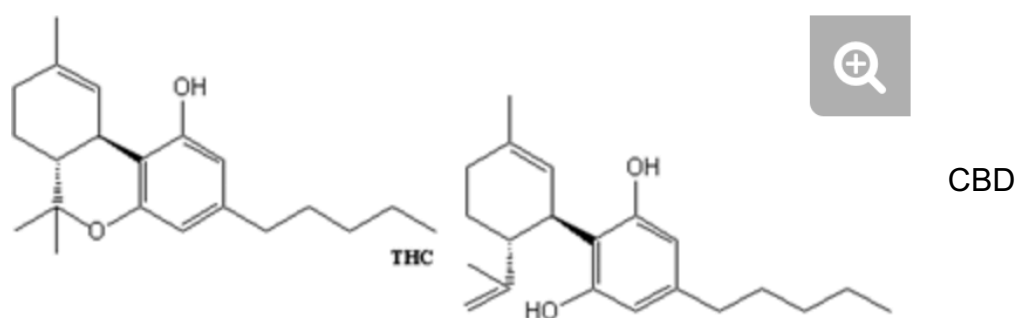
## 1.INTRODUCTION – WHAT IS CANNABIS?

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Cannabis is a flowering plant part of the Cannabaceae family, the cannabis plant has 3 species, Cannabis indica, Cannabis Sativa and a wild form Cannabis Ruderalis. A budded and bushy plant producing herbs.

This plant also has one other important species, which has historically and could currently form the basis of its own industry for clothing, biofuel and a variety of other materials. The herbaceous plant can also be harvested as hemp; it has been for thousands of years. Hemp is a useful plant, which produces woody stems yielding a fiber that has been an industry for 10,000's of years and industry that was used by past rulers of this country.

Consisting of two main active ingredients; (THC) delta-9-tetrahydrocannabinol and (CBD) Cannabidiol.



Both have various medicinal uses; CBD is used more commonly in medicines and gives of a relaxing feeling. Although being the main psychoactive component, THC does accommodate for a variety of diseases, Multiple Sclerosis being one of them, and neuropathic pain. Cannabis with higher amounts of this component are normally used for recreational purposes. These components can be found in the resin, leaf or bud produced by the plant.

Furthermore, in our bodies, we possess a system that naturally synthesizes cannabinoids and the active ingredients inside it bind to its specific receptors in our body. The system in which this happens is called the the endogenous cannabinoid system, named after the plant that led to its discovery, is perhaps the most important physiologic system involved in establishing and maintaining human health. Endocannabinoids and their receptors are found throughout the body: in the brain, organs, connective tissues, glands, and immune cells. In each tissue, the cannabinoid system performs different tasks, but the goal is always the same: homeostasis, the maintenance of a stable internal environment despite fluctuations in the external environment. (Dr Sulak 2017). Dr Sulak believes that that small, regular doses of cannabis might act as a tonic to our most central physiologic healing system.

Along with recreational and medicinal use, cannabis currently does and has historically always had a strong entheogenic purpose. From Hindu's and Christian denomination of Rastafarianism using it for meditative and ceremonial purposes. If the individual is well informed, consuming cannabis for this purpose is a religious freedom where individuals should not be prosecuted for this, as they bring no harm to anyone or themselves.

Over the last 10 years the world has made great leaps in terms of educating ourselves more about cannabis and its beneficiary features both medically and economically. Medically, as we have come forward in science to attain the knowledge that CBD in cannabis can help severe illness like And new innovative ways of ingesting cannabis have been found and have been made suitable for people of all walks of life use and benefit from cannabis if they require it. From elderly people to young kids. Apart from smoking the herb many ways such as sativex a mouth spray for individuals with severe pain related illnesses and CBD oil sold in our country also. Cannabis base medicine (CBM) such as these have helped eliminate the demonizing stigma that cannabis carries with it and have helped it to be accepted socially. From being viewed as a horrific drug that makes you want to kill and rape, to inducing a summer of love around a caring and giving culture, to a war on drugs where millions of people have been incarcerated because of nonviolent drug offences. Fast forward to present day and its public opinion has gone back to being a multifunctional healer being used legally in a growing number of countries around the world. Through history our views of cannabis have changed.

Which Brings me onto my next point. The History of Cannabis.

## 2. HISTORY OF CANNABIS

Historically, the illicit drug trade was never a global phenomenon but an indigenous and cultural practice used in regions like Ancient China, Europe, the Persian empire. This British also exploited the benefits of the cannabis plant species hemp in Tudor times aiding in the naval success this country had at that time.

Below there is a historical timeline of cannabis and it displays how we have gone full circle with our perceptions and knowledge of this plant

### 2700 BC CHINESE EMPEROR SHEN NUNG SAID TO HAVE DISCOVERED HEALING PROPERTIES OF CANNABIS



FIGURE 1 EMPEROR SHEN NUNG THE FATHER OF CHINESE MEDICINE

"Per Chinese legend, the emperor Shen Nung [considered the Father of Chinese medicine] discovered marijuana's healing properties as well as those of two other mainstays of Chinese herbal medicine, ginseng and ephedra."(Mack and Joy, 2001)

Archaeologists excavating the Yanghai Tombs in northwest China in the early 2000s identified one grave as that of a shaman buried 2,700 years ago. In the grave was a stash of well-preserved *C. sativa*. Later analysis of the plant remains confirmed the presence of the psychoactive tetrahydrocannabinol (THC). "This is the oldest physical evidence of pharmacologically active cannabis,"

"The Chinese physician Hua T'o regularly anaesthetized his patients with a mixture of "hemp-boiling-compound" in wine before performing abdominal surgery." (Pain S, 2015)

(Pain S, 2015)

### EUROPEAN INTEREST: ~800

In Western Europe, remedies were based on hemp, which has more non-psychoactive, but biologically useful, Cannabidiol and less THC than Asian cannabis. Archaeological finds suggest that hemp was grown in Roman Britain for grain and fibre, but it was probably the later Saxons who used it as a medicine. The ninth-century medical text the *Old English Herbarium* advised pounded hemp for dressing wounds and a liquid concoction “for pain of the innards”. (Pain, s 2015)

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### HEMP IN THE NEW WORLD: 1545

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Spanish colonists introduced cannabis to Chile, initially growing it for fibre. In 1611, English settlers took hemp to Jamestown, Virginia. Hemp went on to become an important crop in North America. (Pain, s 2015).

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1839

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Modern medical interest in cannabis is traced to Irish physician William Brooke O'Shaughnessy. While in India, he saw how people used Indian hemp as a narcotic and medicine. Impressed, he tested it on animals before beginning trials in patients. O'Shaughnessy made extracts of cannabis resin and either rolled it into pills or dissolved it in alcohol to produce a tincture to treat conditions such as cholera, infantile convulsions and even tetanus. “O'Shaughnessy was of critical importance in introducing Indian hemp to British and North American physicians.”( Pain, S)

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### QUEEN VICTORIA

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“British chemists isolated cannabinal, the first cannabinoid identified, but their discovery came just as medical cannabis was falling out of favor. Advances in chemistry made it possible to isolate and synthesize the active ingredients of medicinal plants, and tinctures gave way to drugs of guaranteed consistency” (Pain S, 2015). This time in history was when the hypodermic syringe was invented it “accelerated the move to water-soluble drugs that could be injected for faster pain relief.” (Pain S, 2015)

Queen Victoria had experienced this then innovative medicine. “Cannabis was in fact promoted by the Queen's physician for dysmenorrhea.” ( Berridge, 2010)  
Dysmenorrhea refers to painful menstrual cramps.

