Government of St. Christopher & Nevis
National Commission on Cannabis

Cannabis Commission

Report

January 10, 2019

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ACKNOWLEDGEMENTS

On behalf of The St. Kitts & Nevis National Commission on Cannabis, I express deep appreciation to all who provided support in conducting the research, actively participated in the consultative meetings and ultimately contributed to the completion of this report. The entities and the individuals include (but are not limited to) the following:

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CHAPTER 1

Background/Introduction

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Cannabis is easily the most commonly utilized illegal/prohibited drug locally, regionally, and internationally. In 2016, almost 192 million persons used cannabis at least once and 13.8 million of these were young people aged 15-16 years.[1] The number of persons using cannabis continues to rise annually.[1]

Cannabis was first introduced in the Caribbean region by East Indian indentured laborers during the post – emancipation era. There is significant use of cannabis in St. Kitts and Nevis up to the present time . Approximately 28% of our local population use cannabis/marijuana, and almost 45% have used cannabis at some time in the past. In our Federation, cannabis is used for varied purposes which include:(1) preventive measures to ward off disease, (2) treatment of common medical conditions like chronic pain, asthma, menstrual disorders, nausea and glaucoma, (3) recreational use and (4) as a religious sacrament.

Rastafari is an all-encompassing spiritual way of life with a strong religious component. The local and regional Rastafari Communities have been associated with the use of cannabis, eating vegan or I-tal food, growing hair into dreadlocks and music. The Rastafari religion is relatively new, and its origin coincides with the coronation of Prince Ras Tafari Makonnen, Haile Selassie as Emperor of Ethiopia in 1930.[2] The followers in Jamaica and in the region usually smoke cannabis with a coconut chalice as a ceremonial activity to facilitate meditation and direct connection with the creator. The ceremony involves 'grounding' and 'reasoning' processes whereby knowledge passes through the Rastafari network. [3-5] Historically, the Rastafarians have endured significant

discrimination and hardship because of their many uses of cannabis. However, the use of cannabis is not limited to Rastafarians, but it has permeated our local and regional societies.

Additionally, further afield, hemp was widely grown throughout early America. The history of cannabis cultivation in the United States dates to the early colonists (the Spanish in the late 1500s) who grew hemp for textiles/clothing, rope, paper and sails and its seeds were used for food. [6]

History of the Criminalization of Cannabis

Jamaica & St. Kitts & Nevis

The prohibition of the importation and cultivation of cannabis started in Jamaica through the Ganja Law of 1913 when Jamaica acceded to the International Opium Convention. Following this and the trend in the United States and Britain, the cultivation, trade and possession of cannabis was criminalized in St. Kitts and Nevis by the Dangerous Drugs Ordinance of 1937. The Ordinance itself was replaced by the Drugs (Prevention & Abatement of the Misuse and Abuse of Drugs) Act 1986, but that Act preserved regulations made under the Ordinance in 1942, 1953 and 1954. ***(Appendix #1)*** Based on the foregoing, the cultivation, possession and use of marijuana in the Federation is still illegal.

The United Kingdom &The United States of America

In 1925, the Dangerous Drugs Act, of Britain, was amended to control the importation of cannabis. In 1928, the same Dangerous Drugs Act was amended and at that time the possession of cannabis was criminalized. The Mexican Revolution/Civil War was an armed struggle that lasted approximately ten years (from 1910 – 1920). During this period, many Mexican immigrants flooded the United States bringing with them their language, culture and customs, including the use of cannabis. Cannabis/marijuana soon became associated with 'disruptive Mexicans' and the ensuing social upheaval caused fear and anxiety in Americans at that time. Interest groups feared the spread of cannabis use by Mexicans and advocated strongly for the anti-marijuana law. The treasury department in 1930 established a new division called the Federal Bureau of Narcotics and the new Director was Harry Anslinger. Harry Anslinger and William Randolph Hearst who was owner of a large newspaper chain, together advocated for the anti-marijuana law because Hearst did not want competition between hemp paper and his supporting timber industry.[6] These socio-economic factors, stigma and political upheaval led to the enactment of the Marijuana Tax Act (a

US Federal Law) in 1937. Heavy taxation was imposed on the sale, possession and transportation of Cannabis and Hemp. In 1970 the Marijuana Tax Act was replaced by the Controlled Substances Act.[6] This Federal Law placed control of the manufacture, possession, sale, import and distribution of cannabis under federal control. Cannabis at this time was classified as a schedule one substance which deemed it to have: (1) High potential for abuse; and (2) No currently accepted medical use in the USA.

In essence, Cannabis sativa was criminalized because of socio- economic and geopolitical reasons and apparently not based on scientific data. This was corroborated by the findings of the Shafer Commission on Marihuana and Drug Abuse that was submitted to the US Congress and the public in 1972.[7]

Cannabis legislative Reform in the region and further afield

In Latin America, Uruguay was the first country in the modern era to legalize recreational and all other forms of cannabis as early as December 2013. All cannabis in that jurisdiction is produced by the federal government. Chile legalized the cultivation of medical cannabis in 2014 and cannabis medicinal products could only be legally acquired through prescription at the pharmacy. In 2015, Columbia and Puerto Rico legalized medical cannabis, and Argentina followed in late 2016 with the legalization of cannabidiol for certain conditions like epilepsy.

In the Caribbean Region, in 2015 Jamaica decriminalized the possession of ≤ 2 oz (56.7g) of cannabis. Each household was allowed to grow ≤ 5 plants and Rastafarians were permitted to use it for sacramental purposes in registered settings. Belize decriminalized possession of ≤ 10 g (0.35 oz) of cannabis in 2017. Also, in 2017, the Cayman Islands made it lawful for registered physicians to prescribe cannabis for medical and therapeutic purposes. On December 10, 2018, Antigua passed a bill that decriminalized the possession and cultivation of small amounts of cannabis for medicinal and religious purposes. On December 11, 2018, the Government of St. Vincent & the Grenadines passed its new legislation legalizing cannabis to facilitate the establishment of a thriving medical cannabis industry.

As of the last quarter of 2018, thirty - three (33) States of the United States of America (US) have legalized medical cannabis with Utah and Missouri being the 32nd and 33rd States to do so. Michigan is the 10th State to legalize cannabis for recreational purposes.
This green wave of investment is expanding exponentially. The US cannabis industry has generated thousands of new jobs particularly in the areas of taxation and regulation.[8]

Canada was the first of the Group of Seven (G7) most powerful industrialized countries with full federal legalization of cannabis for recreational use as of October 17, 2018. Medicinal cannabis has been legalized and available in Canada since 2001. However, the Canadian cannabis industry is highly regulated at the provincial level with the requirement of licensure for all aspects of the industry from cultivation, processing, testing, to retail sale and research. Despite this, the banks still have a challenge navigating the Canadian cannabis system because the banks are all linked to the US banks that are governed by the federal law which still deems cannabis an illegal substance.

In Europe, the green wave of legislative reform is gaining momentum. As early as 2001, Portugal decriminalized marijuana use and legalized it for medicinal use in 2018. In 2003, Belgium decriminalized its use and possession. The Czech Republic decriminalized the possession of ≤15 g of cannabis and the cultivation of five plants since January 2010, and medicinal cannabis was legalized in April 2013. Italy legalized cannabis for medicinal use also in 2013. Cannabis was cultivated by the military. In Italy it is now legal to purchase the industrial hemp based, cannabis light which contains <0.2% THC, however, it cannot be smoked or eaten.[9]

In October 2015, Croatia legalized medicinal cannabis for patients with cancer, multiple sclerosis and AIDS. Turkey legalized medicinal cannabis in 2016. In March 2017, Germany legalized cannabis for medicinal purposes and licensure is required to cultivate and supply this market. In Poland, Cannabis was decriminalized in 2017 and in Greece it was legalized in that same year.[9]
The Netherlands has a permissive drug policy that tolerates smoking cannabis under strict terms and conditions. However, the production, possession, sale, import, and export of cannabis is still officially illegal.[10]

In considering countries that are in close proximity to the African continent, Israel is easily the

global leader in medicinal marijuana research. Scientists in Israel are looking at Cannabis and its effects on patients with multiple medical conditions including Parkinson's disease, asthma, insomnia, post-traumatic stress disorder and irritable bowel syndrome along with many other disorders. In that setting cannabis is legalized for medical use, medical research and medical products can also be exported. [9] The first cannabis expo was recently opened in Pretoria, South Africa on December 13, 2018, without any cannabis plant on show. In September 2018, the constitutional court in South Africa decriminalized the use and cultivation of cannabis in private spaces only. Cannabis cannot be displayed in public.[11]

In Southeast Asia, in countries such as India, medicinal cannabis use is integrated in their Ayurvedic Medicinal System. In essence, cannabis use is still an integral part of the Indian culture, yet federally, it is still regarded as illegal.[8] Thailand legalized cannabis for medical purposes in December 2018. Medical cannabis was unanimously approved by its military government making it the first country in Southeast Asia to have done so.[12] This is noteworthy because prior to this, drug use in Thailand was punishable by the death penalty.[12] Cannabis sativa is one of the 50 fundamental herbs used in traditional Chinese herbal therapy and its use dates back some 4000 years.[12] Similarly, in Australia, the medicinal use of cannabis is decriminalized.[13]

Essentially the green wave of cannabis legislative reform has impacted at least six of the seven continents globally.

CARICOM Marijuana Commission Report

The CARICOM Marijuana Commission was established by the decision of the CARICOM Conference of Heads of Government at its Thirty- fifth Regular Meeting held from July 1-4, 2014, and was mandated to: (1) conduct a rigorous enquiry into the social, economic, health and legal issues surrounding cannabis use in the Caribbean, and to determine whether there should be a change in the current drug classification of cannabis, thereby making the drug more accessible for recreational, religious, research and medical use; and (2) recommend if there should be a re-classification along with the legal and administrative conditions that should apply.

Three (3) Commissioners of the CARICOM Marijuana Commission travelled to the Federation on Thursday November 16, 2017 for a full day of four consultative meetings. The three Commissioners were: (1) Professor Rose- Marie Antoine (Chairperson/ Commissioner);
(2) Bishop Simeon B. Hall; (3) Mr. Lennox F. Franklin.' The Commission conducted similar meetings in all other CARICOM territories and submitted their final report at the 39th Conference of Heads of Government for the Caribbean Community which was held in Jamaica in July 2018. The CARICOM Commission recommended that each member state, in accordance with its own circumstances, should determine the path it will pursue regarding cannabis legislative reform. The link to the final report is provided in ***Appendix # 2.***

St. Kitts and Nevis National Cannabis Commission

The pervasive use of cannabis/ marijuana despite the present legislation, (Prevention and Abatement of the Misuse & Abuse of Drugs Act) is of great public concern. The controversial issues surrounding cannabis use and the growing wave of cannabis legislative reform internationally and regionally, resulted in the genesis of the St. Kitts and Nevis National Cannabis Commission. The Commission was announced on April 5th, 2017 and the first meeting was held on October 5th, 2017.

The Commission comprises: Dr. Hazel Laws, Chief Medical Officer (Chair); Mrs. Michele De La Coudray Blake, Director Counselling Unit, Ministry of Community Development, Social and Gender Affairs; Dr. Garfield Alexander, President, St. Kitts & Nevis Medical & Dental Association; Mr. Andre Mitchell, Assistant Commissioner of Police (Law Enforcement); Samande 'Ras Iya' Reid, Representative of the Rastafarian Religion; Ms. Kenisha Flemming, Representative of the St. Kitts National Youth Parliament Association (SKNYPA); Mrs. Joan Browne, Assistant Secretary, Ministry of Finance, Nevis Island Administration; Mrs. Karimu Byron Caines, Director, National Council on Drug Abuse Prevention; Mr. Curtis Francis, Counsellor, Ministry of Education; Mr. Charles Wilkin QC, Former President St Kitts & Nevis Bar Association; The Rev. Canon P. Allister Rawlins, The Anglican Parishes of St. Paul's & St. John, St. Kitts (Clergy from Nevis); and Dr. Julie Graves, Associate Professor of Epidemiology, Ethics & Behavioral Science (UMHS – St Kitts)

Methodology

The St. Kitts & Nevis (National) Cannabis Commission (SKN-CC) was mandated by Cabinet to host a series of consultative meetings throughout the Federation. The purpose of these meetings was: (i) to engage the populace; (ii) share the facts and latest evidence regarding the medical, social and economic implications of cannabis use and; (iii) ascertain the participants' positions on these complex issues, and (iv) write a final report for submission to CABINET.

To accomplish this, the Commission: (1) Hosted a series of thirteen (13) Town Hall Meetings in most health districts within The Federation; (2) Hosted eight (8) Focus Group Discussions with key stakeholders and special interest groups including: the St. Kitts & Nevis Medical & Dental Association (SKMDA), Law Enforcement (St. Christopher and Nevis Customs and Excise Department, St. Kitts and Nevis Defence Force, Royal St. Christopher and Nevis Police Force), Religious Groups (Evangelic Association, Christian Council, Rastafarian Communities),Youth Groups: (St. Kitts and Nevis Youth Parliamentary Association (SKNYPA), Anglican Young People's Association (AYPA)), Business Fraternity, St. Kitts and Nevis Chamber of Industry and Commerce (SKNCIC), Bankers Association (Eastern Caribbean Central Bank (ECCB) and SKN Bankers Association), The St. Kitts and Nevis Bar Association and teachers from high and primary schools.

At each of these stakeholder/consultative meetings, a data collection instrument was utilized to capture the position of each attendee. This 'Instrument of Engagement' form had a few questions to be answered and the possible recommendations from each person completing the form. ***(Appendix #3)***

A national Prevalence of Use Survey was conducted between March and May of 2018. The aim of this study was to objectively ascertain the prevalence of use of cannabis in the population along with other relevant information pertaining to its use. The survey instrument also captured data regarding the population's position regarding legislative reform. ***(Appendix #4)*** The methodology

utilized by the St. Kitts & Nevis Cannabis Commission (SKN-CC) was guided by the work and best practices of previous cannabis commissions in the region and internationally including: (1) Jamaica's National Ganja Commission (regional); and (2) Canada's Task Force on cannabis Legislations and Regulation. The general public was also encouraged to make independent submissions (memoranda) to the SKN-CC and these are included in (***Appendix # 5).*** Consultants were also engaged to inform the process. ***(Appendices #6-8)***

This report provides a comprehensive yet succinct documentation of the findings of the SKN-CC after exhaustive analysis of the local cannabis situation along with the general health effects, psychological/ mental health effects, social, religious, financial, financial/ economic and human rights implications of cannabis use.

CHAPTER 2

Cannabis – The Local Situation

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Acknowledgements:

- Mr. Carlton Phipps, Senior Statistician, Ministry of Sustainable Development
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The St. Kitts & Nevis National Cannabis Commission conducted a national Prevalence of Use' Survey during the months of April & May 2018. The methodology utilized in conducting this survey is delineated in ***Appendix #4*** . The aim was to ascertain information regarding the level of use of cannabis in the federation along with factors and circumstances related to its use. The status of cannabis use in the Federation can be described as outlined below.

A. Prevalence of use of Marijuana in the Federation

The findings of the survey indicate that the prevalence of the use of cannabis in the Federation at present is approximately 28%.

Table 1: Showing number of respondents presently using marijuana/ cannabis

Question	Responses	Island			
		Nevis	St. Kitts	Total	Percentage
Do you use Marijuana Presently?	Yes	110	436	**546**	28.0 %
	No	422	959	**1,381**	70.7%
	Not Stated	8	18	**26**	1.3%
TOTAL		**540**	**1,413**	**1,953**	**100.0%**

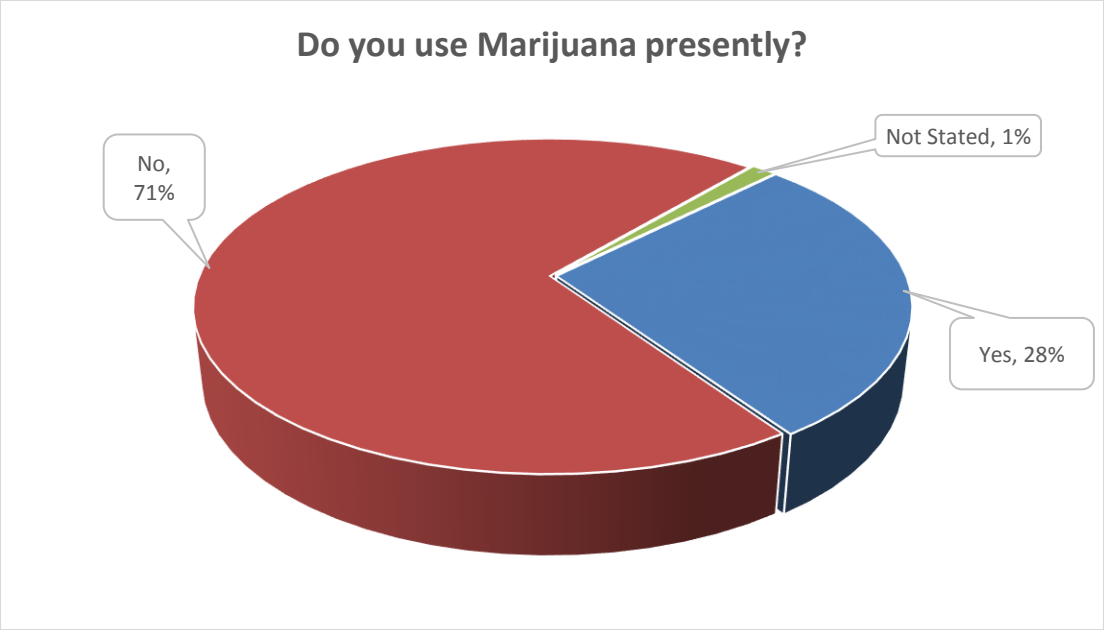

Figure 1: showing proportion of respondents using marijuana/ cannabis at present.

