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# CANNABIS SATIVA L.: A REVIEW OF THE MEDICINAL PROPERTIES OF THIS 'WONDER PLANT' AND AN UPDATE ON THE NIGERIA SITUATION

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ABSTRACT: Cannabis sativa L. is an annual herbal plant of the family Cannabinaceae and abundant in nature. It is known locally as igbo, taba, blaze, joint, pot, dope, ganja, sensi, kpoli, weed, and morocco on the streets of Nigeria, and used as a medicinal plant for many centuries in many different parts of the world. Although native to Central Asia, Cannabis is now grown globally. Cannabis is the most abused plant worldwide, used for medical and recreational purposes. Recent studies have shown its efficacy in several disease conditions, including pain, sleeplessness, depression, and intractable epilepsy. The use, handling and cultivation of *Cannabis sativa* in Nigeria is illegal and backed by several laws. Despite the availability of these regulations and legislation, Nigeria is currently dealing with a drug abuse issue. After alcohol, cannabis is the most often used illicit/illegal substance in Nigeria, with a 10.8% estimated prevalence use rate. Cannabis use in Nigeria has no class distinction as it is used by both the rich and the poor, with Nigeria currently the eighth-highest consumer globally and ranks second in the quantity of dried cannabis seized annually. This review examines the history of the plant, its phytochemical components, its therapeutic use, and the controversy over the plant's legalisation or decriminalisation in Nigeria (the Nigeria situation).

**INTRODUCTION:** *Cannabis sativa* L. is a widely known plant, with its first recorded appearance in Central Asia at approximately 5000 BC<sup>1, 2</sup>. It is an annual dioeciously flowering plant of the family *Cannabaceae*; globally referred to as marijuana, Indian hemp and locally as igbo, wiwi and Ghanja by the indigenous Yoruba, Hausa and Igbo people of Nigeria, Sub-Saharan Africa; and its use predates documented history <sup>1, 3, 4</sup>.



*Cannabis sativa* is a plant that originated in Central Asia but then cultivated in Asia, Europe and China, from where its use and cultivation have spread to other parts of the world <sup>1, 5, 6</sup>. For several years, the plant has been a source of fibre, oil, and traditional medicine; its use is still prevalent today <sup>2, 6, 7</sup>.

The earliest known use of the plant was documented in the year 2737 BC by Shen Nung, the Chinese Emperor in the Pen-Ts'ao Ching (the world's oldest pharmacopoeia), where he provided a detailed description of the plant's characteristics and medicinal use <sup>3, 6</sup>. Early records of its use as medicine include its use as an anaesthesia, treatment of female reproductive system diseases, malaria, and rheumatic pain <sup>6, 7, 8</sup>. Recent data reports an increase in recreational use, where

preparations derived from the adult female cannabis plants are either smoked, eaten or infused as tea; hence, it remains the most common illicit drug worldwide <sup>7,9</sup>.

In addition to being classified as one of the sacred plants in the Atharva Veda, referring to it as a source of happiness and freedom, it is also used as medicine in India. As a result, cannabis was used regularly for various religious rituals and celebrations <sup>6, 10</sup>. The use of the cannabis plant spread to Africa through the movement of traders and soldiers in the fifteenth century, and its medicinal applications include the treatment of fever, malaria, and snake bites<sup>8, 11</sup>. Cannabis is one of the most widely cultivated plants in the world <sup>7</sup>, <sup>12</sup>. It can be grown outdoors or indoors through reproduction (using seeds), sexual asexual reproduction/vegetative propagation (using stem cuttings) or *in-vitro* micro-propagation 2, 12 Globally, it is still illegal to use, handle, cultivate, or breed cannabis; however, in some nations, exceptions are made for medical research and pharmaceutical uses <sup>2, 12, 13, 14</sup>.

**Botanical** Taxonomic Classification and Description of the Cannabis Plant: The cannabis plant is widely dispersed in nature and found in several habitats, including temperate areas and the foothills of the Alps<sup>15, 16</sup>. The taxonomic classification of cannabis has been the focus of several ongoing discussions and disagreements. The term "Cannabis" was initially used to refer to a variety of plants (including Cannabis, Humulus, and *Celtis*) but is now used to describe a genus of flowering plants made up of multiple subspecies: Cannabis sativa, Cannabis indica, Cannabis kafiristanca, Cannabis spontanea and Cannabis *ruderalis* (species with intraspecific forms) <sup>7,9,16</sup>.