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## CANNABIS TERROR: 1925

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FIGURE 2 (PAIN S, 2015)

“An international treaty brokered by the League of Nations to control the opium trade was extended at the last minute to include cannabis. Signatories were required to control the trade in cannabis and prevent trafficking. The 1961 United Nations Single Convention on Narcotic Drugs clamped down still further, and a decade later the UN Convention on Psychotropic Substances made it all but impossible to carry out research on cannabis; only authorized people in supervised laboratories could work with it.” (Pain S, 2015)

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## GROUND BREAKING RESEARCH: 1964

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In Israel, chemist Raphael Mechoulam isolated THC, kick-starting research into the plant's pharmacology “The focus of research in the UK was in exploring the possible harmful effects of recreational cannabis,” says neuropharmacologist Roger Pertwee of the University of Aberdeen, UK. “But gradually people got interested in the potential medical use of synthetic cannabis-like chemicals.” Research led to nabilone and dronabinol, synthetic versions of THC, which were approved in the 1980s to suppress nausea during chemotherapy. (Pain S, 2015)

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## THE CANNABINOIDS WITHIN: 1988

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Researchers discovered a new receptor in the brain, named CB<sub>1</sub>, through which THC exerts its psychoactive effects. “That led us to wonder if we have substances in our bodies that target this receptor,” says Pertwee. The first of these so-called endocannabinoids, anandamide, was found in 1992. More followed, along with a second receptor (CB<sub>2</sub>) in 1993. “The discovery that everyone has cannabinoids in their bodies led to a change in attitude,” says Pertwee. “It made our research much more respectable. (Pain S, 2015)

## CALIFORNIA DREAMIN': 1996

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California passed Proposition 215 (the Compassionate Use Act), which allowed the sale and medical use of cannabis for patients with HIV/AIDS, cancer and other serious and painful diseases. (Pain S, 2015)

## FEAR BEING REPLACED BY UNDERSTANDING 1998

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By the 1990s, growing numbers of people with conditions that failed to respond to prescription drugs were turning to cannabis. “We did a survey in the UK and the US, asking people with multiple sclerosis how they thought it helped them,” says Pertwee. Based partly on the findings, an inquiry by the UK House of Lords concluded in 1998 that there was strong evidence that cannabis had a medical value, and in 2000 the government supported a trial of cannabis in multiple sclerosis. (Pain, S, 2015)

## GW PHARMACEUTICALS 2005

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### GW Pharmaceuticals

The first cannabis-based product Sativex (nabiximols) — a mouth spray of whole-cannabis extract, containing equal amounts of THC and cannabidiol — was given its first approval in Canada. The spray was developed by GW Pharmaceuticals, which was set up by Geoffrey Guy and Brian Whittle following the UK report. Today, nabiximols is approved in 27 countries to treat spasticity in patients with multiple sclerosis. (Pain, S 2015)

## A NEW DIRECTION

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Since Cannabis came back into fashion in the 90's with California being one of the first cities to legalize it for medicinal purposes. Just over two and a half decades later and the world is a different place in terms of cannabis legislation. Countries such as Uruguay and Portugal both made changes to their cannabis legislation, Portugal decriminalizing it in 2001. And Uruguay becoming one of the first countries in the world make it legal to cultivate, sell and consume cannabis. With such a landmark decision over the last years more countries have begun to follow suit. Although each country differs in regulation and tolerance to contraventions in such regulations. Nations where you cannot get criminally persecuted for cannabis unless in violation of the of legislation include:

- “Colombia: Small amounts of up to 22 grams are OK for personal consumption. However, selling it remains illegal. You can grow up to 20 plants for personal use.
- Costa Rica: It's a bit of a grey area. Cannabis is illegal but there's widespread smoking throughout the country. Police officers do not arrest people carrying enough for personal consumption, yet no amount has been outlined as a minimum for possession.
- Czech republic: Possession of up to 15 grams for personal use or growing up to five plants is a police caution. Medical use of the drug on prescription has been legal since April 2013.
- Ecuador: Having a small stash of under 10 grams for personal use is legal.” (Brant and BBC, 2014)

Many great Nations of the world have or are planting the seeds in preparation of new legislation to capitalize of the cannabis market. An industry that has proven great economically in the countries it has taken suit in. For instance, in Denver Colorado USA.

A trade that is undeniably multi-functional able to fit in many different sectors from healthcare to tourism, a substance safer than alcohol and one that has been used as a medicinally and recreationally throughout history. Along with this the culture in each country differs, which brings me onto my succeeding point. Cannabis culture has reached a global stage that has its own global holiday known as 4/20 and a diverse growing population.

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### 3.CANNABIS CULTURE WORLDWIDE/MYTHS OF CANNABIS AND THEIR ORIGIN

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#### GREAT BRITAIN

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From the Tudor times our country hempen ropes were fundamental to the success of the English Navy, King Henry VIII in 1533 mandated that landowners grown allotments of hemp; Elizabeth I later increased those quotas, and the penalties for failing to meet them.(Deitch 2003) As fibre became more available and the growing of hemp became more widespread, people began to find many other uses for the crop. It became a very important part of the British economy. Eventually, demand had expanded to the point that the demand for more fibre was part of the driving force to colonize new lands. Thanks to its hardiness and ease of cultivation, it became an ideal crop to grow in the new British colonies. Moreover, the naval ships built to protect the new colonies and those built to bring the hemp back, also increased demand, as every two years or so much of their two hundred tonnes of ropes and sail cloth had to be renewed. (Deitch 2003)

Great Britain is nation that has profited in the past from taxing cannabis and hemp in their old Indian colonies, Hemp had a historical significance and was poised as an efficient and profitable business for the British.

After the 1920's when it was illegalized, the cannabis scene blew up in jazz clubs in central London.

This ensued the summer of love, a culture around caring, giving, peace and loving the environment. A very tranquil and peaceful culture the only thing was missing was people's self-awareness and extensive knowledge of cannabis which would've let to a lot more safe and responsible consumption of it.

#### INDIA

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India has a long culture of cannabis spanning back 10,000's of years and linking with the country's main religion. Cannabis has been used in Ayurveda and Indian medicine for at least three thousand years to treat a variety of health conditions, including nausea and wasting syndromes. It is also prescribed for general health and longevity. To this day body builders in India use cannabis as a part of their training regimen to gain muscle mass, promote digestion, and build strength. (Lorenzen, 1997)

"The spiritual aspects of cannabis are considered so profound in South Asia that many religious groups including Buddhists, Naths, Shaivites and Goddess Worshippers have incorporated it into meditation practices, to stop the mind and enter into a state of profound stillness, also called Samadhi." (Lorenzen, 1997). To reach a higher consciousness for entheogenic and meditative purposes.



Cannabis holds a prominent place among the Tantric in India, Nepal, Sikkim, and Tibet to this day. In the Mahayana tradition of Buddhism, it is said that Buddha subsisted for six years on nothing but hemp seeds. (Ratsch. C, 2001).

Various spiritual texts, including the Buddhist Tara Tantra, list cannabis as an important aid to meditation and spiritual practice. In the Tantric Buddhism of the Himalayas and Northern India, cannabis still plays a significant role in meditative rituals to facilitate deep meditation and heighten awareness.

Cannabis is even mentioned in the Indian creation myth, where it is named as one of the five nectars of the gods and designated a “Reliever of Suffering.” In the original myth, the gods churn the Ocean of Milk in search of Amrita, the elixir of eternal life. One of the resulting nectars was cannabis. In the Vedas cannabis is referred to as a “source of happiness.” (Towu M 1981)

More naturally found to be growing wildly in the India’s Himalayan regions and other “ethnic region where the plant is a part of the local culture. In this paper the indigenous uses and ethnobotany of its seed, seed oil, stems, fibre, leaves, inflorescences and resin along with various recipes of seeds are described.”(Shah, 2004)

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## CHINA

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Currently Cannabis is completely illegal in China but even dating back before India as seen in the timeline before this section. The first traces of cannabis do occur in ancient china. “Almost 5,000 years ago, Chinese physicians recommended a tea made from cannabis leaves to treat a wide variety of conditions including gout and malaria. Today, as the global market for marijuana experiences an unprecedented boom after being widely legalized.” (Johnson 2014). From traces back to 2700 BC to 570 CE, cannabis was used in this part of the world cannabis was used for food, clothing, other materials such as rope.