Almost 45 % of the respondents indicated that they used marijuana/cannabis at some time in the past.

Table 2: Showing the number of respondents who reported using marijuana/cannabis in the past

Question	Responses	Nevis	St. Kitts	Total	Percentage
Have you ever used Marijuana in the past?	**Yes**	205	671	**876**	**44.9%**
	No	332	733	**1,065**	54.5%
	Not Stated	3	9	**12**	0.6%
Total		**540**	**1,413**	**1,953**	100.0%

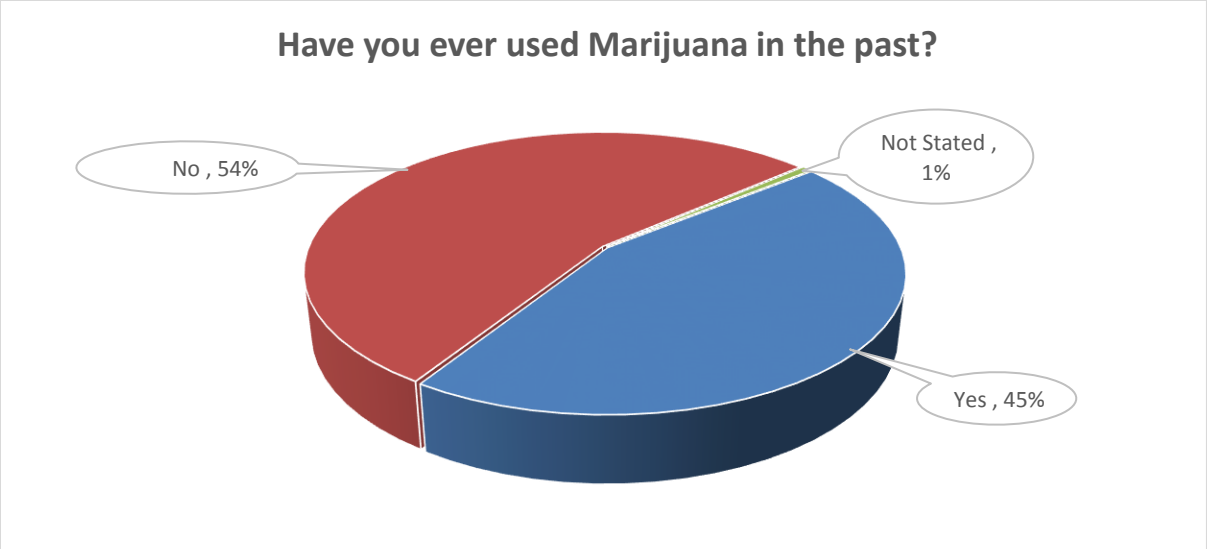

Figure 2: Showing the proportion of respondents who reported using marijuana in the past.

B. Age of Initiation

The study revealed that almost 30% (N=556) of the respondents were within the age range 10 to 19 years of age when they first started using marijuana .

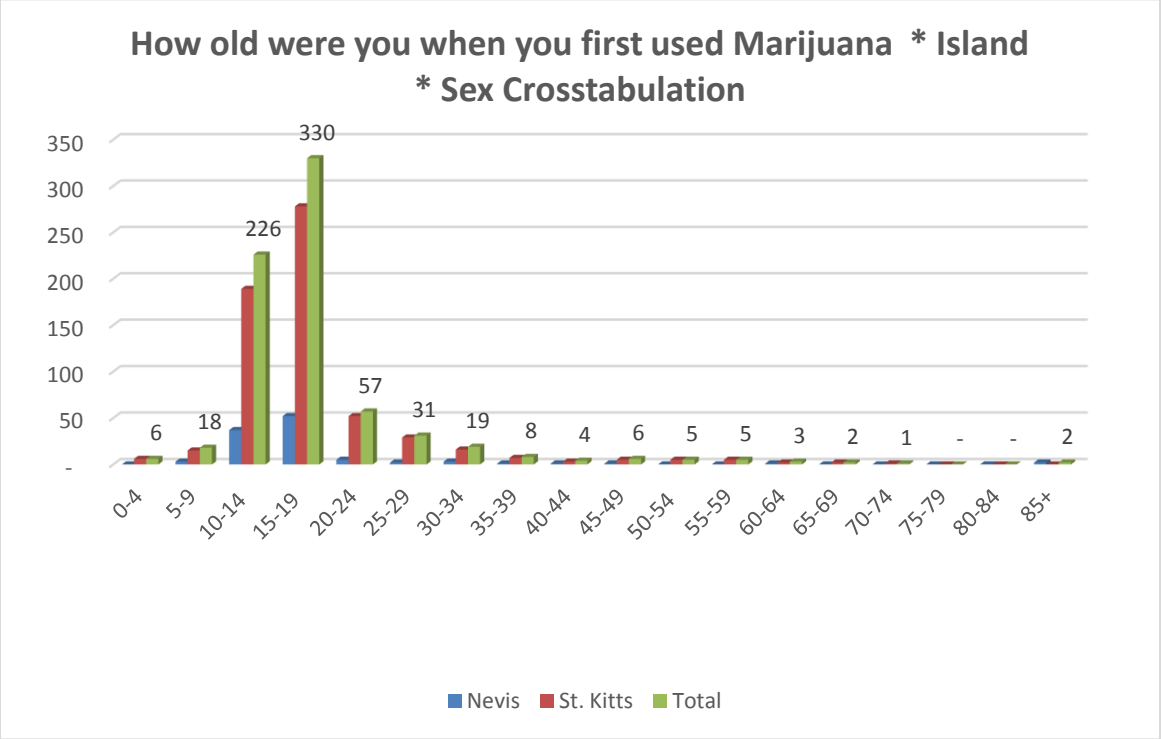

Figure 3: Showing the age of initiation of using cannabis

C. Preferred method of using cannabis

Almost 81% of the respondents indicated that smoking is the preferred method of using cannabis. (Table 3 & Figure 4) Majority of the respondents who use cannabis use it on a daily basis (Figure 5)

Table 3: Showing the preferred method of using Cannabis/Marijuana

Question	Responses	Nevis	St. Kitts	Total	Percentage
What is your preferred method of using marijuana?	Smoking	87	451	538	80.9%
	Tea	15	96	111	16.7%
	Pipe	0	1	1	0.2%
	Food	1	8	9	1.4%
	Vaporizer	1	0	1	0.2%
	Other	0	5	5	0.8%
	None/ Not Stated	436	852	1,288	**665 Users**
Total		**540**	**1,413**	**1,953**	

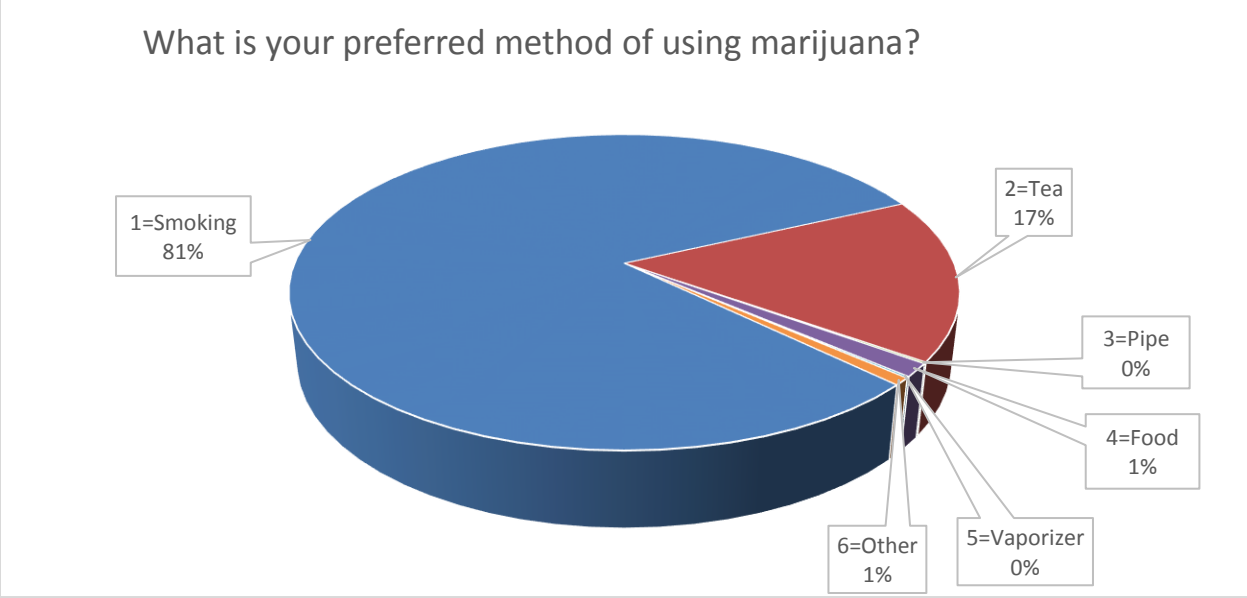

Figure 4: Showing the preferred methods of using marijuana/ cannabis

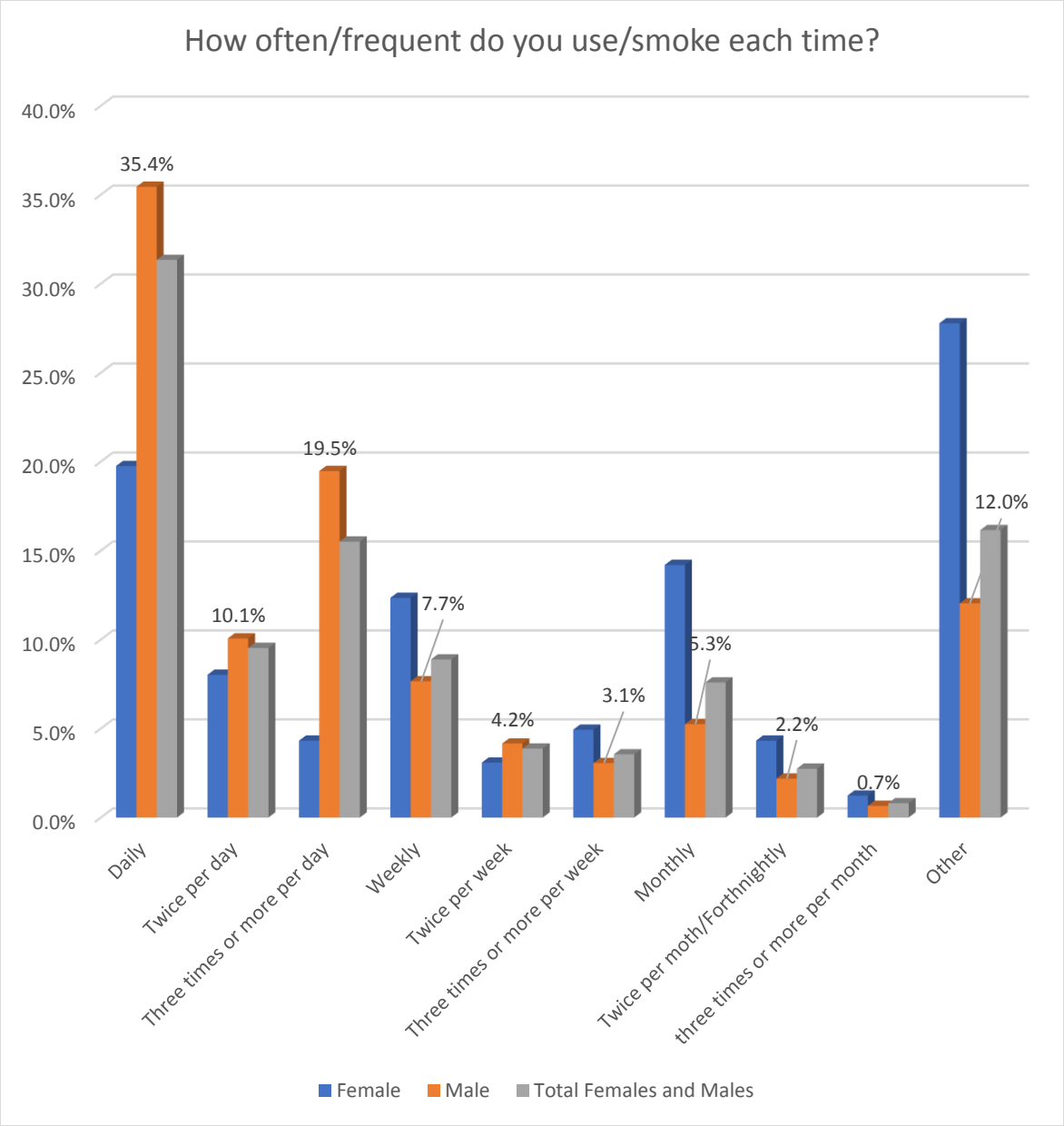

Figure 5: Showing the frequency of use of cannabis

The Local Situation based on data from Law Enforcement (Give source with exact terminology)

Data from Law Enforcement revealed that there was an increase in the number of cannabis related arrests and convictions over the ten-year period 2008 to 2017. (Table 4)

Table 4: Showing local data regarding cannabis related arrests and convictions from the Criminal Records Office, Royal St. Christopher and Nevis Police Force.[1]

The Local Situation			
Year	**Arrests**	**Convictions (Possession/Cultivation/ Importation)**	**Amount seized (plants)**
2008	158	32	-
2009	254	92	-
2010	206	42	81,500
2011	310	80	104,223
2012	333	90	93.188
2013	284	90	75,204
2014	222	82	91,507
2015	181	50*	170,00
2016	257	62*	200,000
2017	372	40*	Not determined
Total	2,577	660	815,622

In 2013, a secondary school drug prevalence study (Secondary School Drug Prevalence Survey, 2013) was conducted in six secondary schools in St. Kitts and two in Nevis. At that time, twenty-four percent (24%, N=148) of the respondents stated that they have used cannabis at least once. The study also confirmed that there was a 10% increase in lifetime prevalence of using cannabis between 2006 and 2013.[2] At that time the average age at which the school age respondents first used cannabis was 12 years (see Figure 6).[2]

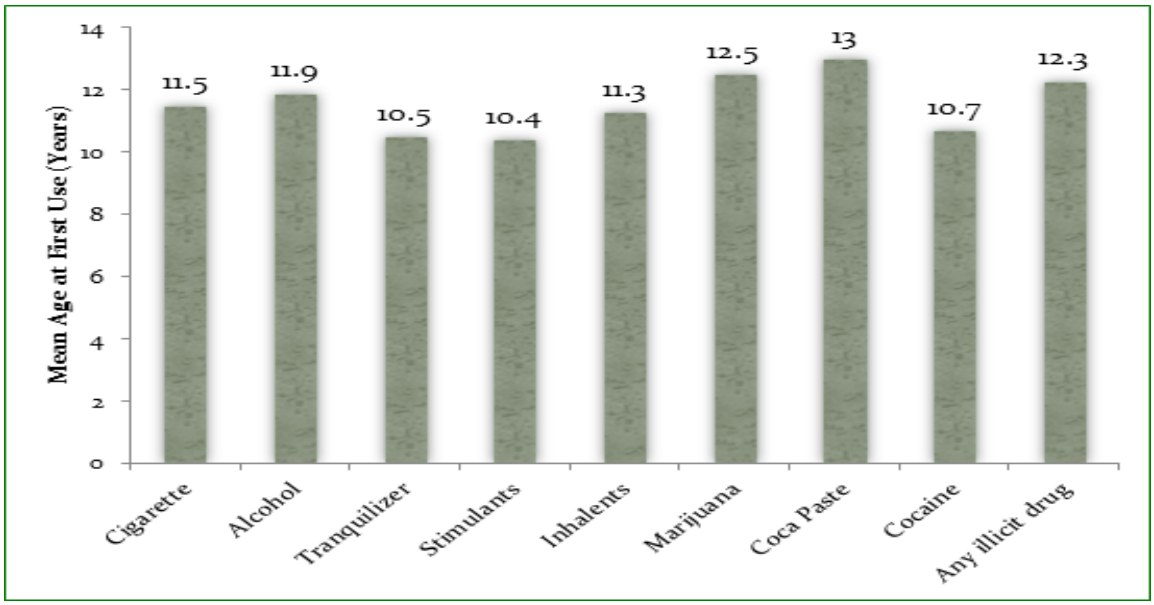

Figure 6: Showing the Average age of persons engaged in the first Use of Substances

In essence, the prevalence of the use of cannabis among the respondents was 28%, and 45% admitted to having used cannabis at some time in the past. Almost one third of the respondents were in the age range 10 to 19 years when they first started using cannabis. Smoking is the preferred method of using cannabis locally.