The Chinese believed that the legendary Shen Nung first taught the cultivation of hemp. “Shen Nung is credited with developing the sciences of medicine from the curative power of plants. So highly regarded was Shen Nung that he was deified and today he is regarded as the Father of Chinese medicine.” (Towu. M 1981)

“A Chinese Taoist priest wrote in the fifth century B.C. that cannabis was used in combination with Ginseng to set forward time to reveal future events. It is recorded that the Taoists recommended the addition of cannabis to their incense burners in the 1st century A.D. and that the effects thus produced were highly regarded as a means of achieving immortality.” (Towu. M 1981)

In the early Chinese Taoist ritual, the fumes and odors of incense burners were said to have produced a mystic exaltation and contribution to wellbeing.

The Chinese were very informed, they knew that excessive use of cannabis “would result in hallucinations, and talking to spirits.” (Towu. M 1981)

In these ancient times this was the Chinese’s accurate depiction of how individuals genetically predispositions to mental illness combined with excessive cannabis use would not bode well for that individuals’ mental wellbeing.

## AMERICA

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America is one Country that has gone a full circle from hemp being a vital part of Americas initial growth in the colonial period, to President Nixon waging war on the drugs. Back to social acceptance and cannabis being legalized in how ever many states. It started in the humble British colony in now America, Jamestown in the late 1500's. Hemp became one of the vital crops of the colony and to its new-found economy.

In the 1920's along with an Egyptians delegate adding that cannabis is as dangerous as opium. This and the combination pf Mexican revolution which resulted in a large migration of Mexican refugees into regions of America such as Texas and California.

These two events on opposite ends of the world were the reason why the culture of cannabis had dramatically changed, and little did they know at the time would shape the views of cannabis and culture of the herbaceous plant around the world for the next 70 years or so.

I find it hard to take in when I hear about the constant deforestation of our planet amazon regions. The alternative is hemp to replace all paper, thereby leaving precious forest resources where they belong: in the ground.

"Hemp has over 25,000 commercial uses from paper to fuel to plastics and medicine. This was at one time in history the most sought-after commodity on the plane. However, because of lack of knowledge which caused fear about cannabis triggered disregard of the plants benefits and "cotton and petrochemical industries--laws were passed in the 1930s that banned the growing of this wonder plant. Our environment would have been far cleaner had Henry Ford's hemp motorcar been allowed to go into full production." (Baker et al, 2004)

Following this there was an onslaught of media and accepted theories, that were racially marginalizing Mexicans. This included claims that would say cannabis causes white women to sleep with black and Mexican men, that ingesting cannabis would urge them to rape and murder. Below there are examples of some of the propaganda used in these times which inaccurately painted a picture of cannabis due to lack of knowledge. This has become problematic as it has caused generations to have a distorted view of cannabis.



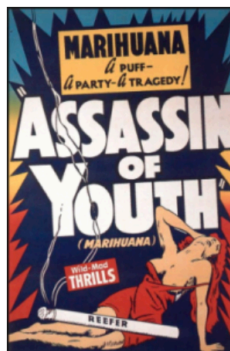
FIGURE 3 THE HISTORY OF ANTI-MARIJUANA PROPAGANDA POSTERS, 2014



Figure 4 : Harry Jacob Anslinger was a United States government official who served as the first commissioner of the U.S. Treasury Department's Federal Bureau of Narcotics.



Subsequently in 1937 USA officially criminalized cannabis however shortly after around 1942, the were promoting a "hemp for the win campaign", As It proved to be one of the most helpful commodities that wasn't weaponry near the end of the war.



America's economy was one of the few that did not significantly plummet after world war two in comparison to other nations involved in ww2 such as Japan, French and Great Britain.

Although there is no evidence for a direct cause and effect for the hemp industry and the stability of the American economy during WWII.

Years went on and the culture of cannabis had changed to an industry very briefly from being demonized as this substance that gives you crazy urges. Being depicted in the propaganda film such as reefers madness. During this time cannabis was being used by jazz musicians.

## 4.WHY THE WAR ON DRUGS NEEDS TO END, AND IS A LOST WAR.

To explain why the war on drugs has damaged the American population, we must consider who the 'war on drugs' effected, since incarceration rates for drug possession and supply sky rocketed since the beginning of this campaign. There was no difference between colored and white users of drugs during this given period,

but what was interesting was 'In 1996, Blacks constituted 62.6% of drug offenders in state prisons. Nationwide, the rate of persons admitted to prison on drug charges for Black men is 13 times that for White men, and in 10 states, the rates are 26 to 57 times those for White men' (Fellner J, 2000). Although, it could be argued that as 'Persons of color compose 60% of the incarcerated population.' (Harrison P et al, 2006). It may have just meant that being colored increased your chances of being arrested but this in turn leads to the question whether the war on drugs was targeting drug dealers and producers or was it a way to cause racial inequality in America's society.

Furthermore, this futile war on has not only caused social and health effects but has resulted in an unnecessarily high amount of money being spent to attempt to eradicate the drug problem, whereas it could've been used in American healthcare or to treat those suffering from drug addiction. For example, 'reducing the opium trade is one of the goals of the 2001 US-led intervention in Afghanistan, which has cost the US alone over \$557 billion' (Belasco, 2011) This is a substantial amount of money being spent by a nation which has one of the most expensive healthcare systems which lacks access and facilities to accommodate all American citizens. Therefore, wouldn't this money be better spent on healthcare costs or to treat patients with drug treatment more effectively as now only 'roughly 35% is on treatment and prevention, and 50% on domestic law enforcement and interdiction' (ONDCP, p.109, 2010) I think this only emphasizes the extent to which the US has a misguided idea of drug addiction and see people involved in drugs as an enemy and not a victim of circumstance or a patient.

From the evidence presented, I believe it is safe to say that the 'war on drugs' has been a negative and unjust phenomenon which has resulted in many inequalities of health, wealth and social status. The failures of this campaign can be seen through the 'one in eight African-American men aged 25-29 years was incarcerated on any given day in the USA in 2007, despite the fact that ethnic minorities consume illicit drugs at similar rates to other subpopulations in the USA' (J Fellner & P Vinck, 2008) and the fact that 'increased drug-law expenditures have not prevented the growth of this market; instead, a long-term pattern of falling drug prices and increasing drug purity and supply has been observed.' (UNODC, 2005)

In addition, I believe a way to end this war and to help treat the problems associated with drugs we must find a way to reduce the involvement of criminal's organizations in distribution of illicit drugs while treating people with drug problems without making them social outcasts. An initial set of approaches are 'Evidence-based approaches to reduce the negative health and social consequences of drug abuse...form parts of a comprehensive approach to substance abuse that have long-term recovery, abstinence, and social reintegration as its goal' (Kelly Morris, 2009). To address the secondary problem of illicit drugs being controlled by criminal organizations, legalization, taxation and control should take place. If drugs are legalized, and only drug addicts can be prescribed heroin, crack and other Schedule 1 and 2 drugs. This allows for effective treatment with clean drugs and addicts will reduce the risk of death or other long term conditions from ingesting impure drugs. Furthermore, the taxation of recreational and less dangerous drugs such as marijuana has proven to show beneficial effects for communities as seen in Colorado, Amsterdam and

Uruguay. The economic, public health and social benefits of this method of legalization definitely outweigh the massive costs of the 'war on drugs'.

I am not advocating class A drugs, they are evidently dangerous however this country is facing a rising problems for these types of drugs. If the government is adamant to carry on the war on drugs because of the families suffering from crack, heroin and cocaine addiction, but Cannabis shouldn't be a participant in it

"One in 40 Scots use cocaine - the highest in the world - and just under one in 50 people in England and Wales."

Overall, Scotland sits top of the world cocaine league table, ahead of Spain, the US, Australia and Uruguay. England and Wales sit sixth in the global list of cocaine users. Ecstasy use in the UK is among the highest in the world, per the UN report. Only Australia and New Zealand use the banned drug more often. The UN report reveals that Scotland is the cocaine capital of the world, with the rest of Britain not far behind.

Scotland is third in the table of ecstasy users, behind only Australia and New Zealand. The Dutch are the fourth biggest ecstasy takers in the world, with England and Wales sitting fifth.

The shock report comes after celebrities including Russell Brand, Sir Richard Branson and Sting called on the Government to end its 'war on drugs',

In an open letter to David Cameron, more than 80 campaigners urged the Prime Minister to launch a review of Britain's drugs policy.

The letter said more than 1.5 million people have been criminalized in the UK for drugs possession over the last 15 years.

It said evidence from Australia, the Czech Republic and Portugal that health problems linked to drugs are 'dramatically' reduced when users are given medical support and advice rather than being prosecuted.

Edward Fox from the drugs charity Release said the figures exposed the futility of the Government's war on drugs." (Hamptonknight.co.uk, 2016)

He said: 'With recent statistics showing that cocaine and ecstasy use in the UK remains among the highest in Europe, it reveals that the government's approach of strict criminalization is failing to have an impact on levels of use.

Simon Antrobus, Chief Executive of the addiction charity Addaction, added: 'We treat some 4,000 people every year whose health, jobs and relationships have been wrecked by cocaine addiction, so the findings of the UN World Drug Report are not that surprising.

In Scotland 2.4 per cent of the population take cocaine - the highest figure in the world. Some 1.7 out of 100 meanwhile take ecstasy. The English and Welsh are also among the highest party drug users in the world, per the UN."

The article above clearly outlines that there are far more serious issues when tackling drug dependency and crime. In this document, I have defined cannabis's medical benefits and there is considerable evidence to say it is less harmful than alcohol. Yet

'By its own estimates, the government spends £1.5-£2.5 billion annually on law enforcement against supply and possession offenses, yet the UK still has one of the highest overall rates of drug use in Western Europe. (Hamptonknight.co.uk, 2016)

'Over 90 percent of people who use drugs in this country do so recreationally, many of them are young and the greatest risk they face is criminalization. 'Additionally the cost of police and prosecuting this activity is an expensive waste of tax payers money.

'It is time that the UK government looks at removing unnecessary criminal sanctions for drug possession to prevent any further waste of state resources and to end the lost opportunities for young people created by criminal records.' Hamptonknight.co.uk, 2016)

Now police supporting legal cannabis could help fund the police go after drug related crimes that are more in the public interest rather than nonviolent drug offences.

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## 5.POTENTIAL DANGERS

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Here I will comment on the potential dangers of cannabis and briefly on how they would be tackled.

There is no doubt that cannabis is not a wonder drug, with all the economical and medical benefits it has. It also carries some potential dangers for someone who is not educated enough about it. Correspondingly to its medicinal rewards, the health risks associated from cannabis are circumstantial to the individual, strength of cannabis and frequency of use. Too much of anything, good or bad is ultimately unhealthy for us.

“People driving under the influence of driving. Some say high drivers are twice as likely to cause a fatal car accident” (Cannabis the Facts NHS, 2014)

An issue circumstantial to the individual, however if this legislation were to occur DUI of cannabis should remain illegal and the severity of committing the crime should not be lowered. As unlike consuming cannabis which does not cause harm to anyone or else or the individual. Operating a car under the influence causes a greater risk of others and that individual being harmed.

In regards to mental health, excessive use and in some cases, regular use is associated with an increased risk of developing a psychotic illness, such as schizophrenia. A psychotic illness is one where you experience hallucinations and delusions (when you believe things that aren't true). Your risk of developing a psychotic illness is higher if you start using cannabis in your teens and if you have a family history of mental illness. Cannabis use has also been shown to increase the risk of a relapse in people who have schizophrenia, and could make existing symptoms worse. (Cannabis, the facts 2015)

Moreover cannabis should only be consumed after an individual has reached adulthood the age of 18. Smoking before this age can be risky to a person's development. Although "it's not clear why the risks are higher for people who start using cannabis when young. It may be linked to the fact that, during the teenage years, the brain is still forming its connections and cannabis interferes with this process." (Cannabis the Facts NHS, 2014)

Recent studies have shown that smoking cannabis on its own decreases the risk of lung related illnesses that the cannabis smoke is not harmful. This is because "While chemically very similar, there are fundamental differences in the pharmacological properties between cannabis and tobacco smoke. Cannabis smoke contains cannabinoids whereas tobacco smoke contains nicotine. Available scientific data, that examines the carcinogenic properties of inhaling smoke and its biological consequences, suggests reasons why tobacco smoke, but not cannabis smoke, may result in lung cancer." (Melamede, 2005)

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## 6.POTENTIAL MEDICAL BENEFITS

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For years, ancient empires and societies have used cannabis for the medicinal purpose it can serve. From being used in ancient India to now for Ayurveda medicines. Also with the recent surge of states in America, and surrounding countries such as Canada, Costa Rica, Uruguay, Paraguay and Colombia many countries are reaping the rewards and benefiting from medicinal marijuana. Circumstantial to the type,

potency of cannabis and the individual. It can be used to treat and diminish the symptoms of several illness's, in the hundreds to name a few:

- ADD
- Alzheimer
- Arthritis
- Asthma
- Atherosclerosis
- 11 types of cancer ranging from leukemia to lung cancer
- COPD
- Epilepsy
- Glaucoma
- HIV/AIDS
- PTSD
- Neuropathic Pain
- Parkinson's disease
- MS
- Sickle cell disease

Sativex is a Cannabis based medicine (CBM), used in Britain to treat MS. Studies on CBM with dosages of THC and CDM in a cohort of rheumatoid patients. A disease of extended duration and with poor analgesic control. A significant analgesic effect was observed and disease activity was significantly suppressed. (Blake, 2005)

Similarly USA have also used man made forms of cannabis like Dronabinol, it used to treat loss of appetite that causes weight loss in people with AIDS. Dronabinol can also be used to treat severe nausea and vomiting caused by cancer chemotherapy.

Due to the variety of illness's cannabis can treat I will focus on illness prevalent in the UK where there is extensive research and evidence for, Epilepsy, Cancer and Pain

Epilepsy is neurological disorder where the sufferer tends to have recurrent seizures. "Every day in the UK, 87 people are diagnosed with epilepsy. Only 52% of these people in the UK are seizure free. It is estimated that 70% could be seizure free with the right treatment. (Epilepsy.org.uk, 2015)

"Currently the use of antiepileptic drugs (AED'S)in Britain to suppress Seizures in epileptics accompanies a wave of conditions and unpleasant side effects. These include:

- drowsiness
- a lack of energy
- agitation
- headaches
- uncontrollable shaking (tremor)



- hair loss or unwanted hair growth
- swollen gums
- rashes

(NHS epilepsy treatment, 2017)

Preclinical animal studies, showed CBD to have anticonvulsant effects when seizures were acutely induced in mice. Studies that followed discovered a potential mechanism for this effect. Exhibiting that CBD raised the threshold requirement after one action potential, making it more difficult for subsequent action potential to fire and propagate seizure activity. (Izquierdo and Tannhauser, 1973)

Cannabinol compared with THC has no disadvantages therefore although cannabis may have side effects. CBD is extracted in medicines like Epidolex in America. Coming in a “liquid form and consisting of 99% CBD” (Epilepsy Foundation, 2015)

Therefore, limits the probability greatly for a patient experiencing negative side effects from such a medicine.