CHAPTER 3

Cannabis and its Health Effects

Authors:

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Use of Cannabis during the Pre- modern Era

Cannabis was recognized and utilized as early as the third century B.C. in Indian Ayurvedic medicinal practices to treat migraine headaches, spasmodic abdominal pains, improve the flow of urine, and as an analgesic. An Indian surgeon, Susruta noted that cannabis dried up mucous discharge.[1]

In 1563, a Portuguese physician Garcia da Orta, journeyed to India and grew resinous Cannabis for medicinal and therapeutic purposes. He documented his experience in a scientific paper.[2] In 1645, another article was published, "The *Compleat Herbal*," highlighting the beneficial effects of cannabis on cough, jaundice, colic, worms, burns, inflammation and painful joints. [3]

Dr Louis Aubert – Roche, a physician, used cannabis / hashish to treat plague, typhoid fever and other physical conditions. He summarized his findings in his book that was published in 1840. [4] By 1845, another early researcher, psychologist Jacques- Joseph Moreau de Tours, published findings of his careful study of the psychological and mental effects of hashish on himself and other individuals.[5]

In 1842, researcher and surgeon, William B. O'Shaughnessy, summarized his research findings in a monograph on 'gunjah' or cannabis. Dr. William B. O'Shaughnessy, was an Edinburgh Medical School alumnus who lived in Calcutta, India and was sensitized to the cultural uses of cannabis in that society. As a scientist, he systematically tested its effects on animals and humans and soon confirmed the folk uses and even discovered new indications, including the treatment of pain caused by rheumatism and convulsions in infants. He is accredited for bringing/ introducing cannabis to Britain, and the telegraph to India. [6]

Between 1840 and 1900 more than 100 articles about cannabis and its therapeutic effects were published. [4] These pre-modern era findings are congruent with the new scientific research findings which are being unearthed at present.

Cannabis Use in the Modern Era

Cannabis: technically refers to the plant species Cannabis sativa, Cannabis indica, Cannabis ruderalis, and all its other industrial, medicinal and recreational varieties or cultivars. [7,8]

'**Cannabis'** is also considered a generic term that denotes the several psychoactive preparations (marijuana/weed, hashish and hash oil) derived from the various species/ varieties/ cultivars of the cannabis plant. The different cannabis formulations are described as follows:

(1) '**Cannabis resin**'- is a natural product obtained from the cannabis plant by separating and compressing the resin glands or trichomes of the female plant. The resin trichomes appear translucent in color when near their THC concentration peak. This determines the time of harvest. The resin can be crude or purified and this depends on the method of separation that is utilized;

(2) **Marijuana or weed** – is a hand rolled cigarette or 'joint' prepared from dried flowery tops and leaves of plants. Smoking remains the most common method of using cannabis; (3) **Hashish-** is derived from the resin of the flowering heads of the cannabis plant which is usually dried. [7,8]

Hemp or Industrial Hemp- is Cannabis Sativa L. which is a distinct variety / specie / cultivar of the cannabis sativa plant which is cultivated specifically for the production of a range of products like fabric, paper, textiles, construction materials etc. **Legally, hemp or Industrial Hemp-** is Cannabis Sativa L or any part of such a plant with a delta- 9 tertra hydro cannabinol (THC) concentration of less that 0.3% on a dry weight basis, and it has a high concentration of cellulose. This is the legal definition used in US & EU jurisdictions. [7,8]

Cannabis consists of two main classes of components namely cannabinoids and terpenes. The Cannabinoids refer to a class of unique chemical compounds (Phytocannabinoids) found in the

cannabis plant, that act on the cannabinoid receptors in cells in the human body to modulate neurotransmitters which are released in the brain, and consequently, these result in a range of psychological and physiologic effects. Synthetic (non- plant derived) cannabinoids can also be developed in laboratories.

The Endocannabinoid System (ECS)

The Endocannabinoid System (ECS) refers to the internal system through which endogenous cannabinoids exert their influence. It plays an important role in our bodies whereby it influences the function of our central and peripheral nervous systems. The ECS helps to regulate psychological activities including: memory (short term), coordination, movement, behaviors, attention, language and other cognitive functions like problem solving, decision making, judgement and reasoning.

There are naturally occurring endogenous endocannabinoids like anandamide, which is a potent agonist of Cannabinoid (CB) 1 receptors which are found primarily in the central nervous system. CB 2 receptors seem restricted to cells of the peripheral immune system.

Cannabis derived cannabinoids, or phytocannabinoids, mimic the effects of the endo-cannabinoids. The cannabis plant has over 100 cannabinoids and the three main ones are:

1. Delta-9 Tetrahydrocannabinol (THC)
2. Cannabidiol (CBD)
3. Cannabinol (CBN)

There are six (6) other major ones including: (1) Cannabigeral (CBG); (2) Cannabichromene (CBC); (3) Cannabigerivarin (CBGV); (4)Tetrhydrocannabivarim (THCB); (5) Cannabidivarin (CBDV); (6) Cannabichromevarin (CBCV). The crystals seen on the plant are called tricomes and these contain the cannabinoids. ***(Appendix #7)***

Cannabis can be consumed by smoking (most common method) or by ingestion. The blood levels of the cannabinoids (THC or CBD) peak at approximately 12 minutes after inhaling or smoking. However, the blood levels of THC peak at about four (4) hours after ingesting.

Non-Medicinal effects of Cannabis on the Human Body throughout the life course

Pregnancy and Breastfeeding

Generally, brain development begins a few weeks after conception and continues through to early adulthood to about 24 years [9]. During the prenatal phase of life, the development of the fetal brain takes place mainly under genetic control, however, toxins can have a deleterious influence at this stage of life [9]. Biological evidence shows that THC traverses the placenta of the pregnant female who smokes/uses cannabis. The fetus absorbs and metabolizes the THC. THC is also excreted in the breast milk of the woman who uses cannabis. There is moderate evidence showing that maternal use of cannabis during pregnancy is associated with some adverse outcomes in the exposed offspring including:

1. Decreased growth and lower birthweight; and
2. Reduced cognitive functions due to problems in brain development.

Children

Early childhood is a critical period for the development of the healthy brain [9]. The foundations of the sensory and perceptual systems are completed during these early years which determine language, social behavior and emotions later in life. Children 0-10 years are often impacted by cannabis through unintentional exposures. Adults who use/smoke marijuana in the home frequently leave the ends of the hand rolled spliff sometimes called a 'roach' in a tray that is usually easily accessible to young children. In our local study, many persons advised that they were initiated into using cannabis at a young age in this manner.

Unsafe disposal of ends of the hand rolled cigarettes/spliffs by adults in the home increases the risk of children initiating the use of cannabis at a young age.

Adolescents

Several research studies have revealed that cannabis adversely affects the young, developing brain. The young brain develops by the building/formation of connections or neural networks. Higher level brain processes including memory, decision making, and emotion, depend on and are built on lower level processes like sensory and perceptual development (e.g. discrimination of sounds) which would have occurred in early childhood. Brain development occurs through a hierarchical wiring process.[9] It is also interesting to note that the brain eliminates neural connections that are rarely, or never used. [9]

Research studies have confirmed that cannabis adversely affects the formation of neural connections necessary for normal functioning. These adverse effects include impaired thinking, learning, challenges with memory and problem solving (maths). Teenagers who smoke cannabis weekly or more frequently tend to: (1) perform lower on intelligence tests; (2) achieve poorer academic performance; (3) have lower educational achievements (failure to graduate from high school or attain a college degree). [10]

Cannabis use during adolescence is also associated with the development of psychotic symptoms in adulthood including hallucinations, paranoia and delusional beliefs. [10] Adolescents who use cannabis are also at increased risk of developing schizophrenia. [10] The latest evidence also reveals that adolescents who stop using cannabis reduce their risk of adverse cognitive and mental health effects compared to those who are persistent with the habit. [10] ***(Appendix #7)***

Non-medicinal effects of Cannabis Use in Adults

Respiratory system

Studies show that smoking cannabis results in bronchial dilation and this occurs in proportion to the dose of THC. [11] Based on the latest evidence, cannabis-only smokers are not at risk for developing Chronic Obstructive Pulmonary Disease (COPD) but they can develop chronic bronchitis. [7]

Cannabis users who have switched to vaporizing seem to have fewer respiratory symptoms and improved pulmonary functions.[10] More research needs to be conducted looking at the effects of exposure to second hand cannabis smoke.

Cardiovascular System

Cannabis use causes an increase in heart rate and blood pressure. Studies have shown that older adults with underlying heart disease may have an increased risk of developing myocardial infarction and cere-brovascular accident. [7, 10]

Long Term Cannabis Use and Dependence

Persons who initiated cannabis use in adolescence have an increased risk of developing cannabis dependence (estimated risk of 16%). [7] Cannabis dependence is a cluster of behavioral, cognitive and physiological characteristics that are exhibited after persistent use of this substance.[7]

Cannabis Use and Driving

Research Data reveal that occasional smokers of cannabis experience significant driving impairment immediately after smoking.[7] It can take up to six (6) hours after smoking cannabis for driving impairment to resolve.[10] It can take up to eight (8) hours post ingestion of an edible cannabis product for driving impairment to resolve.[10] In-depth analysis of a number of research studies revealed that recent cannabis use is associated with an increased (double) risk of a car crash.[12] However, several studies have looked at crash rates post legislative reform in States such as Washington and Colorado. They concluded that the risk of motor vehicle accidents associated with cannabis use is still uncertain.[13] There is consensus that more research is needed to fully understand the association between cannabis use and driving impairment.[13] Some US states have developed drug- impaired driving laws. However, they vary and are proving difficult to enforce.

Cannabis & Medication Interaction

There is sufficient evidence confirming that cannabis interacts with prescription medications including:

Chlorpromazine, Clobazam, Clozapine, CNS depressants like benzodiazepines, Disulfiram, Hexobarbital, Hydrocortisone, MAO inhibitors, Phenytoin, Protease inhibitors like Indinavir, Nelfinavir, Theophylline, Tricyclic antidepressants, and Warfarin. However, more research needs to be done to provide additional information about the cannabis- drug interactions.[10] ***(Appendix #7)***

The Medicinal / Medical Effects of Cannabis

There is strong evidence in the medical literature regarding the efficacy of medical/ medicinal cannabis in treating patients with the following medical conditions [14-19]: (1) chronic pain from rheumatoid arthritis and neuropathic or nerve pain, (2) HIV /AIDs with anorexia, (3) Nausea and vomiting associated with cancer chemotherapy, (4) Glaucoma, (5) Muscle spasticity associated with multiple sclerosis and (6) Epilepsy and seizures, especially in children with Dravet and Lennox-Gastaut syndromes.[17]

Epidiolex is the first cannabis plant-derived medication approved in June 2018 by the US Food and Drug Administration. This prescription medication is now available in all US States and it is approved for use in children two years and over who suffer with the medical conditions: (1) Dravet Syndrome and (2) Lennox- Gastaut Syndrome which are characterized by intractable seizures. Epidiolex is presently classified as a Schedule V substance.[18] Sativex oral spray is another cannabis plant-derived product that has achieved regulatory approval in at least 30 countries outside of the USA including many European countries. It is approved for use in patients diagnosed with nerve pain and multiple sclerosis.

At present, opioid addiction and overdose are public health challenges in the United States. It is felt that an increase in the practice of prescribing a cannabis derived product for severe chronic pain versus an opioid, is one intervention that has the potential to abate the scourge of opioid overdose which affects hundreds of Americans daily.[19]

Globally, there are medical research projects presently investigating the efficacy of cannabis plant- derived products in the treatment of an expanding number of medical conditions including: Cancer, Alzheimer's disease, Post Traumatic Stress Disorder, Crohn's Disease, Eating disorders such as anorexia, Spinal Cord Injury, Insomnia and even obesity.

CHAPTER 4

Mental Health Implications of use & abuse of Cannabis

Authors:

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Marijuana Use and Mental Health

This section reviews the literature and research findings related to marijuana and various mental health conditions. It attempts specifically to determine the level of association between the two; the impact of marijuana use on the developing brain of the youth; the cognitive impact of marijuana intoxication, and some findings regarding the local perspective analyzed from data received through mental health and drug counsel entities. Serious consideration must be given to cannabis legislative reform and any potential impact this may have on the mental health of the populace.

The Link between Marijuana and psychiatric disorders:-

The following is a synopsis of the Canadian Task Force on Cannabis Legalization and Regulation. It summarizes some findings assessing whether or not there is a link between Marijuana use and the development of Psychiatric disorders, and its short and long term impact on cognitive functioning.[1]

The strongest evidence to date concerns links between marijuana use and substance use disorders, and between marijuana use and psychiatric disorders in those with a pre-existing genetic condition or those with other vulnerabilities.

Research using longitudinal data from the National Epidemiological survey on alcohol and related conditions, examined the association between marijuana use, mood and anxiety disorders and substance use disorders. After adjusting for various confounding factors, no association between marijuana use and mood and anxiety disorders was found.

Recent research has noted that people who use marijuana and carry a specific variant of AKT1 gene, which codes for an enzyme that affects dopamine signaling in the striatum (an area of the brain that becomes activated and flooded with dopamine when certain stimuli are present), are at increased risk for developing psychosis.

One study found that the risk of psychosis among those with this variant was seven (7) times higher for those who used marijuana daily compared with those who used it infrequently or used none at all. [2]

Determining whether adolescent marijuana use could contribute to developing psychosis later in adulthood, appears to depend on whether a person already has a genetic based vulnerability to the disorder.

Marijuana use has also been shown to worsen the course of illness in patients who already have schizophrenia. [1]

Marijuana can produce an acute psychotic reaction in non-schizophrenic people who use marijuana, especially at high does, although this fades as the drug wears off. [1]Inconsistent and modest associations have been reported between marijuana use and suicidal thoughts and attempted suicide in teens.[1]

Marijuana also has been associated with motivational syndrome, defined as a diminished or absent drive to engage in typically rewarding activities. Because of the role of the endocannabinoid system in regulating mood and reward, it has been hypothesized that brain changes resulting from early use of marijuana may underlie these associations, but more research is needed to understand them and verify that such links exist. [1]

Adverse Consequences of Marijuana Use

Acute (present during intoxication)

- Impaired short-term memory
- Impaired attention, judgment and other cognitive functions

- Impaired coordination and balance
- Increased heart rate
- Anxiety, paranoia
- Psychosis (uncommon)

Persistent (lasting longer than intoxication but may not be permanent)

- Impaired learning and coordination
- Sleep problems

Long Term (cumulative effects of repeated use)

- Potential for marijuana addiction
- Impairments in learning and memory with potential loss of IQ (the loss of IQ among individuals with persistent marijuana use disorder who began using heavily in adolescence)
- Increased risk of schizophrenia in persons with a genetic vulnerability (these are often reported co-occurring symptoms/disorders with chronic marijuana use. However, research has not yet determined whether these mental problems are caused by marijuana or just associated with it.[1]

Hall and Degenhardt, noted researchers in the field of Cannabis use and its effects on mental health, spent time analyzing the literature regarding cannabis use in adolescents and its association with the development of psychotic disorders. They looked at longitudinal studies in order to determine levels of association between the two. The studies controlled for confounding characteristics, including other forms of drug use, and personal characteristics.[3]

The findings suggested consensus that regular cannabis use, especially in adolescence, was related to the development of psychosis. While these studies are convincing in relation to the association between the two, debates still persist about the causal relationship between cannabis use and the development of psychoses, with arguments suggesting that cannabis use is just one factor among many other complex factors in the development of psychoses.[3]

Determining a 'cause and effect' relationship between cannabis use and psychosis is complex, because so many factors converge to create vulnerability to mental health illnesses like schizophrenia. Consequently, the issue of determining the relationship is still a controversial one, with a lot of work still needing to be done in this area.

Even with the ongoing controversy in trying to determine the relationship between cannabis use and psychosis, the consistent finding of an association between the two makes ***chance*** alone an unlikely explanation for the relationship, with new prospective studies showing cannabis use often preceding psychosis.[3]

Longitudinal Studies

The strongest evidence that cannabis use is a contributory cause of schizophrenia comes from longitudinal studies of large representative samples of the population who have been followed over time to see if cannabis users are at higher risk of developing schizophrenia. The earliest such study was a 15-year prospective investigation of cannabis use and schizophrenia in 50,465 Swedish conscripts. The study found that those who had tried cannabis by age 18 were 2.4 times more likely to be diagnosed with schizophrenia than those who had not, and the risk of this diagnosis increased with the frequency of cannabis use. The risks were substantially reduced but still significant after statistical adjustment for variables that were related to the risk of developing schizophrenia.

Zammit et al reported a 27-year follow-up of the Swedish cohort that also found a dose-response relationship between frequency of cannabis use at baseline and risk of schizophrenia during the follow-up. The relationship between cannabis use and schizophrenia persisted when the authors statistically controlled for the effects of other drug use and other potential confounding factors, including a history of psychiatric symptoms at baseline. Assuming a causal relationship, and given current patterns of use, they estimated that 13% of cases of schizophrenia could be averted if all cannabis use were prevented.

A recent British and a Swiss study reported suggestive evidence of an increased incidence of psychoses among males in recent birth cohorts with the highest rates of cannabis use in adolescence.

Given residual uncertainties about the evidence for a causal relation between cannabis and psychosis, we need to consider the possible costs and benefits of different policy actions. This suggests that it is good policy to encourage young individuals to avoid using cannabis or at least to delay such use until early adulthood. If the relation is truly causal, the public health gain (a reduction in schizophrenia incidence) would arguably offset the foregone pleasure among those young individuals who either did not use cannabis or delayed using it until young adulthood. This argument makes a good case for discouraging cannabis use among young individuals, but it leaves room for disagreement about the best method of achieving this goal in particular population groups.

Regular cannabis use predicts an increased risk of schizophrenia, and the relationship persists after controlling for confounding variables. The relationship is unlikely to be explained by self-medication. There is increasing evidence that the association is biologically plausible, but given the complex nature of the etiology of schizophrenia and related disorders, it is unlikely that the relationship will be due to an interaction between cannabis use and a single gene. Uncertainty about the biological mechanisms should not distract us from using educational, psychological and social interventions to reduce the use of cannabis by vulnerable young people and thereby reduce the risk of problems related to its use. [4]

Mental health problems

While the report notes some research suggesting that using marijuana might increase the risk of developing schizophrenia or other social anxiety disorders, the committee of scientists cautions that there may be other explanations for that link; it could simply be, for example, that people with these mental health problems are more likely to smoke marijuana, as a way of self-medicating to lessen the symptoms of mental health disorders. [2]

Assessing the risks

Risk is inherent in all discussions on the health effects of cannabis, yet our understanding of risk is constrained by more than 90 years of prohibition, which has limited our ability to fully study cannabis. [2]

Risks to children and youth:

Generally speaking, studies have consistently found that the earlier cannabis use begins, and the more frequently and longer it is used, the greater the risk of potential developmental harms, some of which may be long-lasting or permanent.