In America after they gained the knowledge of the medical resolution to dull seizure activity. GW Pharmaceuticals conducted clinical trials on Epidolex. After which they released preliminary findings which had proved promising with an overall 44% reduction. (GW Pharmaceutical, N.D)

The legalization of cannabis has allowed local researchers in America to form specific strains of cannabis for specific illness such as Charlotte’s web which has proven success in suppressing seizure symptoms with individuals who suffer from dravet syndrome

In addition to undergoing three separate tests for purity, potential contaminants, the Charlotte’s Web extract is tested for its cannabinoid content – the cannabinoid profile is approximately 28:1 CBD to THC. Patients are started at 0.5mg/lb, and slowly increase the dose up until seizure control is established.

Realm of Caring has also been providing a strain of cannabis high in THCA for patients who have failed the CBD-rich treatment, and has seen some success here as well. As Jackson importantly points out, “These are very intractable cases, patients on average have tried at least 12 different therapies prior to cannabis, moreover, the safety profile is like night and day.”

Further studies commenced and the results were as follows (without a placebo control) were presented at the AMERICAN ACADEMY OF NEUROLOGY, APRIL 22, 2015 IN WASHINGTON DC.

- Seizures decreased by an average of 54% in 137 people who completed 12 weeks on Epidiolex.
- Patients who had DS responded more positively with a 63% decrease in seizures over 3 months.

- This improvement in seizures lasted through 24 weeks on the Epidiolex, more often for people with DS than without DS.
- In 27 patients with atonic seizures (which are commonly seen in people with LGS as well as other types of epilepsy), the atonic seizures decreased by 66.7% on average.
- The responder rate (the number of people whose seizures decreased by at least 50%) was also slightly better in patients with DS (about 55% at 3 months) as compared to patients without DS (50%).
- People who were also taking the anti-seizure medication Clobazam (Onfi) seemed to respond more favorably to the Epidiolex with a greater improvement in convulsive seizures than in patients who were not taking Clobazam. The authors suggested that an interaction between Clobazam and Epidiolex may play a part in the differences seen.

(Epilepsy Foundation, 2015)

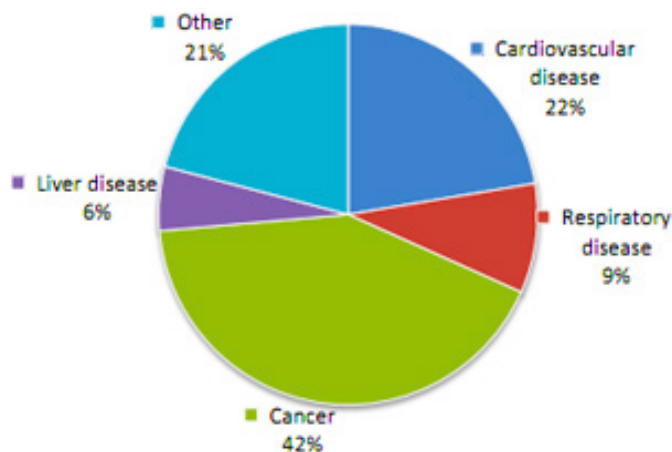
In relevance to the United Kingdom, if a drug reform were to be considered it would open new avenues for research such as charlotte's web for researches to innovate and extract components of cannabis for specific illness's

In the United Kingdom, in this modern information age. A child born today should expect to live a longer and healthier life. Yet, a Government report, [Living Well for Longer \(PDF, 1.6Mb\)](#), blames the top five killers for more than 150,000 deaths a year among under-75s in England alone and the Department of Health estimates two-thirds of them are entirely avoidable.

This chart shows the premature death toll by illness. Heart disease and stroke are together referred to as cardiovascular disease.

As it is legal in America they can carry out extensive research, and have found a link between cannabis suppressing cancer cell aggressiveness in breast cancer.” There is a general consensus in the field of cancer research that targeting multiple pathways that control tumor progression is the best strategy for the eradication of aggressive cancers. Since CBS has low toxicity, it would be an ideal candidate for use in combination treatments with additional drugs already used in the clinic. Importantly, CBD appears to be interacting through a cellular system that regulates the expression of key transcriptional factors. That control breast cancer cell proliferation migration and invasion. The experiments described in this manuscript not only define the pathways that CBD is working through to control breast cancer cell aggressiveness, but also demonstrate the efficacy of CBD in pre-clinical models. A greater understanding of this system may lead to future therapies for breast cancer patients, including the additional refinement of CBD analog synthesis.

Figure 7 (NHS LIVEWELL FOR LONGER, 2016)



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## 7. PROPOSED MEDICAL BILL

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To introduce an effective medicinal bill to be able to benefit patients and keep patients at the center of the law. It needs to be brought about in three separate stages.

1. 1-2 years of laboratory and university testing to ensure the UK can produce relevant and effective literature and evidence-based advice to help guide the future prescription of cannabis.
2. Start providing education to doctors, nurses and all medical professionals on how to prescribe cannabis safely and how to monitor the therapeutic outcome of each prescription of cannabis.
3. Begin prescribing cannabis and maintain a constant audit with patients to ensure that the cannabis is the best solution to help them maintain their good health. To maintain the utmost safety with the production of medicinal cannabis, it should be controlled by the government. This will allow the government to be able to make sure this programmed is self-sustaining and to reap the profits to help reinvest into the country. This will be achieved by hiring farmers across the country to produce cannabis through government subsidies that should be on offer. They will be government licensed farms which will directly supply pharmacies and dispensaries that provide medicinal cannabis. All dispensaries and pharmacies who wish to provide medicinal cannabis must purchase cannabis from the government licensed farms. The medicinal cannabis will always be cheaper than recreational as to be an incentive for all dispensaries and pharmacies to sell medicinal cannabis. These profits will then help to maintain the medicinal cannabis sector as a government project and keep patient safety at a top priority.

## 8. ECONOMIC AND SOCIAL BENEFITS OF LEGALISING CANNABIS

The economic benefits are numerous there will be the emergence of a sector based around tourism, recreation, hospitality, food, media, marketing, horticultural and farming these are to name but a few of the small business and big business that could emerge in the UK with this proposal. The economic benefits can be seen in the pie chart and bar graph below, highlighting the projected legal cannabis sales in the American State of Colorado.