Risks to vulnerable populations:

Studies have found associations between frequent cannabis use and certain mental illnesses (e.g., schizophrenia and psychosis) and between frequent cannabis use during pregnancy and certain adverse cognitive and behavioural outcomes in children

Considerations

Research suggests that cannabis use during adolescence may be associated with effects on the development of the brain. Use before a certain age comes with increased risk. Yet current science is not definitive on a safe age for cannabis use, so science alone cannot be relied upon to determine the age of lawful purchase.

Recognizing that persons under the age of 25 represent the segment of the population most likely to consume cannabis and to be charged with a cannabis possession offence, and in view of the Canadian Government's intention to move away from a system that criminalizes the use of cannabis, it is important, in setting a minimum age, that we do not disadvantage this population.

There was broad agreement among participants and the Task Force on Canadian legalization and regulation that setting the bar for legal access too high could result in a range of unintended consequences, such as leading those consumers to continue to purchase cannabis on the illicit market.

For these reasons, the above-mentioned Task Force is of the view that the federal government in Canada should set a minimum age of 18 for the legal sale of cannabis, leaving it to provinces and territories to set a higher minimum age should they wish to do so.

To mitigate harms between the ages of 18 and 25, (a period of continued brain development), governments should do all that they can to discourage and delay cannabis use. Robust preventive measures, including advertising restrictions and public education, all of which are addressed later in this chapter, are seen as key to discouraging use by this age group. [5]

A synopsis of our local situation, as analyzed by information obtained through Community Mental Health and the National Council on Drug Abuse Prevention, has indicated the following:

Based on an Initial Assessment carried out by the National Council on Drug Abuse Prevention and the Drug Prevention and Treatment Services Group in 2016, Schizophrenia with Marijuana Dependence is the leading mental illness seen at the community level.

It is also important to note, at the Community level, the following concerns were reported [5 & 6]:

- High numbers of comorbid illnesses with alcohol and marijuana
- Lack of understanding and knowledge of illnesses by patients and family members
- Lack of familial support
- The ease of availability and accessibility of marijuana, alcohol and other drugs
- No adequate treatment or rehabilitation center in the Federation[5 & 6]

This information was gathered through interviews with key informants, including community nurses, Deputy Matron of JNF Hospital, the Psychiatric Nurse, CMO and Drug Prevention Specialists. The Community Mental Health report also supports these findings.

CHAPTER 5

Social Implications of Cannabis use and Law Enforcement

Authors:

- Ms. Karimu Byron Caines
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According to the ***"Drug and Criminal Behavior: Exploring the linkages within the Prison Population of St. Kitts and Nevis, 2012"*** which was carried out at Her Majesty's Prison, St. Kitts:

- 52% of the prisoners in the combined sample (convicted and on remand) who confirmed the existence of a relationship between their crimes and drugs, stated that they were under the influence of a drug or were intoxicated when the crime for which they are imprisoned was committed.
- More than 50% of the convicted prisoners who confirmed that they were under the influence of a drug when they perpetrated their crimes, claim to have been under the influence of alcohol. 18.2% said they were under the influence of marijuana while 9.1% responded that they were under the influence of cocaine, crack cocaine and tobacco respectively.
- Remand prisoners (repeat offenders) were asked whether or not the crime(s) for which they were previously convicted and imprisoned were committed under the influence of any drugs. Two thirds of respondents said yes while the remaining one third said no.
- The opinions of the convicted prisoners regarding their beliefs about whether the crime would have been committed were they not under the influence of any drugs, 63.6% of the prisoners said that they did not think they would have committed the crime were they not under the influence. 27.3% said they would have committed the crime whether or not they were intoxicated.

The survey ***"Exploring the Relationship between Drugs and Crime: A Comparative Analysis of Survey Data from Prisoners in Four Caribbean Countries – Dominica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines"*** [1] revealed the following:

- Data regarding the self-reported lifetime prevalence of substance use confirmed that the most prevalent drug reported ever used by offenders in all four countries was marijuana. About 68-86% of all offenders had used marijuana at least once in their lifetime: the highest proportion was reported in Dominica and Saint Vincent and the Grenadines, and the lowest proportion overall in Saint Kitts and Nevis (67.9%).[1]
- In every country, repeat offenders reported notably higher proportions of illicit drug use than first-time offenders (12-16 percentage points higher in the case of marijuana).[1]
- Lifetime marijuana use featured prominently in all offences, except for malicious damage in the case of Saint Vincent. In Saint Kitts and Nevis, more than 60% of marijuana use was reported for all offences except sexual offences and physical assault.[1]
- Prisoners overall reported that they began to use marijuana at an early age (mean age of 14). Marijuana was, in many cases, the substance used first, even before alcohol and tobacco. Use of marijuana was prevalent among all inmates and across all categories of offences.[1]
- In light of offender reports that many of them started to use marijuana and alcohol while still adolescents, it is highly recommended that substance abuse prevention programs be stepped up in primary and secondary schools, and in community and religious groups. Life skills programs that teach anger and stress management, resilience and coping skills, and capacity to resist peer pressure can help young people resist drug use and criminal behavior.[1]

Marijuana and Road Accidents and Fatalities:

According to Sewell RA. Et al in "**The Effects of Cannabis Compared with Alcohol on Driving, 2009" [2]:**

- In summary, laboratory tests and driving studies show that cannabis may acutely impair several driving-related skills in a dose-related fashion, but that the effects between one individual and another vary more than they do with alcohol because of tolerance, differences in smoking technique, and different absorptions of THC. Driving and simulator studies show that detrimental effects vary in a dose-related fashion, and are more pronounced with highly automatic driving functions, but more complex tasks that require conscious control are less affected, which is the opposite pattern from that seen with alcohol. Because of both this and an increased awareness that they are impaired, marijuana smokers tend to compensate effectively for their impairment by utilizing a variety of behavioral strategies such as driving

more slowly, passing less, and leaving more space between themselves and cars in front of them. Combining marijuana with alcohol eliminates the ability to use such strategies effectively, and results in impairment even at doses that would be insignificant were they on either drug alone. Case-control studies are inconsistent, but suggest that while low concentrations of THC do not increase the rate of accidents, and may even decrease them; serum concentrations of THC higher than 5 ng/mL are associated with an increased risk of accidents. Overall, case-control and culpability studies have been inconclusive, a determination reached by several other recent reviewers. Similar disagreement has never existed in the literature on alcohol use and crash risk.

Prevalence among our youths:

According to the St. Kitts-Nevis Secondary School Drug Prevalence Survey, 2013, Twenty four percent (24%) of the students stated that they have used marijuana at least once. This shows a 10% increase in the lifetime prevalence of marijuana when compared to the results of the Secondary School Drug Prevalence Survey of 2006.

How does marijuana use affect school, work, and social life?

Research in the past five years has contributed considerable advances regarding cannabis' acute and non-acute effects on human cognition. These studies continue to demonstrate the negative effect of cannabis on learning and memory, in addition to deficits in attention, concentration, and abstract reasoning in both acute and non-acute studies. [3]

Consequently, someone who smokes marijuana daily may be functioning at a reduced intellectual level most or all of the time. Considerable evidence suggests that students who smoke marijuana have poorer educational outcomes than their non-smoking peers. For example, a review of 48 relevant studies found marijuana use to be associated with reduced educational attainment (i.e., reduced chances of graduating). [4]

Several studies have also linked heavy marijuana use to lower income, greater welfare dependence, unemployment, criminal behavior, and lower life satisfaction.[5]

Studies have also suggested specific links between marijuana use and adverse consequences in the workplace, such as increased risk for injury or accidents. One study among postal workers found that employees who tested positive for marijuana on a pre-employment urine drug test had 55 percent more industrial accidents, 85 percent more injuries, and 75 percent greater absenteeism, compared with those who tested negative for marijuana use.[6]

Is Marijuana a gateway drug?

Some studies suggest, like marijuana, alcohol and nicotine also prime the brain for a heightened response to other drugs, and are typically used before a person progresses to other more harmful substances. However, according to the research, only a minority of persons who use marijuana go on to use harder substances. Another argument from research suggests that, it is not necessarily the drug (marijuana, alcohol or nicotine) that is the gateway to harder substances but rather an individual's social environment and the easy access to marijuana, alcohol and nicotine that should be identified as the gateway to harder substances.[7] Basically, the majority of people who use marijuana do not go on to use "harder" substances.

At present, there is no consensus as to the correct answer to this question. Further research is needed to explore whether marijuana itself is indeed a gateway drug as the findings are inconclusive. [7]

Is Marijuana use associated with crime and violence?

Under the current law, cannabis use is invariably one of the contributors to the situation of crime and violence in St. Kitts and Nevis. The mere possession and/or use of specific amounts with knowledge and control, is classified as a crime, whether the circumstances of that infringement point to importation or exportation (Section 4), production and supply (Section 5), possession (Section 6) or cultivation (Section 7) of the law (Prevention and Abatement of the Misuse and Abuse of Drugs Act, Chapter 9.08.).

The police crime statistics (Local Intelligence Office, January, 2017) point to a total of two thousand, five hundred and seventy-seven persons charged with marijuana cases over the period 2008 and 2017. This figure represents 16.6% of total crimes (15,529) for the period.[8]

The said statistics also point to conviction of seven hundred and three persons over the cited period for marijuana cases.[8]

In addition, over eight hundred thousand marijuana plants were seized by way of eradication operations.[8]

The information presented is indicative of the significant contribution of marijuana as a single category of crime to the overall crime situation.

It is therefore necessary for us to examine its relationship to the issue of violence. While there are no known studies which speak to marijuana use associated with violence, or its causal relationship to violence here in St. Kitts and Nevis, crime trends and investigative work undergird the following [8]:

A striking correlation between the crimes of dishonesty (robberies, break-ins and larcenies) and the number of persons criminally charged with marijuana-related offences;

- Criminal investigations point to the mixing of marijuana with other drugs by offenders, thus creating a hype, just prior to the commission of serious offences;
- Criminal Investigations also point to the theft of marijuana cultivated on a large scale, contributing to a number of firearm-related homicides over the last ten years;
- Criminal Investigations reveal that the trafficking in marijuana has led to firearm-related offences over the last twenty-five years

A parallel can be drawn between the local context and that of the United States, as it relates to cannabis, as a contributor to violence.

Gil Kerlikowske, a former White House director of the national drug-control policy in the Obama-led Administration, has indicated that a study finds that marijuana is a drug most often linked to crime.

The 2012 study found that in Sacramento, California, 80% of adult males arrested for crimes, tested positive for at least one illegal drug. Fifty-four percent of those arrested were found to have marijuana in their system.[9]

The study indicates that similar results were found in New York City, Chicago, Denver and Atlanta. A total of 1736 urine samples were taken, and 1,938 interviews were conducted with men who were arrested between the five cities.[9]

In Chicago, 58% of these men were found to have used marijuana, while 37% of the men arrested in Atlanta used cannabis.[9]

Kerlikowske dismissed calls for the legalization of marijuana, characterizing this call as a "bumper-sticker approach" that should be avoided.[9]

In his speech, Kerlikowske said that it was time for the US to acknowledge and come to grips with the link between crime and substance abuse, and ease the burden on the criminal justice system. He further articulated that drug addiction is not a moral failing but a brain disease that can be prevented, treated, and from which people can recover.[9]

The Social Impact of the criminalization of marijuana on the Rastafarian Faith:

According to "Caribbean News Now", Sir Ronald Sanders, Antigua and Barbuda's ambassador to the United States and the Organization of American States (OAS), in an address to the Permanent Council of the OAS on Monday 14th May, informed the OAS that Antigua and Barbuda's Prime Minister, Gaston Browne, has apologised to the Rastafarian community for decades of discrimination against them.

Sanders also informed the Council of other measures that the government has taken and intends to take to enhance the rights of Rastafarians, who are a minority group in Antigua and Barbuda.

Sanders' report is in keeping with the Inter-American Democratic Charter of the OAS, which requires the elimination of all forms of discrimination and intolerance, as well as respect for cultural and religious diversity in the Americas.

"Implementation of the Charter requirement to eliminate discrimination and intolerance contributes to strengthening democracy and citizen participation in all the 34 active member states of the OAS, and the Antigua and Barbuda government is proud to show its deep commitment to the rights of all citizens," Sanders said.

He revealed that Browne readily agreed to his request to be joined on Monday by Ambassador Franklyn Francis, a leading member of the Rastafari community, who would also address the OAS Permanent Council on the actions of the Antigua and Barbuda government.

"When Ambassador Francis – King Frank I – speaks at the OAS Council meeting, it will be an historic first for the Rastafarian community," Sanders said.

"To my knowledge no other Rastafarian has spoken to an international inter-governmental organization before," Sanders added. "We are making history."

In a tweet on the OAS website, he noted that Antigua and Barbuda "has taken steps to recognize the dignity and worth of the Rastafarian community as an integral part of our society."

"Discrimination prevented the Rastafarians from escaping the confines of poverty, denying them the right to explain who they are, what they believed and what role they wanted to play," Sanders said.

The remarks presented by Ambassador Franklyn Francis/ King Frank I, are a reflection of the views of many Rastafarians within the Federation of St. Kitts and Nevis as voiced by members of the Rastafarian Community during town hall meetings and focus group meetings.

As a Federation, it is important for us as citizens and residents to demonstrate a textured sensibility as we consider changes in the legislative framework relative to cannabis along the lines that the Commission has suggested, after it engaged in the consultative process. Control mechanisms through regulations, upgraded social and medical support services and education are pivotal to a small-island state affected by a systemic crime problem exacerbated by the use of cannabis.

CHAPTER 6

Cannabis Use and its Religious Implications

Authors:

- The Rev. Canon P. Allister Rawlins
- Samande 'Ras Iya' Reid

What are Christians saying?

What are Christians saying and thinking about cannabis? What is our response to the current discourse with regard to its legality and its usage?

A common position among some Christians is that we do not use it therefore we can stay above the fray.

A more rational position was gleaned once we sat down with members of the Christian Council and the Evangelical Association in both St. Kitts and Nevis.

Marijuana and the Bible

What does the Bible say about this particular plant? If we are looking for the word marijuana or even cannabis in the English translations, then it says nothing really. There are people who question whether Genesis 1:12 is referring to marijuana. In this creation narrative we read "the earth brought forth vegetation: plants yielding seed of every kind, and trees of every kind bearing fruit with the seed in it. And God saw that it was good." (New Revised Standard Version NRSV). The passage refers to the creation of all plant life and not any particular plant. Similarly, verse 29 of the said chapter "God said, see, I have given you every plant yielding seed that is upon the face of the earth, and every tree with seed in its fruit; you shall have them for food." This is also broadly referring to all of the plant life which was found to be edible. At the other end of the biblical text, in Revelation 22:2b, we find another text that is being suggested as referring specifically to the cannabis plant. The text reads: "On either side of the river is the tree of life, producing its fruit each month; and the leaves of the tree are for the healing of the nations." NRSV

The term "tree of life" refers to many trees on both sides of the river, bearing fruits in season with leaves that offer healing. No one particular tree is being specified here.

One may conclude therefore, that there is no direct and specific reference to the marijuana plant in Christian scripture.

However, in Exodus 30:22-25 where God is giving Moses instructions for making the oil to be used in anointing, we find an ingredient called in various English language translations "fragrant cane", "scented cane", "aromatic cane". The Jerome Biblical Commentary suggests that this ingredient had its origins in India (1) as does the cannabis which was brought to the Caribbean.

Wikipedia suggests that the Hebrew version of the Bible refers to that ingredient as "kaneh bosem" and that that is the root of the word kannabus or cannabis.[2] If these theories are correct then we may have a biblical reference for the plant being used for religious purposes.

Is marijuana use a sin?

That is a frequently asked question that requires us to ask "what is sin?" In the Anglican school of thought, "sin is the seeking of our will instead of the will of God, thus distorting our relationship with God, with other people, and with all creation." (Catechism, Book of Common Prayer). (3) There are some who would use this definition and conclude that marijuana use is sinful and there are those who claim that it isn't.

Some use the Levitical prohibitions of the Old Testament to make a case against use of the herb under discussion. Leviticus Chapter 10 Verse 9 reads as follows "drink no wine or strong drink, neither you nor your sons, when you enter into the tent of meeting, that you may not die; it is a statute forever throughout your generation." NRSV

This exhortation to be sober is said by some to be as equally applicable to marijuana as it is to alcohol.

"Do you not know that your body is a temple of the Holy Spirit within you, which you have from God, and that you are not your own?" (1 Corinthians 6:19) NRSV. This is another passage of scripture that is used to support the view that marijuana use may be sinful, as research mentioned in earlier chapters will show that the substance does harm to the body.

It is agreed, that in all matters of sin and faith, God gives us free will and we have to make choices.

What is the role of the church in legal reform?

The role of the Church is to be the ear, the eye and the mouth piece of society.
The church must begin to listen to its members so that it can be more in tune with where they are and must not bury its "head in the sand". It must also listen to the authorities to hear of the changes that are taking place so that we can assume our rightful place in the discourse.