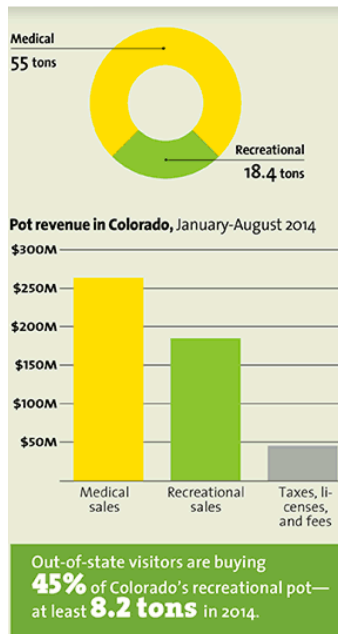


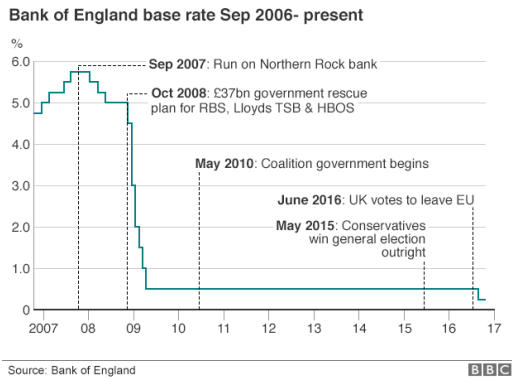
FIGURE 4 MARIJUANA POLICY GROUP FOR THE COLORADO DEPARTMENT OF REVENUE

Many countries such as America have benefited greatly economically and socially from their new cannabis legislation. Cannabis is a prosperous trade if legalised, regulated and taxed it could bring in £900m in taxes every year, save £400m on policing cannabis and create over 10,000 new jobs. (Petitions UK Government and Parliament)

Washington has hit a landmark in their first year, “\$70 million in tax revenue has been generated statewide from marijuana sales.”(CNN Jareen Imam, 2015).The economic benefit is evident in the state of Colorado USA where “Cannabis revenue totaled \$486 million for the first five months of 2016, up from \$356.8 million in the first five months of 2015”(Colorado.gov, 2017) according to the Colorado Department of Revenue Data.

As mentioned before cannabis has a wide scope in terms of industry from medical, recreational, the food industry. Furthermore, there is the environmentally friendly hemp business from which paper, clothing and biofuel can be produced. Our countries growth in medicine, agriculture and technology has been compelling in recent years, our ability to research and innovate has become more efficient as of late. Therefore, with the right research biofuel derived from hemp could be the answer to the current crisis of lack of fossil fuels.

This shows that the economy would not only benefit direct tax of cannabis, it would benefit from the sheer amount of jobs that it would create in these industries. Our economy would reflect the otherwise stale economy of Denver prior to its drug reform.



The graph on the right shows that we have not yet recovered from the financial crisis in 2008. Also due to Brexit having a knock-on effect on the pound plummeting. Our Countries Economy is not very stable now, with the NHS insecure, what better time could it be for something like a regulated cannabis trade to help the economy. For more than a decade, employment

growth in Colorado's food manufacturing sector was stale, gaining an average of 0.1 percent a year from 2001 to 2013, said Patty Silverstein, president and chief economist at Development Research Partners in Jefferson County.

Recreational cannabis sales began in 2014. That year, "we had a 3.5 percent increase in employment. In 2015, a 4.9 percent increase in food-manufacturing employment," she said. "The data doesn't allow us to slice and dice to say, 'These are indeed edibles or not,' but the recognition is this is where they would be classified."

Similarly, jobs in chemical manufacturing declined an average of 2.2 percent a year from 2002 to 2012. In 2013, the trend reversed, and the sector logged a 2.1 percent increase. Jobs increased 1.4 percent in 2014 and 3.9 percent in 2015, she said. (Wallace, 2016)

We have various serious issues in the UK socially that the police are struggling to tackle in our society. I will name a few that could potentially be resolved with an effective transition to a legal cannabis market.

The persistent issue of drunken domestic violence in the UK could potentially be resolved as since the legalization of cannabis in Colorado, *per statistics compiled by the DPA, in the first 11 months of 2014, the rate of violent crime fell 2.2 percent* After One Year of Retail Sales and Two Years of Decriminalization (*Drug Policy Alliance, 2015*)

Secondly, we can reduce the number of police, court and criminal resources being used on cannabis related crimes. "Toxicological MOE approach validates epidemiological and social science-based drug ranking approaches especially regarding the positions of alcohol and tobacco (high risk) and cannabis (low risk)." (LACHEMEIR and REHM, 2015)

Margin of Exposure" (MOE) method is a holistic approach to put it simply, this looks at the ratio between the dose which characterizes adverse effects and the amount that people typically use.

We are prosecuting people based upon a policy which is outdated and not evidence based, this will save thousands if not hundreds of thousands of pounds as there are over 1000 people currently incarcerated due to cannabis and as recent events have shown the justice system is at breaking point with current prison riots and poor

conditions. This change in law can alleviate the a few of the pressures on the ministry of justice.

Moreover, the social and recreational nature of cannabis culture opens door for more business opportunity and ventures.

## 9.UK CANNABIS REGULATION AUTHORITY- WHY WE NEED THIS

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UK Cannabis Regulatory Authority:

UKCRA will be a government organization that is run by people who have been selected by a government committee to ensure they are individuals who can be trusted, relied upon and informed well enough to be able to carry out this vital role in the legalization of cannabis. The authority should make up of a team of individuals who work to carry out specific roles which will be listed below:

- They will assess and log all cannabis bought in for medical regulation and will monitor the outcomes in patients using the audit data.
- They will be responsible for ensuring the recreational licensed premises are run to code and do not violate the terms of their license or participate in illegal activities.
- The employees of the UKCRA will be required to understand and stay informed about updates regarding cannabis across the globe to ensure a holistic process is maintained in the UK.
- Every 3 years there will be a test for all members of the UKCRA to participate in which will ensure they are prepared to deal with the challenges of the industry.
- In summary, the UKCRA is a regulatory government body which will help regulate, distribute funds and make sure that society benefits from the legalization process and outcomes.

As mentioned in this document Cannabis is no wonder drug and does have potential risk factors and dangers. Therefore, to ensure safe and responsible consumption.

For both members of public who either require or desire to ingest cannabis with higher levels of THC for either medical or recreational reasons. Must pay a fee to take a self-awareness and cannabis safety course, and to see a doctor if their requirement is solely medicinal.

This will use a multifactorial criteria with an assessment at the end to ensure that before any legal regulated cannabis consumption is taken place, that individual know themselves, the dangers of cannabis and knowledge on doses and potency of differing types of the plant.

The assessment will question based on this criteria and an individual's answers

would have to show they are aware of what is required in the criteria. Therefore it will provide a basis for their eligibility.

Passing this test will provide the individual with a cannabis license allowing them to consume cannabis. The license will require a renewal fee for every 2 years

Regulation Committees like this are key to ensuring safe and responsible cannabis use and in regulating and enforcing any bills, Acts or conditions that come with the legislation.

## 10.WHO IN THE UK CONSUMES CANNABIS

The United Kingdom has a huge cannabis culture, a petition to make the production, sale and use of cannabis legal sky rocketed to above 200,000 signatures in 2015. In march 2016 Liberal Democrat MP Norman Lamb made history by proposing a cannabis legislation in a ten-minute bill at the house of commons. It was very like this proposal. In fact, Mr. Lamb's proposal and the petition provided some of the basis for inspiration for this proposal.

The 10-minute bill proved a success for its stage and received a date for a second reading. Since nothing has come of this 10-minute bill and it apparently has been adjourned and no date has been given to when it will be read again.

Cannabis policy reform for this country is backed by a vast number of people. The number of adversaries for legislation reform in the form of charities or clubs is increasing:

- UKCSC — United Kingdom Cannabis Social Club
- NORML UK (Cannabis legislation reform)
- Drug Equality Alliance (DEA)
- Law Enforcement Against Prohibition (LEAP)
- European Coalition for Just and Effective Drug Policies (ENCOD)
- Transform Drug Policy Foundation
- CLEAR (Cannabis Law Reform)
- RELEASE

A requirement for cannabis policy reform is a holistic approach, and I'm sure if the population are correctly educated about the dangers and benefits of the drug. There are many members of the public would not mind an amendment in the current misuse of drugs act 1971. and would support such a reform. For instance, in 2013 surveys were conducted and found the following on MP's opinions on drug reform in this country.