Then the church must be vigilant in ensuring that proper safeguards are put in place for the control of all the variables that may be encountered as a result of reform. Whether the safeguards be in the health system, in law enforcement or in our schools and colleges, we should continue to observe and bring our concerns to the attention of the relevant authorities and keep the questions alive.

Lastly, the church must always lead. We do so by agitating for justice. If we believe that citizens have been unduly wronged under the old laws then we should work for justice for such people. We should also lead by teaching. Our congregants may not have the resources or the time to research the plant or the legal implications. The church ought to provide the information so that our people are not operating in darkness. It is a very important role from which the church must not shirk.

Prevalence of use in the Church

Because in most instances congregations have not had open and frank discussions in a trusting environment, it will not be possible to determine the prevalence of use.

Have some practicing Christians used marijuana in the past? Are there some who use it today? Yes, certainly, as a tea.

Are there those who have not ruled it out? Most definitely, especially as a medicine and perhaps as tea.

So, although we do not have numbers, we know that it has been used by members of the church, it is being used and it will be used even more were its legal status to change.

Recreational use and its effects.

As may be expected, the church is very concerned about controls were the law, with regard to marijuana, to change.

Who would be the growers? Who would secure the plants? How would we ensure that underage users were protected? How would we know the dosage for medical marijuana? How would we protect our share of the medicinal market? Would the health facilities be able to care for medical problems when there are increases in users? Are we equipped to treat addiction? These were some of the questions asked at both the St. Kitts and Nevis meetings with the Christian bodies.

There is grave concern that with changes in the legislation, the numbers of users will soar.

The church groups concluded that because of the effects of marijuana, especially on the young brain, they are not as yet ready for it to be decriminalized for recreational use.

There is overwhelming support for decriminalization for medicinal use on both islands and grudging support in St. Kitts for decriminalization for religious purposes. The Nevis bodies demurred.

The church, though late in becoming involved, must now increase the education of its membership so that they can become more aware of the current discussions and changes taking place with regard to marijuana around the world, and most certainly here at home.

What is Rasta saying?

We the members of the Rastafari Nyabinghi Theocracy Order are here to support the outline of The Organisation of Rastafari in Unity (ORU) stance/position on the hola herb (cannabis). This is the position that the organization takes as a spiritual movement regarding the hola herb and its uses from a wholistic view giving deference to our ancient ancestors, our elders and others who have benefited from the spiritual usage of the herb over the years, facilitating connection with the creator. Cannabis is seen as a natural plant from which a variety of products and bi-products including textiles are made. Appreciation of its varied uses and versatility helps one to understand why the organization uses it as the sacrament. Considering then, that the herb is the sacrament of the organization, the members of the Rastafari Nyabinghi Theocracy Order make this recommendation in support of the ORU on the findings of the medicinal, recreational, and spiritual uses of the hola herb, and its promise of economic prosperity for all.

Knowing that the National Cannabis Commission has, as part of its mandate, to inform the government of the views of the general public as it relates to the uses of cannabis, one of the positions of the Rastafari Nyabinghi Theocracy Order is cultural in nature. In that respect, we support the free use of herb for recreational, social, and spiritual activities. We wish to emphasize that education should be given in the proper use of herb.

As it relates to the possession of ganja, the organization believes that the Government should not deny the possession and use of a reasonable amount of herb; it should not be a criminal offence, particularly, when Rastafari is within a religious gathering.

Cultivation should be a collective movement. If the individual wishes to cultivate by and for himself or herself, then this individual should meet with the group and seek advice on how to operate and be part of a dispensary. The authorities should educate visitors to the country about the local laws and regulations, so that when they do come to the local dispensary, they would have already been informed about the uses of herb by the relevant local bodies .

The hemp industry is a vital industry from which the people of St. Kitts and Nevis should be able to benefit, in addition to the rich promise of healing from medical cannabis. Dr Sebi, our modern Imhotep, has done great work in exploring the healing capacity of the herb for treatment of illnesses like Aids, tuberculosis, cancer and other chronic diseases. (4) Cannabis is indeed created "for the healing of the nations". ***Free the herb.***

CHAPTER 7

Financial Implications of Trading in the Cannabis Industry

Authors:

- Charles Wilkin, Q.C
- Dr. Hazel Laws, Chief Medical Officer

The Economy

As is recognised by the CARICOM Commission at page 53 of its report, there is vast economic potential for the region in a cannabis related industry. This Commission acknowledges such potential but has not investigated and is unable to quantify the potential economic or tax benefits specific to St. Kitts and Nevis. The Commission is, however, mindful of the dangers to the financial system as described in the next paragraph. ***(Appendix #2 – The Caricom Marijuana Report)***

Finance

The Commission has been warned by the Bankers and Financial Services Association of St. Kitts and Nevis as follows:

"Whilst recognizing that change continues to be a constant variable which is evidenced by increased reform surrounding the various use of Cannabis, there remains some journey to be uncovered in raising acceptance levels in this regard internationally. It is, with this in mind, that the Bankers and Financial Services Association holds the strong view that even with successful local reform, the relationships with International Correspondence Banks would be adversely impacted should local Banks proceed to engage in the process of on boarding such relationships at this time."

In similar vein, the Eastern Caribbean Central Bank (ECCB) has warned of possible adverse consequences from exogenous factors over which the Government and the ECCB have no control, including international rules on movement of funds and correspondent banking arrangements and international compliance issues as controlled by international financial organizations.

Trading in the Cannabis Industry

Pursuant to the wave of legislative reform internationally, the cannabis industry is becoming highly regulated and governed by policies and regulations in order to ensure that the sale of cannabis products are of an acceptable standard. Seed to sale tracking is now an international requirement whereby the cannabis products are monitored through every stage of the supply chain from cultivation, harvesting, processing, packaging, transportation to sale (locally and internationally). Each dispensary and retailer must keep records and must be able to provide specific details regarding products based on this tracking system.

The export and importation of all cannabis products must be reported by each territory/ country to the International Narcotics Control Board (INCB) through its well established quarterly reporting system, by completing the INCB - Form A entitled, "Quarterly Statistics of Imports and Exports of Narcotic Drugs". This is compulsory because cannabis is still considered a Schedule 1 drug under INCB control. INCB is a Vienna based independent body established by the 1961 Single Convention on Narcotic Drugs to monitor all controlled drugs.

CHAPTER 8

Cannabis and the Law

Author:

- Charles Wilkin, Q.C.

INTRODUCTION

The constitution is the supreme law of St. Kitts and Nevis. The constitution protects fundamental rights including the right to life and personal liberty. A person can only be lawfully deprived of these rights in circumstances specified in the constitution. In the case of deprivation of personal liberty, the circumstances include execution of a sentence of a court in respect of a criminal offence.

Another fundamental right which is relevant, is the enjoyment of freedom of conscience which includes freedom of religion. That freedom includes the right in public and private "to manifest and propagate his religion or belief in worship, teaching, practice and observance". That right may only be hindered by a law which makes provision that it is reasonably required "in the interests of defence, public safety, public order, public morality or public health" or by a law passed "for the purpose of protecting the rights and freedoms of other persons". It is noted that the effect of this provision in relation to the use of cannabis for religious purposes is currently before the Courts in proceedings brought by a member of the Rastafarian Spiritual Movement.

Section 37 of the constitution gives Parliament, subject to the provisions of the constitution, power to make laws for the peace, order and government of St. Kitts and Nevis. Parliament has power therefore to determine, within the constraints imposed by the constitution, whether a particular conduct should be criminalized and the nature and severity of punishment.

THE LEGISLATION

The legislation which criminalises the use and dealing in cannabis is the **DRUGS (PREVENTION AND ABATEMENT OF THE MISUSE AND ABUSE OF DRUGS) ACT** CAP 9.08 of the Laws of St. Kitts and Nevis. The Act is referred to hereafter as the "Act" or the "Drugs Act".

SUMMARY OF THE PROVISIONS OF THE DRUGS ACT RELATING TO CANNABIS

1. The Act makes it unlawful to produce, import, export, supply or possess without a licence, drugs listed in the Second Schedule to the Act.

2. The Second Schedule Part I includes as Class A drugs "cannabinol except where contained in cannabis or cannabis resin" and "cannabinol derivatives".
   The latter is defined in Part IV of the Second Schedule to the Act as follows:
   "cannabinol derivatives" means the following substances, except where contained in cannabis or cannabis resin, namely, tetrahydro derivatives or cannabinol and 3-alkyl homologues of cannabinol or of its tetrahydro derivatives;"

3. Part II of the Second Schedule to the Act lists Class B drugs including cannabis and cannabis resin. "Cannabis" (except in the expression "cannabis resin") means "any plant of the genus cannabis or any part of such plant (by whatever name designated) except that it does not include cannabis resin or any of the following products after separation from the rest of the plant, namely,
   (a) the mature stalk of any such plant,
   (b) the fibre produced from the mature stalk of any such plant,
   (c) the seed of any such plant;

4. In addition to the offences in 1 and 2 above Section 7 makes it unlawful to cultivate any plant of the genus cannabis.

SENTENCES

The Act imposes sentences on conviction for trafficking, possession or cultivation of cannabis in the following ranges:

Trafficking offences (including possession of more than 15 grammes) - a fine of $400,000 or 3 times the street value of the drug whichever is higher and 5 years to life imprisonment.

Possession of less than 15 grammes - a fine in the range of $75,000 to $200,000 or 2 to 7 years imprisonment.

Cultivation- a fine in the range of $100,000 to $200,000 and/or 3 to 14 years imprisonment.

INTERNATIONAL CONVENTIONS

By section 31 the Drugs Act establishes the National Council on Drug Abuse Prevention whose functions are set out in Section 32 and include in subsection (q) to "ensure in collaboration with the Customs, the Coast Guard, Police and like Government Agencies, that the provisions of Conventions ratified and acceded to by the Government are complied with". The word "Conventions" is defined in the Act as "international treaties and laws that govern international agreements on drugs".

The relevant international drug control treaties to which St. Kitts and Nevis have acceded are:

1. The Single Convention on Narcotic Drugs of 1961 (as amended in 1972) acceded to on 9th May 1994. This Convention is referred to hereafter in this Chapter as the "1961 Convention".

2. The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substance of 1988 acceded to on 19th April 1995. This Convention is referred to hereafter in this Chapter as the "1988 Convention".

Copies of the Conventions are attached to this report ***(Appendix #9).*** Their major relevant provisions are summarized as follows:

1. The Conventions are intended to be supportive and complementary.
2. Article 4 of the 1961 Convention requires parties to the Convention "to limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs." The drugs referred to in that Convention and in the 1988 Convention include "cannabis and cannabis resin".
3. "Cannabis" is defined as "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. "Cannabis plant" means "any plant of the genus Cannabis" and "Cannabis resin" means "the separated resin, whether crude or purified, obtained from the cannabis plant".
4. The 1961 Convention does not apply to the cultivation of the cannabis plant exclusively for industrial purposes (fibre and seed) or horticultural purposes.
5. Article 28 of the 1961 Convention requires the Parties to it to control production of cannabis and cannabis resin where such production is permitted by law. Control means that there must be a Government agency or agencies established to designate areas for cultivation, to license cultivators and to receive all crops produced. Licenced cultivators must deliver their total crops to the designated agency. That agency must have the exclusive right of importing, exporting, wholesale trading and maintaining stocks other than those held by manufacturers of medicinal cannabis and cannabis preparations.
6. Article 30 provides that the trade in and distribution of drugs (except by a State enterprise) must be under licence.
7. Article 33 requires that Parties shall not permit the possession of cannabis or cannabis resin except under legal authority.
8. Article 38 requires Parties to criminalise action contrary to the Convention and to make serious offences liable to adequate punishment particularly by imprisonment or other penalties of deprivation of liberty.

9. The Article allows Parties to legislate that when abusers of drugs have committed such offences, either as an alternative to conviction or punishment or in addition, such abusers undergo measures of treatment, education, after-care, rehabilitation and social integration.
10. Articles 2 and 3 of the 1988 Convention are set out in full

Article 2

SCOPE OF THE CONVENTION

1. The purpose of this Convention is to promote co-operation among the Parties so that they may address more effectively the various aspects of illicit traffic in narcotic drugs and psychotropic substances having an international dimension. In carrying out their obligations under the Convention, the Parties shall take necessary measures, including legislative and administrative measures, in conformity with the fundamental provisions of their respective domestic legislative systems.

2. The Parties shall carry out their obligations under this Convention in a manner consistent with the principles of sovereign equality and territorial integrity of States and that of non-intervention in the domestic affairs of other States.

3. A Party shall not undertake in the territory of another Party the exercise of jurisdiction and performance of functions which are exclusively reserved for the authorities of that other Party by its domestic law.

Article 3

OFFENCES AND SANCTIONS

1. Each Party shall adopt such measures as may be necessary to establish as criminal offences under its domestic law, when committed intentionally:
   a) i) The production, manufacture, extraction; preparation, offering, offering for sale, distribution, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation or exportation of any narcotic drug or any psychotropic substance contrary to the provisions of the 1961 Convention, the 1961 Convention as amended or the 1971 Convention;

   ii) The cultivation of opium poppy, coca bush or cannabis plant for the purpose of the production of narcotic drugs contrary to the provisions of the 1961 Convention and the 1961 Convention as amended;

   iii) The possession or purchase of any narcotic drug or psychotropic substance for the purpose of any of the activities enumerated in (i) above;

   iv) The manufacture, transport or distribution of equipment, materials or of substances listed in Table I and Table II, knowing that they are to be used in or for the illicit cultivation, production or manufacture of narcotic drugs or psychotropic substances;

   v) The organization, management or financing of any of the offences enumerated in i), ii) iii) or iv) above;

   b) i) The conversion or transfer of property, knowing that such property is derived from any offence or offences established in accordance with subparagraph a) of this paragraph, or from an act of participation in such offence or offences, for the purpose of concealing or disguising the illicit origin of the property or of assisting

any person who is involved in the commission of such an offence or offences to evade the legal consequences of his actions;

ii) The concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from an offence or offences established in accordance with subparagraph a) of this paragraph or from an act of participation in such an offence or offences:

c) Subject to its constitutional principles and the basic concepts of its legal system:

i) The acquisition, possession or use of property, knowing, at the time of receipt, that such property was derived from an offence or offences established in accordance with subparagraph a) of this paragraph or from an act of participation in such offence or offences;
ii) The possession of equipment or materials or substances listed in Table I and Table II, knowing that they are being or are to be used in or for the illicit cultivation, production or
iii) Publicly inciting or inducing others, by any means, to commit any of the offences established in accordance with this article or to use narcotic drugs or psychotropic substances illicitly;
iv) Participation in, association or conspiracy to commit, attempts to commit and aiding, abetting, facilitating and counseling the commission of any of the offences established in accordance with this article.

2. Subject to its constitutional principles and the basic concepts of its legal system, each Party shall adopt such measures as may be necessary to establish as a criminal offence under its domestic law, when committed intentionally, the possession, purchase or cultivation of narcotic drugs or psychotropic substances for personal consumption contrary to the provisions of the 1961 Convention, the 1961 Convention as amended or the 1971 Convention.

3. Knowledge, intent or purpose required as an element of an offence set forth in paragraph 1 of this article may be inferred from objective factual circumstances.

4. a) Each Party shall make the commission of the offences established in accordance with paragraph 1 of this article liable to sanctions which take into account the grave nature of these offences, such as imprisonment or other forms of deprivation of liberty, pecuniary sanctions and confiscation.

   b) The Parties may provide, in addition to conviction or punishment, for an offence established in accordance with paragraph 1 of this article, that the offender shall undergo measures such as treatment, education, aftercare, rehabilitation or social reintegration.

   c) Notwithstanding the preceding subparagraphs, in appropriate cases of a minor nature, the Parties may provide, as alternatives to conviction or punishment, measures such as education, rehabilitation or social reintegration, as well as, when the offender is a drug abuser, treatment and aftercare.

   d) The Parties may provide, either as an alternative to conviction or punishment, or in addition to conviction or punishment of an offence established in accordance with paragraph 2 of this article, measures for the treatment, education, aftercare, rehabilitation or social reintegration of the offender.

5. The Parties shall ensure that their courts and other competent authorities having jurisdiction can take into account factual circumstances which make the commission of the offences established in accordance with paragraph 1 of this article particularly serious, such as:

   a) The involvement in the offence of an organized criminal group to which the offender belongs;
   b) The involvement of the offender in other international organized criminal activities;

c) The involvement of the offender in other illegal activities facilitated by the commission of the offence;
d) The use of violence or arms by the offender;
e) The fact that the offender holds a public office and that the offence is connected with the office in question;
f) The victimization or use of minors;
g) The fact that the offence is committed in a penal institution or in an educational institution or social service facility or in their immediate vicinity or in other places to which school children and students resort for educational, sports and social activities;
h) Prior conviction, particularly for similar offences, whether foreign or domestic, to the extent permitted under the domestic law of a Party.

6. The Parties shall endeavour to ensure that any discretionary legal powers under their domestic law relating to the prosecution of persons for offences established in accordance with this article are exercised to maximize the effectiveness of law enforcement measures in respect of those offences, and with due regard to the need to deter the commission of such offences.
7. The Parties shall, ensure that their courts or other competent authorities bear in mind the serious nature of the offences enumerated in paragraph 1 of this article and the circumstances enumerated in paragraph 5 of this article when considering the eventuality of early release or parole of persons convicted of such offences.
8. Each Party shall, where appropriate, establish under its domestic law a long statute of limitations period in which to commence proceedings for any offence established in accordance with paragraph 1 of this article, and a longer period where the alleged offender has evaded the administration of justice.
9. Each Party shall take appropriate measures, consistent with its legal system, to ensure that a person charged with or convicted of an offence established in accordance with paragraph 1 of this article, who is found within its territory, is present at the necessary criminal proceedings.
10. For the purpose of co-operation among the Parties under this Convention, including, in particular, co-operation under articles 5, 6, 7 and 9, offences established in accordance with

this article shall not be considered as fiscal offences or as political offences or regarded as politically motivated, without prejudice to the constitutional limitations and the fundamental domestic law of the Parties.

11. Nothing contained in this article shall affect the principle that the description of the offences to which it refers and of legal defences thereto is reserved to the domestic law of a Party and that such offences shall be prosecuted and punished in conformity with that law.

Those Articles in essence repeat the prohibitions in the 1961 Convention and expand on them to include illicit traffic in drugs. Drugs covered by the 1988 Convention are the same as those covered by the 1961 Convention.

It is noteworthy however, that Article 1 of the 1988 Convention makes the obligations of the Parties subject generally to "the fundamental provisions of their respective domestic legislative systems". Article 3.2 makes the obligation of Parties to legislate for the criminalisation of possession, purchase or cultivation of drugs for personal consumption to be "subject to its constitutional principles and basic concepts of its legal system."

In summary, St. Kitts and Nevis has, by acceding to the 1961 Convention and the 1988 Convention, undertaken to criminalise the possession, use, cultivation and trade in cannabis and cannabis resin (as defined in the 1961 Convention) except for medicinal and scientific purposes. Use for religious purposes would also be excepted if (and to the extent that) the Court rules that the prohibition on such use is unconstitutional.

CHAPTER 9

Human Rights Implications of Cannabis Use

Authors:

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- Mr. Charles Wilkin, QC
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- Mrs. Karimu Byron Caines
- Mr. Andre Mitchell
- Dr Garfield Alexander
- Samande Ras 'Iya' Reid

Across the globe there is a clarion call for amendment to the laws and removal of restrictions on use of cannabis, one of the worlds most debated plants. The overall genesis of the illegalization of cannabis was racist and a breach of equality of people as recognized by articles 1 & 2 of the Universal Declaration of Human Rights (UDHR***) (Appendix #10)***. This was reflected in the approach of influential lobbyists such as Harry Aslinger in the United States, in statements such as this "… the primary reason to outlaw marijuana is its effects on the degenerate races."; "Reefers makes darkies think they're as good as white men."; "There are 100,000 total marijuana smokers in the US, and most are Negroes, Hispanics, Phillipinos and Entertainers. Their Satanic music, jazz and swing, result from marijuana usage. This marijuana causes white women to seek sexual relations with Negroes, entertainers and any others." Harry J. Aslinger was the first Commissioner of the Treasury Department's Federal Bureau of Narcotics back in the 1930s. This Bureau ultimately morphed into the Drug Enforcement Agency of today. (The accepted spelling is Filipinos, but if Phillipinos is a direct quote, the spelling should not be changed)

The attitudes of leaders such as Mr. Aslinger, impacted the approach to Cannabis legislation in Britain and other countries as well as the USA. Prohibition was entrenched in St. Kitts and Nevis as a colony of Britain.

With reference to Article 5 of the UDHR, the Rastafari community has endured what they consider to be inhuman and degrading punishment for the use of cannabis in their spiritual life. They also complain that their human rights of freedom of association and freedom of religion have, contrary to Articles 18, 20 and 28 of the UDHR, been infringed by the prohibition of cannabis and in the enforcement of that prohibition. The Rastafari also claim discrimination contrary to Article 7 of the UDHR.

Article 27 (1) of the UDHR states: "Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits." It is arguable that the prohibition of cannabis for medical use infringes this article.

Even in countries such as Canada, where cannabis has been legalized, there have been complaints about discrimination in the work and public places and unfair restrictions on the use of cannabis. Across the world, Human Rights will remain a live and important issue in the continuing debate on the liberalization of the use of cannabis.

CHAPTER 10

Survey Results

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- Dr. Hazel Laws, Chief Medical Officer

Acknowledgements:

- Mr. Carlton Phipps, Senior Statistician, Ministry of Sustainable Development
- Mr. Davian Trotman, Statistician, Ministry of Sustainable Development

A. Summary of Findings from the Town Hall Meetings & Focus Group Discussions

The 'instrument of engagement' was the tool utilized to collect objective data from the attendees at each of the **Town Hall Meetings** & **Focus Group Discussions** (FGD). The data revealed that:

1) 12.5% of the respondents **did no**t want the law (Drugs Act) to change; 87.5% would like the law to be changed.
2) More persons preferred decriminalization versus legalization.
3) The respondents wanted legislative change:
   - 87.5 % wanted legislative change for **medicinal purposes**
   - 67% wanted change to allow **recreational use (**> 24 years)
   - 65.4% wanted change to allow use for **religious purposes** (with parental consent for those < 24 years)
   - 37.5% wanted change to allow for **research work**

B. Summary of the Results from the 'Prevalence of Use Survey'

The St. Kitts & Nevis National Cannabis Commission spearheaded this national survey in close collaboration with the Ministry of Sustainable Development. The sample was randomly selected using the methodology outlined in (***Appendix #4).*** There was a sample size of 1, 953 persons with a response rate of 97.7%. The respondents comprised of 28% from Nevis and 72% from St. Kitts with 50.3 % being male respondents. Based on the combined stratified and

systematic random sampling methodology applied in this study, it is fair to assume that the findings of this survey can be applicable to the general population. Additionally, the crude unemployment rate derived from the data collected is in keeping with the broad international definition of unemployment.

The respondents were 18 years and over (Figure 7) and the majority had secondary level education or higher (Figure 8).

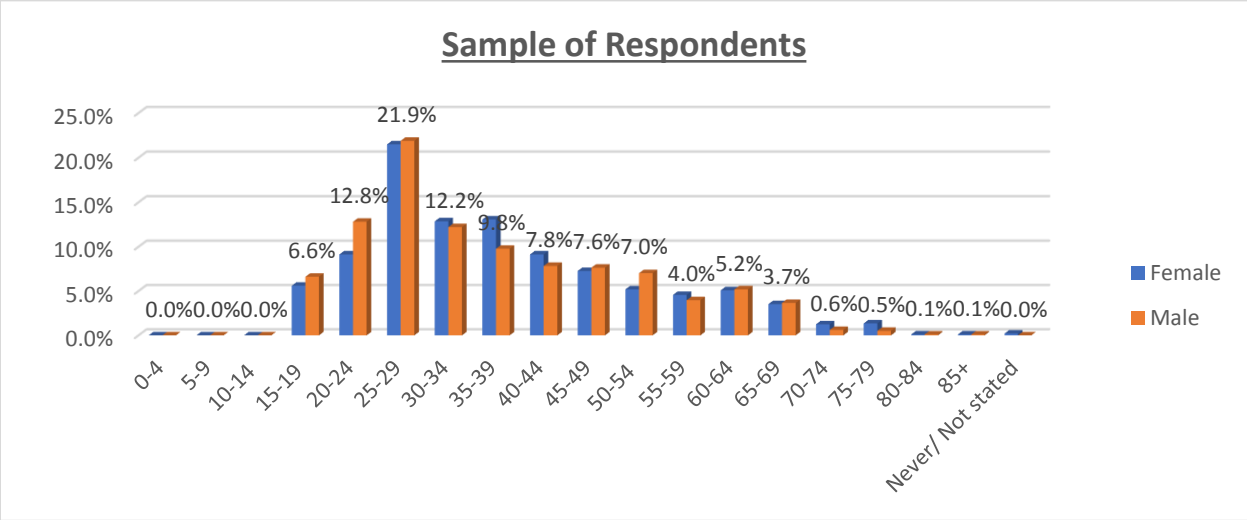

Figure 7: Showing the age and gender distribution of the sample population.

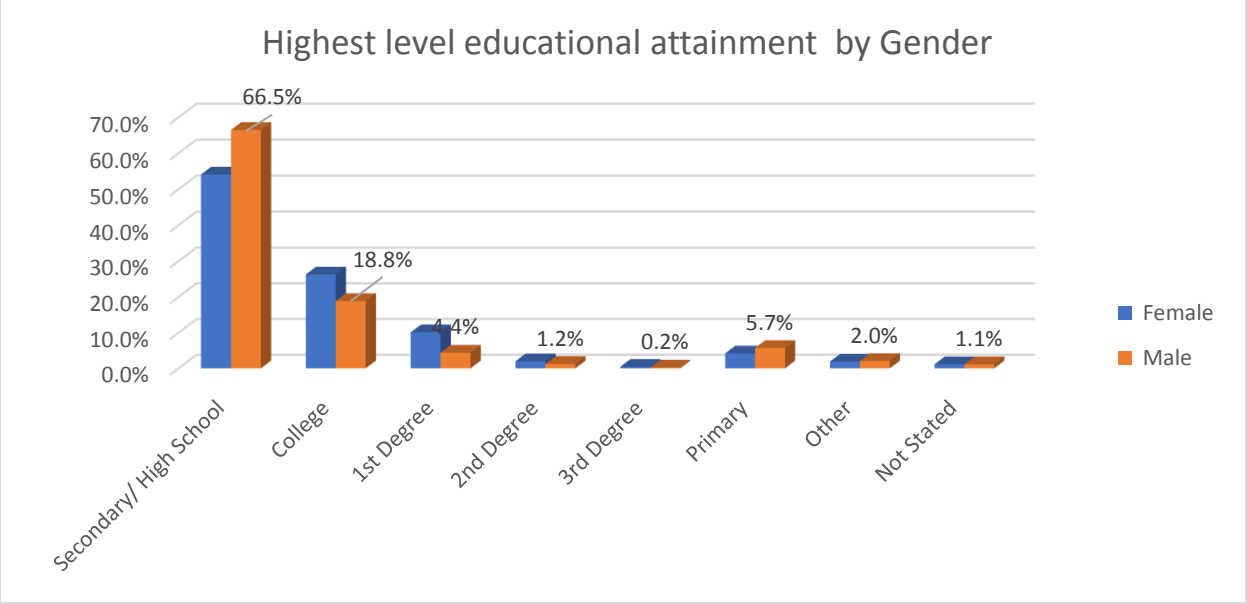

Figure 8: Showing the highest level of educational attainment of the respondents

The majority (63%) of the respondents felt that the law that prohibits the use of marijuana should be amended or changed (Table 5)

Table 5: Showing the number of respondents who think that the Drugs Act should be changed/ amended.

Question #	Responses	Island		St. Kitts-Nevis	Percentage
		Nevis	St. Kitts		
Do you think that the law that prohibits the use of marijuana should be changed or amended	Yes	319	914	1,233	**63.1%**
	No	123	386	509	26.1%
	Not Stated/ Don't Know	98	113	211	10.8%
Total		**540**	**1,413**	**1,953**	100%

Similarly, 75 % of the respondents felt that there should be a minimum age for recreational use of cannabis (see Table 6).

Table 6: Showing the number of respondents who felt that there should be a minimum age for recreational use of cannabis.

Total	Do you think that there should be a minimum age for recreational use?	Yes	268	1,191	**1,459**	**74.7%**
		No	38	159	**197**	**10.1%**
		Not Stated/ Don't Know	234	63	**297**	**15.2%**
	Total		**540**	**1,413**	**1,953**	**100.0%**

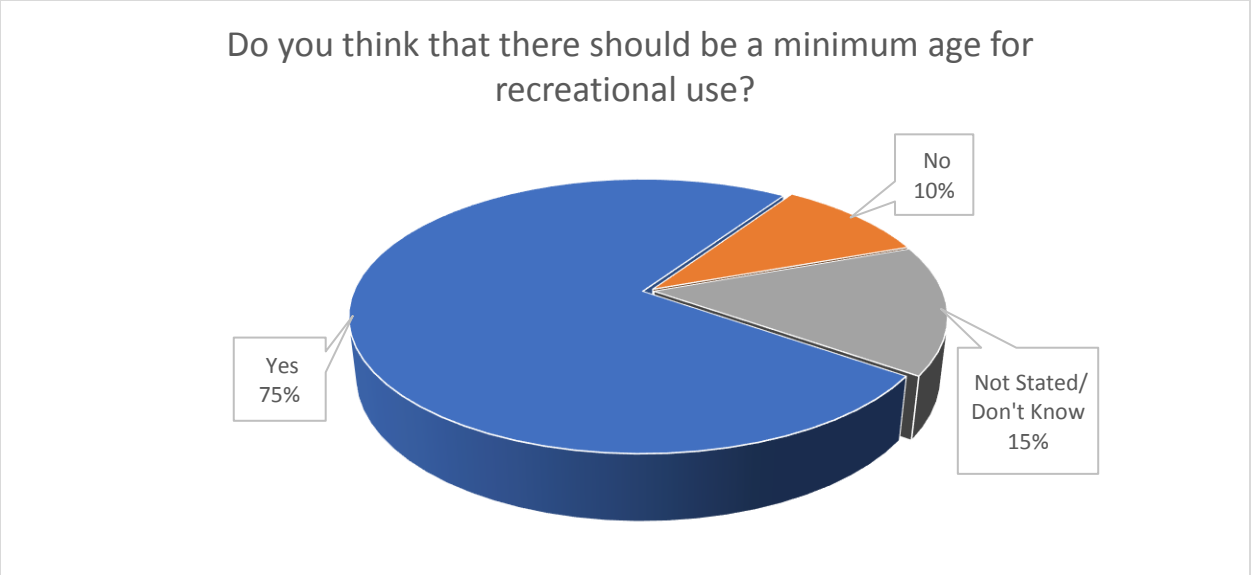

Figure 9: Showing the proportion of respondents who felt that there should be a minimum age for recreational use.

More than half of the respondents (55%) felt that 18 years (age range 15 -19 years) should be the cut off point above which cannabis can be allowed for recreational purposes. (Figure 10).

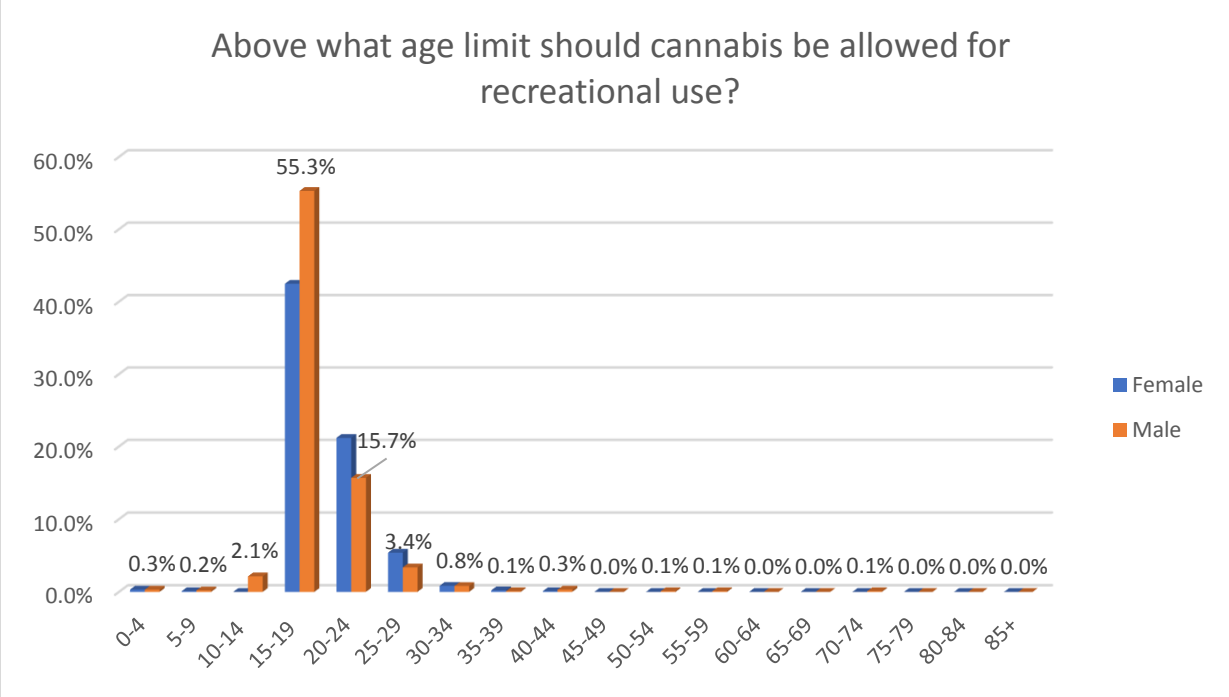

Figure 10: Showing what the minimum age for recreational use of cannabis should be

More than half of the respondents (56%) perceived that cannabis is associated with crime. (Table 7 & Figure 11) Over 30% felt that crime will increase if cannabis is decriminalized and almost half (46%) felt that crime will get worse if cannabis is legalized. (Figure 12 & 13) Essentially the respondents think/contemplate that cannabis use is linked to and associated with crime.