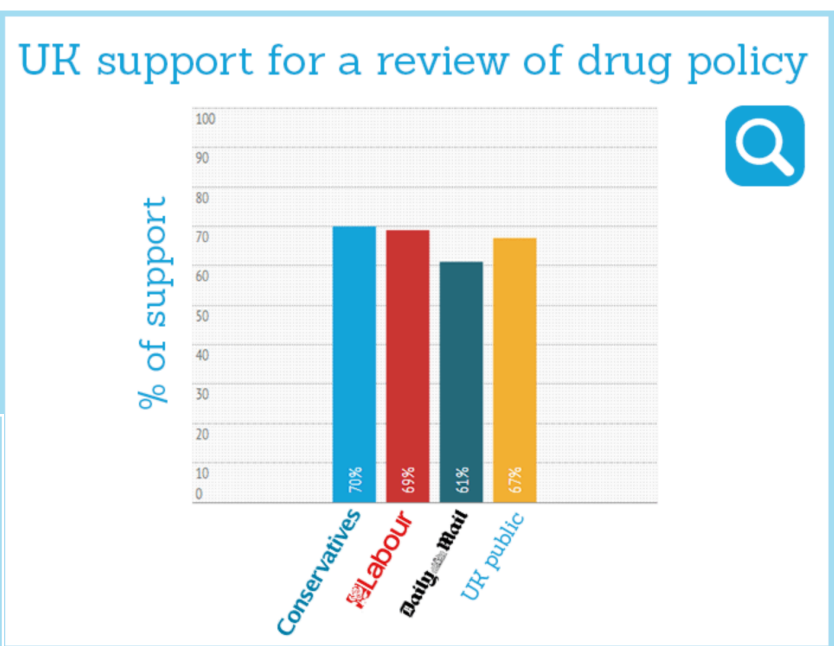
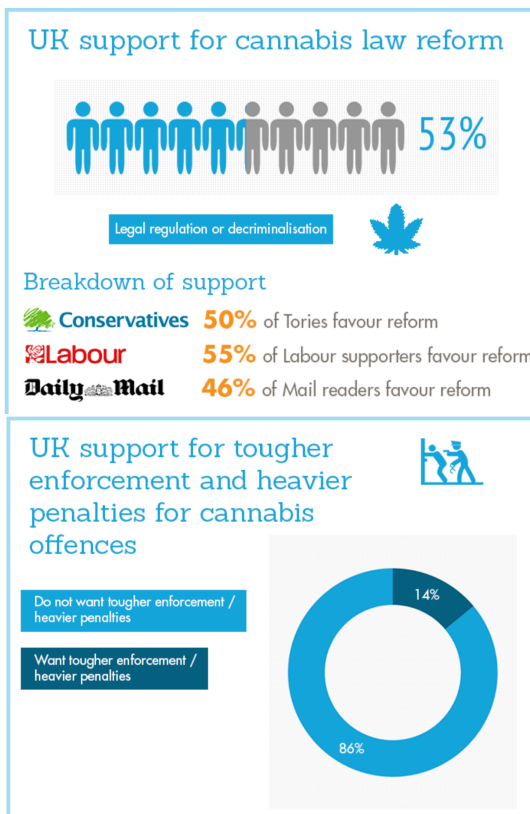


FIGURE 5 (TRANSFORM DRUG POLICY FOUNDATION, 2013)

The sheer support for a review in how we handle cannabis in the UK from educated MP's emphasizes the window of opportunity that we have and that after being informed correctly about cannabis, they realize that it is not actually as harmful as the stigma attached to it. A legislation backed by the people, MP's and respectable members of society.

Individuals such as sir Richard Branson, Russel Brand, and QC Michael Mansfield wrote an open letter to Mr. David Cameron urging him to launch a review to decriminalize possession. If respectable people like this and a clear majority of individuals are campaigning for this. I feel it's our duty as a country and for democratic nature of our politics. It should be at least considered.

In comparison with “ 27 reporting countries the United Kingdom has the 6<sup>th</sup> highest rate of cannabis use”. (Webster, 2015)

However, I suspect that this is number may be higher, and should not be conclusive figure. The reason I say this is because these statistics are reliant on the countries of origins scales of recording which may not be effective as recording data in their countries as the British ones.

Despite this the amounts of cannabis and cash from criminal proceedings that are seized by police in Britain are as follows, from 11,612 seizures they apprehended 367, 000, 15,106kg of herbal cannabis from 110,626 seizures. And for cannabis resin from 5,339 seizures they managed to capture 15,106kg. (Home Office, 2015)



If you monetize what is seized per Denver Colorado's cannabis pricing below.

	1/8 oz	1/4 oz	1/2 oz	1 oz
Store #1	\$59	\$100		
Store #2	\$38	\$72	\$140	\$222
Store #3	\$38	\$69	\$134	\$237
Store #4	\$68	\$116	\$202	\$405
Store #5	\$40	\$75	\$140	\$265
Store #6	\$67	\$135		
Store #7	\$42	\$76	\$143	\$304
Store #8	\$35	\$70	\$140	\$280
Store #9	\$55	\$90	\$180	\$360
Store #10	\$60	\$115	\$220	\$440
<b>Average Price</b>	<b>\$49</b>	<b>\$88</b>	<b>\$156</b>	<b>\$314</b>

FIGURE 6 (COLORADO GUIDE, 2016)

- 15106 kg of herbal cannabis seized equates to 543816 ounces. Which per these prices. The lowest possible potential total revenue would be (\$222=£182)

- 543816 ounces = £97886880

- Considering the discrete nature of the black-market trade of cannabis although still an extremely large figure, these figures should not be definitive, as they only paint part of the picture for the black-market trade of cannabis.

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## 11. HOW TO INTRODUCE CANNABIS MEDICALLY AND RECREATIONALLY IN THE UK

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I have already spoken quite deeply about how to introduce cannabis medicinally into the UK but this is how to maintain a consistent supply of cannabis and to ensure that this is beneficial economically and socially. To produce cannabis in the UK the government needs to provide the agricultural sector with contracts to produce cannabis and it needs to be affordable enough that the agricultural sector receives a boost from their investment into the contracts. Once the contracts have been offered and are complete there are two options.

We could promote the building of small business that hires ex-military and ex-police to transport the cannabis from the farms to the UK Cannabis Regulatory Authority Headquarters. Once it arrives at the location it'll be individually checked for quality and safety. Each plant will be logged onto a government database and then systematically deconstructed for each individual process. It's important to keep in mind that there are a variety of uses for every part of the plant from production of biofuel, paper production, pet food and various medicinal values. The materials that the authority do not use for government purposes will be sold or contracted to companies who will be vetted to ensure their uses were genuine.

This entails how the medicinal and government sectors will be produced for. However, the recreational sector I will entail a more lucrative way to ensure society benefits from the greatest from the recreational uses of cannabis. The recreational

business must seek an initial license that will incur a fee from the UK Cannabis Regulatory Authority. They must then purchase equipment identical to the UKSCRA to ensure absolute certainty in measurements and evaluations of cannabis. After this they can produce cannabis commercially but these will again require a license from the UKSCRA which will incur another fee. Furthermore, there will be a 25% tax on all recreational cannabis sold at any of these businesses. This will produce a massive amount of government income, which can be reinvested into the health service, schooling, university education and care of the elderly. It causes the emergence of a sector which is directly beneficial to the UK economy and society as seen by these results across the Globe.

## 12. HOW TO END THE BLACK MARKET AND ILLICIT TRADE OF CANNABIS

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To end the black-market trade of cannabis, there are several measures that need to be put in place in order ensure a smooth transition but also a peaceful end to the illicit trade. The first measure, will be to ensure that medicinal and recreational cannabis prices begin cheaper than any black-market cannabis. This will ensure an economic squeeze on most high-profile criminals, which in turn will push the masses of cannabis consumers to the legal alternative. Furthermore, this action will make a major end to the cannabis trade.

Decriminalize cannabis but the new law should state that the only cannabis legal to produce and supply are government-licensed facilities and recreational facilities that have applied to the UK Cannabis Regulatory Authority for licensing. This will end any black-market demand for cannabis as consumers will be made aware through a campaign to the population that legally produced cannabis is safer and more regulated.

Begin providing an education to young adults through PSHCE, to allow them to understand the risks of illegal drugs, but instead of maintaining our draconian and conservative educational values we should be honest to young adults about the truth about drugs otherwise we risk of maintaining the constant issue we have seen of serious drug addiction and unfortunate drug deaths. Through this education we shall notify young adults about the use of evidence-based drug policy and how they should educate themselves in anything they are going to consume. This way we can promote understanding rather than ignorance of sensitive topics like drugs. Through this information provision, these young adults can also be educated about the medicinal benefits of cannabis and the negative effects of cannabis but also I feel more importantly they can be educated about alcohol, the potential dangers and how to be responsible while consuming alcohol. As a society, we need to promote education about these sensitive topics as then we can promote a culture of openness which will lead to a better trust between all parts of society.

## 13.LONG – TERM IMPLICATIONS FOR SOCIETY AND THE UK AS A WHOLE

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- The economic benefits are present as seen by examples from the US, Netherlands and Spain. These amounts of revenue for the government could be used to help alleviate some of the austerity hardship that is going on at this very moment. It'll also allow the UK to have a smoother exit from the EU, as it provides us with a reason to expand tourism which will keep the visitors from the EU still wanting to visit the UK on holiday.
- Economic benefits can help develop the UK's schools, NHS, fracking projects, government projects, community projects and be used to help benefit society instead of being used in the black-market.
- We can provide jobs throughout the cannabis industry to Ex-police, ex-military, homeless, poorly qualified and young individuals as this industry is extremely diverse, there will be a requirement for security, business posts, general retail personnel, medical personnel and especially skilled individuals. This will reduce unemployment and in our current society drug use is extremely common, we are limiting all these vulnerable individuals by limiting them from a potentially beneficial opportunity.
- We could gain a better understanding of the links between psychosis and cannabis, and help to combat it as it has been shown to cause this in a small number of individuals. It's the consumption of cannabis combined with a variety of other factors that leads to this psychosis, but allowing for legalization allows us to learn and prevent this mental illness.
- Reduce alcohol consumption across the UK, which has shown to be a serious issue and a burden on the NHS. Alcohol causes a burden on our justice system and police service, with legalization we can alleviate this burden and help to rebuild broken parts of society.
- Becoming a world-leader in drug research which is becoming a key field of tomorrow, we will also be able to better educate younger generations about the benefits and harms of drugs which will end this culture of ignorance and promote this information age.

## 14. DISCUSSION

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In the last 100 years or so, there has been a cycle of research suggesting contrasting views about cannabis from it being a drug that induces rape and murder in the 1920's to a dangerous drug that can cause severe mental illness, to a natural remedy that mirrors chemicals such as cannabinoids in vital systems in our body. From the recent surge of countries legalizing cannabis, it depicts that with the correct regulation, knowledge, awareness restrictions for use such as license, tests, physician assessments to say the individual doesn't risk mental illness or an addictive personality. Can lead to a nation reaping remarkable rewards from a legal cannabis trade.

If there is an extensive emphasis on educating the nation on self-awareness, self-reflectiveness, and on cannabis of its dangers, benefits, doses, uses different types and that it works tailored to an individual. And that a license will only be permitted to individuals who present these traits which will be measured by tests results individuals must take if they wish to use cannabis recreationally. For those who require it for medicinal purposes may need a recommendation from a doctor.

Lastly when conducting a holistic cost benefit analysis of a legal cannabis in the UK. The benefits greatly outweigh the costs. From creating a flourishing economy for its self in countless number of sectors and industries, creating jobs in the thousands and helping people with serious diseases such as epilepsy or severe seizure related illnesses suppress their symptoms. Also, this could not only open doors for the economy it could also open doors for research, there is also research to confirm that there is a link between cannabis and a reduced risk of developing tumors. Modern medicine in the UK is a level above other countries already. Further research on cannabis and cancer could help diminish one of the top 5 causes of premature death in this country.

Although there are risks associated with such a legislation with the correct regulations, restrictions and education they can all be dwindled immensely. After all there are no deaths associated with cannabis and it is 114 less harmful than tobacco and alcohol which have been leading industries across the world and we have a wave of individuals in this country involved with alcohol related problems and alcohol related crimes.

## 15.CONCLUSION

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To conclude from the evidence which I have compiled from a combination of peer reviewed articles, Clinical Studies, government reports and publications, statistics from the home office and well respected non-for profit organizations. I believe that it is safe to say that our criminalization of cannabis In this country is unnecessary and out of touch. The United Kingdom is a educated, fair and democratic country and we are following suit from countries 70 years ago who's presumptions were based on fear because of lack of knowledge and close mindedness as it was a different time. The strict rules that we adopting on governing cannabis stemmed from racist public opinion shaping from Americans in the 1920's who have since then become the forefront for legal cannabis in the world. Great Britain is a lot more racially tolerant than countries such as the united states therefore I feel we shouldn't base our laws, legislations and policies surrounding cannabis based on out of touch research which has been since disproven.

Cannabis has a long history of being beneficial to societies and patients with severe illness's mysterious plant that has countless functions that could possibly have its own economy as shown by the great strides made in the American economy.

The cannabis culture in the United Kingdom has always been prominent but have felt like they have never had a voice due to fluctuations in civilization from going back and forth to class A and B, to times in history where penalties for possession were that the same of serious violent offences. The amount of cannabis and cash seized from police each year for cannabis related crimes paints only have the picture of the prosperous trade that can be capitalized on.

Therefore, displaying how cannabis and hemp industries in the sectors of:

- Medicine
- Pharmacy
- Research
- Pharmacology
- Botany
- Horticulture
- Biofuel Derived from hemp
- Media
- Recreational ventures

- Tourism, (Although the £ is low now, that can be highly advantageous for this particular sector as it makes the UK a cheaper holiday destination)
- Clothing
- Paper, (which could lead to a decrease in deforestation of our planet)
- All of the above would open a variety of jobs and decrease unemployment rates In the country

The combination of appropriate and strict regulation from a government approved UKCRA and an extensive emphasis on educating the nation on cannabis, its dangers, benefits, how it can affect you and how its circumstantial to an individual. Would lead to a very prosperous trade.

Currently I feel this is what the country needs as the tax, licensing fees and further monetization of the trade surrounding the herbaceous plant of cannabis can generate numbers in the millions. Which can be used for the NHS, education and/or anything else the government feels is appropriate for our country.

In this current age there is a lot of opportunity for ground breaking research to happen in all the industries that lie in the cannabis trade, and our country should be at the forefront of that.

We have made great leaps and had humbling plummets in the last 2 decades but we are a nation striving to be the superpower we once were. Legalization of cannabis will further enhance the chance for more innovations and more knowledge about this plant and its medicinal and other numerous uses.

Recently the people in this country who support this idea, have spoken from petitions from university students, to letters from respectable individuals in our society, to many MP's being in favor of such a policy reform. Norman Lamb's 10 minute bill got through to the stage of a second reading at the house of commons and a date was also given. However, the bill consideration has been dropped and will not have a second reading.

Lastly I feel it is an essential part of the nature of the democratic politics in this country calls for a more noteworthy Drug Policy reform for cannabis in the United Kingdom. Making government regulated production, sale and use of cannabis legal for medicinal and recreational Purposes.

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