Table 7: Showing the proportion of respondents who perceived that there is an association between cannabis and crime

Sex	Question	Response	Island		Total	
			Nevis	St. Kitts		
Females & Males	**Do you think that marijuana use is linked and associated with crime?**	Yes	291	804	**1,095**	**(56.1%)**
		No	234	579	**813**	**(41.6%)**
		Don't Know/ Not Stated	15	30	**45**	**(2.3%)**
	Total		**540**	**1,413**	**1,953**	**(100%)**

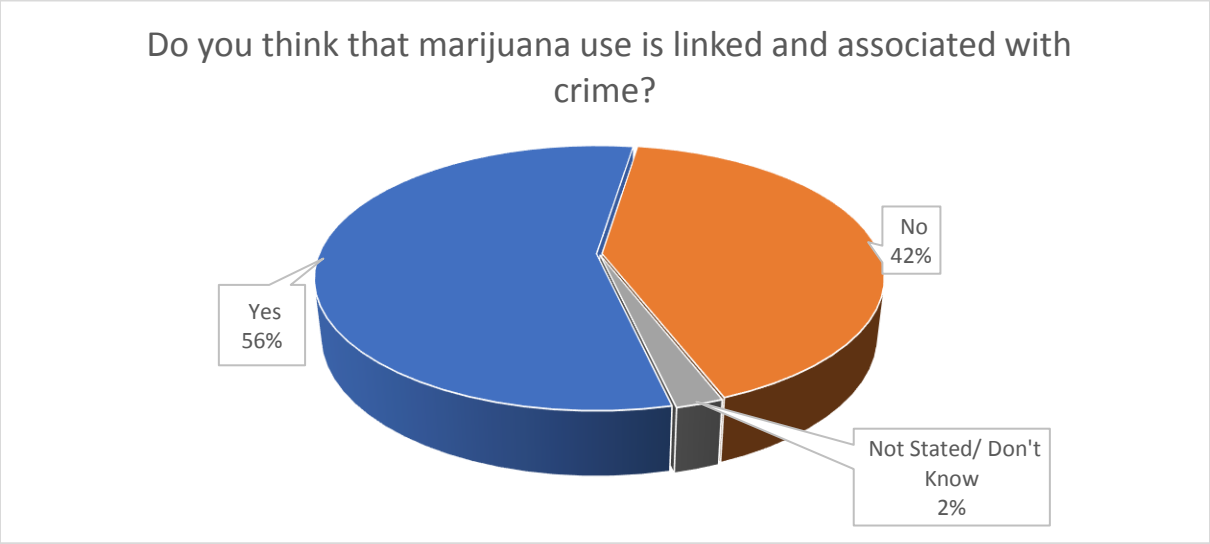

Figure 11: Showing the proportion of respondents who perceived that there is an association between cannabis and crime

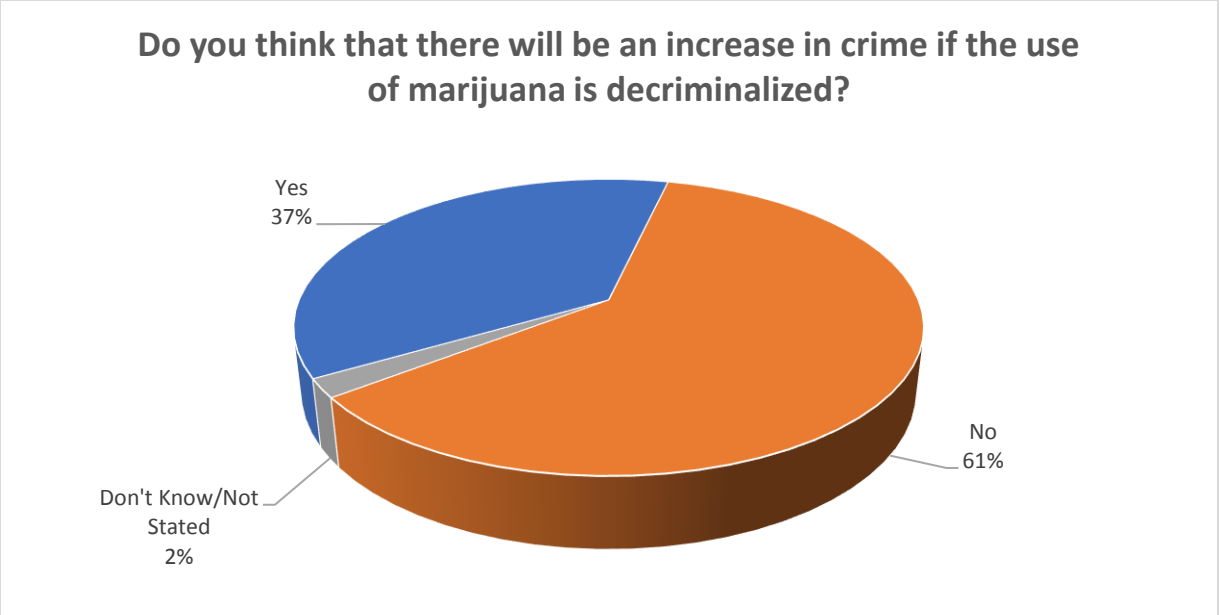

Figure 12: Showing the proportion of respondents who perceived that there will be an increase in crime if marijuana use is decriminalized.

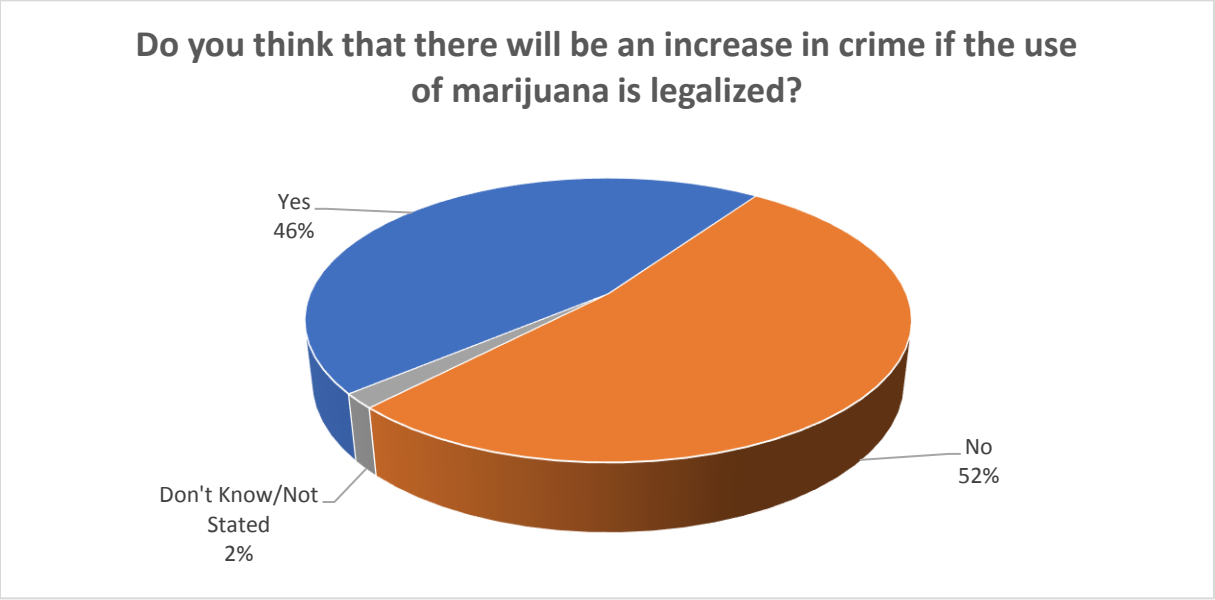

Figure 13: Showing the proportion of respondents who perceive that there will be an increase in crime if marijuana use is legalized.

The data revealed that the majority (88%) of the respondents did not cultivate or grow cannabis plants for personal use or sale. (Table 8)

Table 8: Showing the proportion of respondents who cultivate marijuana plants for personal use

Total	Do you plant or cultivate or nurture marijuana plants for personal use?	Yes	34	176	210	10.8%
		No	497	1,220	1,717	87.9%
		Not Stated	8	18	26	1.3%
	Total		**539**	**1,414**	**1,953**	100.0%

A moderate majority of the respondents (63.1%) emphatically stated that they would like to see the Drugs Act that prohibits the use of cannabis changed or amended. (Table 9)

For the purposes of this national survey the following terms and definitions were utilized in the survey tool / instrument:

(1) Decriminalization – removal of criminal penalties from use and or possession of small amounts of cannabis and

(2) Legalization - Use and/or possession of cannabis permissible by law.

Questions regarding decriminalization and legalization had independent responses and these were mutually exclusive as respondents answered both.

Table 9: Showing the proportion of respondents who indicated whether the law that prohibits marijuana use should be changed

Question	Response	Island		Total
		Nevis	St. Kitts	
Do you think that the law that prohibits the use of marijuana should be changed or amended	Yes	319	914	1,233
	No	123	386	509
	Not Stated/ Don't Know	98	113	211
Total		**540**	**1,413**	**1,953**
Definite Response (Yes or No)		**442**	**1,300**	**1,742**
Affirmative Response ("Yes")		**59.1%**	**64.7%**	**63.1%**

Just over thirty-three percent (one third) of the respondents felt that there should be decriminalization of cannabis for Recreational /Social and Religious uses. (Tables 10 & 12) However, 58% of respondents perceived that cannabis should be decriminalized for medicinal purposes. (Table 11)

Table 10: Showing the proportion of respondents who perceived whether marijuana should be decriminalized for recreational use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think Drugs Act should be changed, do you think that Marijuana should be decriminalized for Recreational/Social use?	Yes	182	554	**736**
	No	117	17	**134**
	Not Stated/ Don't Know	241	842	**1,083**
Total		**540**	**1,413**	**1,953**
Definite Response (Yes or No)		**299**	**571**	**870**
Affirmative Response ("Yes")		**33.7%**	**39.2%**	**37.7%**

Table11: Showing the proportion of respondents who perceived whether marijuana should be decriminalized for medicinal use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think the Drugs Act should be changed, do you think that Marijuana should be decriminalized for Medicinal use	Yes	295	838	**1,133**
	No	16	-	**16**
	Not Stated/ Don't Know	229	575	**804**
Total		540	1,413	**1,953**
Definite Response (Yes or No)		**311**	**838**	**1,149**
Affirmative Response ("Yes")		**54.6%**	**59.3%**	**58.0%**

Table 12: Showing the proportion of respondents who perceived whether marijuana should be decriminalized for religious use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think the Drugs Act should be changed, do you think that Marijuana should be decriminalized for Religious use	Yes	166	537	**703**
	No	130	10	**140**
	Not Stated/ Don't Know	244	866	**1,110**
Total		**540**	**1,413**	**1,953**
Definitive Response (Yes or No)		**296**	**547**	**843**
Affirmative Response ("Yes")		**30.7%**	**38.0%**	**36.0%**

Table 13: Showing the proportion of respondents who perceived whether marijuana should be legalized for recreational use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think the Drugs Act should be changed, do you think that Marijuana should be Legalized for Recreational/ Social use?	Yes	153	374	**527**
	No	144	20	**164**
	Not Stated/ Don't Know	243	1,019	**1,262**
Total		**540**	**1,413**	**1,953**
Definite Response (Yes or No)		**297**	**394**	**691**
Affirmative Response ("Yes")		**28.3%**	**26.5%**	**27.0%**

Just over twenty-five percent (one quarter) of the respondents felt that there should be legalization of cannabis for Recreational and Religious uses (Tables 13 & 15). However, almost fifty percent (46.8%) of respondents perceived that cannabis should be legalized for medicinal purposes. (Table 14)

Table 14: Showing the proportion of respondents who perceived whether marijuana should be legalized for medicinal use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think the Drugs Act should be changed, do you think that Marijuana should be legalized for Medicinal use?	Yes	277	637	**914**
	No	35	10	**45**
	Not Stated/ Don't Know	228	766	**994**
Total		**540**	**1,413**	**1,953**
Definite Response (Yes or No)		**312**	**647**	**959**
Affirmative Response ("Yes")		**51.3%**	**45.1%**	**46.8%**

Table 15: Showing the proportion of respondents who perceived whether marijuana should be legalized for Religious use.

Question	Response	Island		Total
		Nevis	St. Kitts	
If you think the Drugs Act should be changed, do you think that Marijuana should be legalized for Religious use?	Yes	143	352	**495**
	No	151	11	**162**
	Not Stated/ Don't Know	246	1,050	**1,296**
Total		**540**	**1,413**	**1,953**
Definitive Response (Yes or No)		**294**	**363**	**657**
Affirmative Response ("Yes")		**26.5%**	**24.9%**	**25.3%**

Just over one tenth of the respondents (13%) are presently using cannabis for medicinal purposes (Figure 14). One quarter of these persons are using cannabis to treat pain and over one third (34%) are using cannabis to alleviate respiratory symptoms (Figure 15).

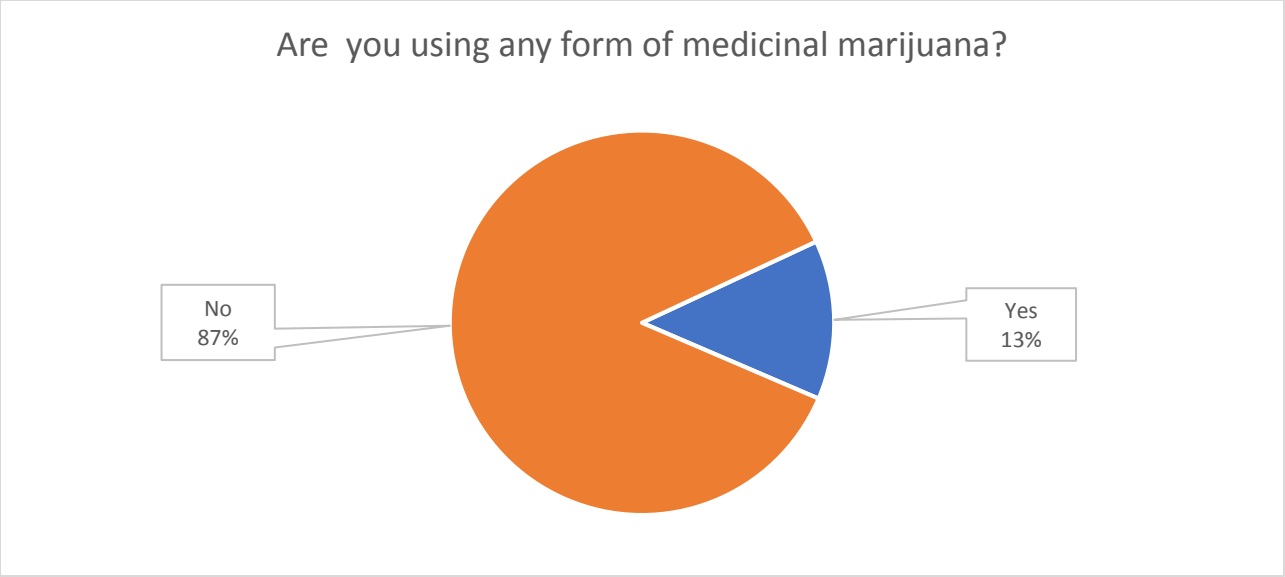

Figure 14: Showing the proportion of respondents who were using cannabis for medicinal purposes

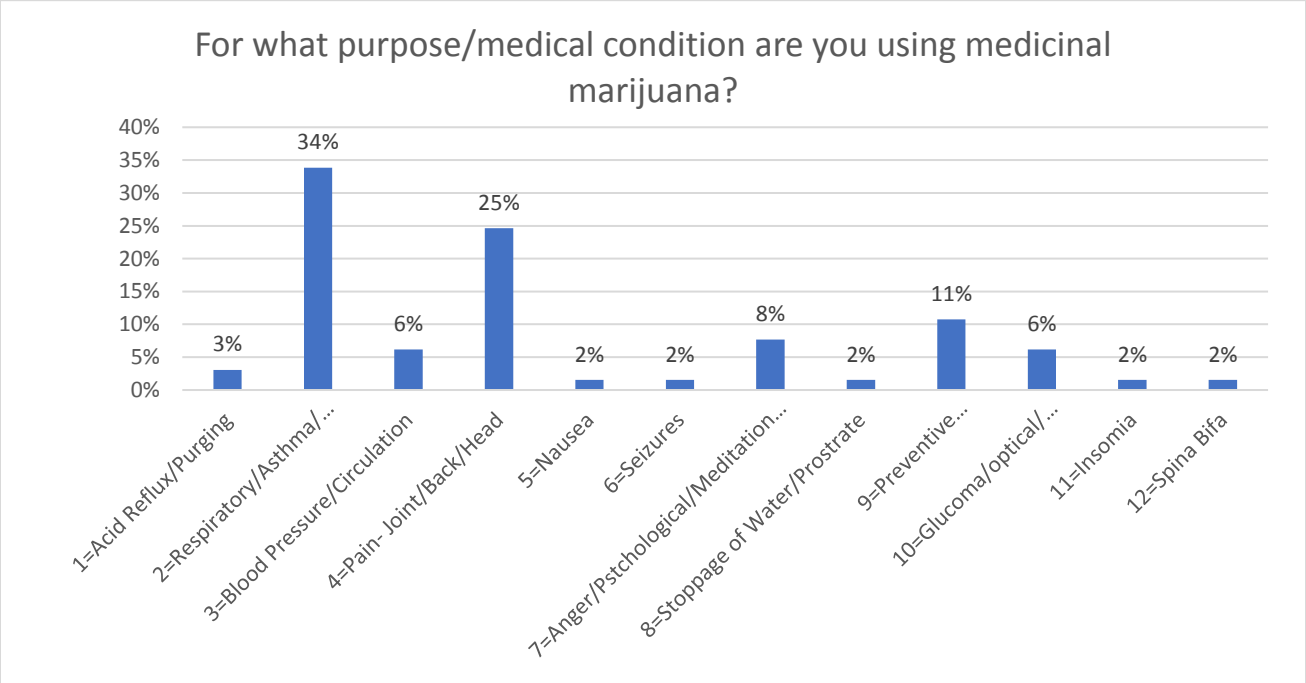

Figure 15: Showing the medical complaints for which cannabis is used

Essentially, over two thirds of the respondents indicated that the Drugs Act should be amended / changed. However, the respondents (56%) perceived that cannabis use is associated with crime. They were unsure if a change in the law would further exacerbate crime. Only one tenth (10.8%) of the respondents cultivated or grew cannabis plants.

It is noteworthy that a larger number of respondents were more in favor of decriminalization of cannabis rather than legalization by all categories of purpose of use. Nearly two-thirds of respondents were uncertain about the decriminalization of cannabis for recreational and religious purposes. Whereas, 58% of the respondents indicated that cannabis should be decriminalized for medicinal purposes. Only 13 % of the respondents were presently using cannabis for medicinal purposes including treatment of pain and respiratory challenges. The percentage of respondents who indicated/said definitely "No" to decriminalization or legalization was minimal or less than 10% in each case.

CHAPTER 11

Recommendations of the St. Kitts and Nevis National Marijuana Commission

Authors: ***Commissioners***

- Dr. Hazel Laws,
- Mr. Charles Wilkin Q.C.,
- Mrs. Michele De La Coudray Blake,
- Mrs. Karimu Byron Caines,
- Mr. Curtis Francis,
- Canon P. Allister Rawlins,
- Mr. Andre Mitchell,
- Samande 'Ras Iya' Reid,
- Dr. Garfield Alexander

A. UNANIMOUS RECOMMENDATIONS

1. The blanket criminalisation of cannabis as per the Drugs Act is archaic and unjustified. The Act should be amended in the manner stated below in Section A.
2. The definitions in the Drugs Act relating to cannabis should be amended having regard to scientific developments since the Act was passed in 1986.
3. The use of cannabis and its derivatives for medicinal and scientific purposes should be permitted under licence and a strict legislated regime.
4. The regime for the use of cannabis for medicinal purposes should include the following:
    a. The establishment of a medicinal licencing authority to regulate importation, local cultivation and production;
    b. A requirement that two tiers of practitioners, must complete a requisite amount of CME hours on Cannabis: (i) Medical practitioners for prescribable marijuana products; and (ii) Herbalists – for non prescribable marijuana products;
    c. A requirement that prescribable marijuana products must meet international labelling standards;

d. The inclusion of other components should be allowed only under advice from experts in the industry.

5. Production and trade should be permitted under licence and a strict legislated regime of hemp and hemp products.
6. If the prohibition on the use for recreational purposes is retained, the penalty for possession of less than 15 grams of cannabis should be reduced to a ticketable offence without a criminal record.
7. If the prohibition on the use for recreational purposes is retained, the penalty for the growth of less than 5 plants per household should be reduced to a ticketable offence without a criminal record.
8. The current legal regime for the rehabilitation of offenders should be amended to permit the Court to expunge the criminal records of persons convicted in the past for possession of cannabis in quantities below the amounts specified in paragraph 6 above. The Court should take into account all relevant factors, including the age of the applicant at the time of conviction, the nature and extent of the crime committed, and his/her conduct since.
9. Current healthcare services for the treatment of substance abuse are generally grossly inadequate. Government should substantially upgrade such services and increase the number of personnel trained in the treatment and counseling of young persons and other vulnerable groups.
10. A massive public messaging programme should be created prior to any changes in the law, and continuing thereafter, this programme should inform the community of the benefits and risks, and in particular, the potential harm to young persons regarding the use of cannabis.
11. The programme should be adapted for use in the school curriculum.
12. Whatever changes are made to the Drugs Act, the smoking or other use of cannabis in public places should remain a criminal offence with substantial penalties.
13. Offences and penalties relating specifically to driving under the influence of cannabis should be indicated.

B. **RECOMMENDATIONS RELATING TO CANNABIS USE FOR RELIGIOUS PURPOSES** – there was not unanimity under this head. Various recommendations were made by members of the Commission as follows:

1. As a God given herb, unrestricted use of cannabis by Rastafari should be permitted for religious ceremonies. (3 members)
2. As per #1 with a prohibition on smoking of cannabis by persons under the age of 21. (3 members)
3. Retain the total prohibition (0 members)
4. Restricted use for genuine religious purposes should be permitted under licence and control. (3 members)
5. To avoid a multiplicity of court actions in future, the Courts should be asked to make a determination in the pending litigation (Case SKBHCV 2017/0234) regarding the manner and degree to which production of cannabis and use for religious purposes can be licensed and controlled by Government under Section 11(5) of the Constitution. (3 members)

C. **RECOMMENDATIONS RELATING TO CANNABIS USE FOR RECREATIONAL PURPOSES**- there was not unanimity under this head. Various recommendations were made by members of the Commission as follows:

1. As a God given herb, production and use of cannabis should be totally legalized without control or regulation by Government (1 member).
2. There should be legalisation of cannabis for use in private settings by persons over the age of 18 years, with no other restrictions or controls (2 members).
3. Possession of less than 15 grams of cannabis by persons over the age of 18, and use/sharing in private by groups of such persons within that limit, should be decriminalized (2 members).
4. A household should be allowed to grow:
    a. up to 5 plants at any point in time. (4 members)
    b. up to 7 plants at any point in time. (2 members)
5. The licencing authority should be enabled to grant licences for cultivation for use as outlined in #2 & #3. (4 members)
6. In keeping with the international conventions to which the country has acceded, the production and use of cannabis for recreational purposes should remain prohibited,

subject to #7 below. Government should be very mindful of the potential adverse consequences to the banking system, and by extension the economy, of breaching the country's international agreements (3 members).

7. The members referred to in # 6 are of the view that the country should actively participate in ongoing international deliberations to review the applicable international conventions. The country should, in those deliberations, lobby for a new internationally acceptable regime for the use of cannabis for recreational purposes.
8. The position on recreational use should be revisited in 2 years when the health care services are adequately resourced. (3 members)
9. No change to the current law. (0 members)

CHAPTER 12:

Policy Imperatives Recommended by Consultant Dr. Andre Gordon, Former Chair of the Cannabis Licencing Authority in Jamaica (See biography in appendix # 5 A including significant role played by Dr. Gordon in developing Jamaica's cannabis regulatory framework for cannabis use)

Authors:

- Charles Wilkin, Q.C
- Dr. André Gordon

Listed in this Chapter (in no particular order of importance) are forty-two (42) issues raised by Dr. Gordon (based on the Jamaica experience) to be addressed in the formulation of a comprehensive policy within a regulatory framework if a decision is taken to progress towards decriminalization or legalization of the production and use of cannabis. These are by no means all of the relevant issues. However, they demonstrate the complexity of the subject.

1. Protection of youth population (from the negative effects of *cannabis*)
2. Age limits (on the legal use of *cannabis*)
3. Ensuring the availability of adequate healthcare services, particularly psychiatric care, as required
4. Ensuring that there is an adequate, balanced, appropriately funded and effectively delivered public education programme, including one specifically targeting children and adolescents within the education system prior to decriminalization
5. Development and implementation of rules and protocols governing the prescription and dispensing of medicinal products
6. Training and licensing of medical personnel, as well as a system of licensing/approval of traditional practitioners, such as may exist
7. Social messaging including publication of medical research
8. Location of sites of production
9. Location of retail sites
10. Licensing of production, distribution and sales

11. Security and investigation
12. Constraints of treaty obligations
13. Consideration of how decriminalization impacts and interfaces with other national foreign policy imperatives
14. Training and preparation of law enforcement to ensure effective, and balanced implementation of the decriminalization
15. Specific policies covering the use of edibles and other non-prescription products
16. Movement of licensed products within the country
17. Use in public
18. Use for religious purposes (specific rules/regulatory framework governing sacramental /religious use)
19. Research and development
20. Inter-ministerial responsibilities and co-ordination
21. Interaction with other OECS and CARICOM countries
22. Banking
23. Testing (the need for regulations, protocols and guidance to assure that there are adequate, internationally recognized analytical capabilities – accredited testing)
24. Sale to visitors (how is this to be effected, licensed and managed – mechanism for easy, seamless, hassle-free implementation)
25. Funding and taxation (including for sale to visitors)
26. Fiscal incentives
27. Zoning and licensing
28. Use of existing experience and traditional knowledge
29. Involvement of foreign expertise (ensuring best and appropriate advice in development of the local infrastructure and sector)
30. Protection of IP rights
31. Praedial larceny
32. Import licences and WTO obligations
33. Importation policy and impact on local varieties
34. Genetically modified products
35. Plant adulteration

36. Impact on athletes and World Anti-Doping Agency (WADA)
37. Impact of use and consumption on employment – rules impacting on-the-job drug testing
38. Interaction with other social factors
39. Timing of reform
40. Opportunities for export of local knowledge
41. Participation in industry of foreign investors (application of specific provisions to ensure local ownership and control of the industry)
42. Framework for participation of Rastafarians in a legal medical and therapeutic cannabis industry when it comes into being (this has not been specifically addressed in the legislation of several other jurisdictions).

REFERENCES

Chapter 1

1. UNODC (2018), *World Drug Report 2018*, UN, New York, https://doi.org/10.18356/d29e3f27-en.
2. Charles Reavis Price (2003) Social Change and the Development and Co-Optation of a Black Antisystemic Identity: The Case of Rastafarians in Jamaica, Identity, 3:1, 9-27, DOI: 10.1207/S1532706XID0301_02
3. M. G. Smith, Roy Augier & Rex Nettleford (1967) The Rastafari Movement In Kingston, Jamaica, Caribbean Quarterly, 13:3, 3-29, DOI: 10.1080/00086495.1967.11828959
4. Harriet Agerholm. Italian Court rules its okay for Rastafarians to smoke marijuana when meditating. Independent. November 2, 2017, https://www.independent.co.uk/news/world/europe/marijuana-smoking-meditating-italian-court-rastafarian-cannabis-possession-a8033891.html
5. Akeia A. Benard (2007) The Material Roots of Rastafarian Marijuana Symbolism, History and Anthropology, 18:1, 89-99, DOI: 10.1080/02757200701234764
6. Anne Sraders. History of Marijuana: Origins, Legality and what's happening in 2018. The Street September 24, 2018; https://www.thestreet.com/markets/history-of-marijuana-14718715
7. Schafer Commission. Marihuana, A Signal of Misunderstanding. Commissioned by President M. Nixon, March 22, 1972
8. Nick Kovacevich. Cannabis is a tax Bonanza for States. December 5, 2018. Forbes https://www.forbes.com/sites/nickkovacevich/2018/12/05/cannabis-is-a-tax-bonanza-for-states/#3b3aa6ee2514
9. Maclver B. Cannabis legalization World Map. *Cannabis Business Times*. June 29, 2017, available at: https://www.cannabisbusinesstimes.com/article/cannabis-legalization-world-map
10. *Dutch Drug Policy* available at: https://www.holland.com/global/tourism/information/dutch-drug-policy.htm
11. *In an African First, a Cannabis Expo…without Cannabis*, December 14, 2018 available at: https://www.forbesafrica.com/economy/2018/12/14/in-an-african-first-a-cannabis-expo-without-cannabis/
12. Bourque A. Thailand's legalization of Medical Cannabis proves one very important thing. Forbes December 28, 2018 available at: https://www.forbes.com/sites/andrebourque/2018/12/28/thailands-legalization-of-medical-cannabis-proves-one-very-important-thing/#66285aaf14b3

13. *Medicinal cannabis factsheet - Department of Health*, also found on: https://www.health.gov.au/internet/ministers/publishing.nsf/Content/546FB9EF48A2D570CA257EE1000B98F2/$File/Medicinal-cannabis-factsheet.pdf

Chapter 2

1. *Criminal Records Office*, Royal St. Christopher and Nevis Police Force

2. *Secondary School Drug Prevalence Survey, 2013*, Conducted jointly between the St. Kitts and Nevis National Drug Council/Organisation of American States (OAS)/Inter-American Uniform Data System on Consumption (SIDUC)

Chapter 3

1. N. Patnaik, *The Garden of Life: An Introduction to the Healing Plants of India* (New York, NY: Doubleday Books, 1993), 8.

2. G. Da Orta, *Colloquies on the Simples and Drugs of India*, *1563*, Henry Southern, trans. (London, 1913)

3. N. Culpeper, *Complete Herbal* (London: Richard Evans Co., 1814), 91

4. Conrad C. Hemp for health - The medicinal and nutritional uses of cannabis sativa. Rochester,Vermont: Healing Arts Press, 1997.

5. J. J. Moreau, "Lypemanie avec Stupeur: Tendence a la demence, Traitement par l'extrait Guerison, Resineux de Cannabis indica, "*Gaette des Hopitaux Civils et Militaires* 30 (1857): 391

6. W.B. O' Shaughnessy, " On the Preparation of Indian Hemp, or Gunjah" Translations of the Medical and physical society of Calcutta (1842): 421- 461.

7. World Health Organisation. The Health and social effects of non-medical cannabis use, World Health Organisation, 2016

8. 8. Congressional Research Service. Defining 'Industrial Hemp'; A Fact Sheet. March 06, 2017 R44742. Available at https://www.everycrsreport.com/reports/R44742.html

9. 9. Tierney A, Nelson C. Brain Development and The Role of Experience in the Early Years, Zero Three. 2009 Nov 1; 30(2): 9–13.

10. 10. Colorado Department of Public Health and Environment, Monitoring Health Concerns related to Marijuana, 08 2016

11. Tashkin DP. Does Marijuana Pose Risk for Derouic Air Flow Obstruction? Ann Am Thorae Socuty. 2015; 12 (2): 235-236.

12. Asbridge M, Hayden JA, Cartwright JL. Acute Cannabis Consumption and Motor Vehicle Collision Risk: Systematic Review of observational studies and Meta-Analysis BMJ; 2012; 344 14-7.

13. Drug Policy Alliance, From Prohibition to Progress: A Status Report on Marijuana Legalization, 2018 available at http://www.drugpolicy.org/legalization-status-report

14. Hill, K.P. Medical marijuana for treatment of chronic pain and other medical psychiatric problems: A clinical review. JAMA. 2015: 313(24)2474-2483.

15. Whiting et al. Cannabinoids for medical use: a systematic review and meta-analysis. JAMA. 2015; 313(24)2456-73
16. National Academics of Science, Engineering and Medicine. The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. 2017.

17. Devinsky O, Cross H, Laux L. et al. Trial of Cannabidiol for Drug Resistant Seizures in the Dravet Syndrom. N Engl J Med. May 2017;376:2011-2020. DOI:10.1056/NEJMOA1611618

18. Ben Tinker. First FDA Approved Cannabis -based drug now available in the US. CNN November 2 2018 available at: https://edition.cnn.com/2018/11/01/health/marijuana-drug-epidiolex-prescription/index.html

19. Dr Sanjay Gupta. DR Sanjay Gupta to Jeff Session: Medical Marijuana could save many addicted to opioids. CNN. April 24, 2018 available at: https://edition.cnn.com/2018/04/24/health/medical-marijuana-opioid-epidemic-sanjay-gupta/index.html

Chapter 4

1. "A Framework for the legalization and regulation of Cannabis in Canada: A final report of the task force on cannabis legalization and regulation". November 30, 2016.

2. Di Forti M1, Iyegbe C, Sallis H, Kolliakou A, Falcone MA, Paparelli A, Sirianni M, La Cascia C, Stilo SA et al, Confirmation that the AKT1 (rs2494732) genotype influences the risk of psychosis in cannabis users. Biol Psychiatry. 2012 Nov 15;72(10):811-6. doi: 10.1016/j.biopsych.2012.06.020. Epub 2012 Jul 24.

3. "Cannabis Use and the Risk of developing a psychotic Disorder: Wayne Hall and Louisa Degenhardt; World Psychiatry. 2008: 7 (2): 68-71"

4. "A framework for the legalization and regulation of cannabis in Canada: A final report of the task force on Cannabis legalization and regulation: Health Canada; December 2016"

5. National Drug Council Drug Assessment, 2016

6. Mental Health Services Data, 2016-2017. Health Information Unit, Ministry of Health

Chapter 5

1. Exploring the Relationship between Drugs and Crime: A Comparative Analysis of Survey Data from Prisoners in Four Caribbean Countries – Dominica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines as found on http://www.cicad.oas.org/oid/pubs/caribbeanprisons2012.pdf

2. Sewell RA, Poling J, Sofuoglu M. The effect of cannabis compared with alcohol on driving. Am J Addict. 2009 May-Jun;18(3):185-93. doi: 10.1080/10550490902786934.

3. Crane, NA, Shuster RM, Fusar-Poli, P. and Gonzalez, R. Effects of Cannabis on Neurocognitive Functioning: Recent Advances, Neurodevelopmental Influences, and Sex Differences, 2013

4. Macleod J, Oakes R, Copello A, et al. Psychological and social sequelae of cannabis and other illicit drug use by young people: a systematic review of longitudinal, general population studies. 2004

5. Fergusson DM, Boden JM. Cannabis use and later life outcomes. Addict Abingdon Engl. 2008

6. Macdonald S, Hall W, Roman P, Stockwell T, Coghlan M, Nesvaag S. Testing for cannabis in the work-place: a review of the evidence, 2010

7. Levine A, Huang Y, Drisaldi B, et al. Molecular mechanism for gateway drug epigenetic changes initiated by nicotine prime gene expression by cocaine 2011

8. Crime Directorate of the Royal St. Christopher and Nevis Police Force, 2018

9. Mullins M. Marijuana is not often linked to crime in US, Drug Czar claims. Newsmax. May 24, 2013. Available at: https://www.newsmax.com/thewire/marijuana-linked-crime-drug/2013/05/24/id/506302/

Chapter 6

1. The Jerome Biblical Commentary, Prentice-Hall IN

2. Wikipedia: Holy anointing oil in Exodus

3. The Book of Common Prayer, The Church in The Province of The West Indies.

4. Wikipedia: Alfredo Bowman, Dr Sebi, Honduran Herbalist