TABLE1:TAXONOMICANDBOTANICALNOMENCLATURE OF CANNABIS SATIVA L.

Category	<b>Botanical Nomenclature</b>
Kingdom	Plantae
Sub-Kingdom	Tracheobionta
Super Division	Spermatophyta
Division	Magnoliohyta
Class	Magnolioppsida
Sub-Class	Hamamelididae
Order	Urticales
Family	Cannabaceae
Genus	Cannabis
Species/Subspecies	Cannabis sativa L

The three subspecies of the cannabis plant most frequently encountered are *Cannabis sativa*, *Cannabis indica*, and *Cannabis ruderalis*. The globally accepted taxonomic and botanical nomenclature of *C. sativa* L. is shown in **Table 1**.

Cannabis is mono-typic because it consists of only a species - *C. sativa*<sup>2, 7</sup>. All subspecies of the cannabis plant have been combined into a single species as the chemical and morphological differences that divide the plant into its various subspecies are not easily discernible, vary continuously, and are easily modified based on prevailing environmental conditions (such as temperature and light)<sup>2, 16, 17</sup>. The amount of certain phytocannabinoids (THC and CBD) in the plant, the number, size and nature of its leaves, and its height are the basis for grouping the species and are constantly varying.

C. sativa and C. indica plants are widely cultivated for their economic significance -fibre, oil, and medicine<sup>4, 2, 16</sup>. The cannabis plant can be grown using several techniques, including sexual or asexual propagation. The plant's cultivation strategy is selected based on its intended use and the resources available for its cultivation <sup>2, 16</sup>. However, in most parts of the world, the plant is propagated using seeds in humid forests or on cliff faces (guerrilla farming) because of the illegality associated with the cultivation and handling <sup>2,18, 19</sup>. Nonetheless, it is typically grown in greenhouses, farms, and gardens in countries where its cultivation is legal <sup>2, 18</sup>. The length of the plant's life cycle from seed to adult depends on how and when planted, how it was transplanted, and its variety; in most cases, a cycle is finished in 4 to 9 months, during which the plant can grow to attain a height of 5 m. (16 ft.)<sup>2, 18, 19</sup>.

The morphological difference between *C. indica* and *C. sativa* species is the leaves, while *C. sativa* leaves are smaller, thinner, and green in Colour, *C. indica* leaves are deep green with purple undertones that turn dark purple upon maturity. They also have wider fingers than *C. sativa* leaves  $^{4, 20}$ . In addition, the *C. sativa* species is native to Eastern Asia and the West, while the *C. indica* variety is native to Afghanistan, Pakistan, India, and their surrounding areas  $^{4, 17}$ .

**Description of the Plant:** *Cannabis sativa* is a dioecious annual plant species with several phenotypic traits. The genetic heritage of the plant plays a part in the presentation of the leaves in terms of the number of branches or size. However, the leaves typically have 5-7 leaflets, are palmate, and green. They can be either opposite, alternate, or spirally arranged, as long as 6-11 cm and 2-15 mm wide, and have coarsely serrated leaf margins. The

adaxial and abaxial leaf surfaces have sporadic resinous trichomes and are green <sup>2, 20</sup>. The stems are typically angular, branched, furrowed, and have woody interiors, while the branches on the stem have opposite or alternately presentations of leaves <sup>2, 20</sup>. The roots grow as branched tap roots with different depths (up to 2.5 m in loose soils) but are more branched in wet soils <sup>2, 20</sup>.



FIG. 1: (A) YOUNG CANNABIS PLANT (B) MATURED FEMALE CANNABIS PLANT (C) SEEDS, MATURED FEMALE FLOWER AND OIL EXTRACTED FROM THE SEEDS OF THE CANNABIS PLANT

The leaf axil gives rise to its inflorescence, with several flower heads on long, leafy stems, the male and female cannabis flowers growing on different plants. Each leaf axil produces an inflorescence with multiple flower heads on long, green stems. Five pale-green hairy sepals (2.5–4 mm long) and five pendulous stamens with slender filaments and stamens make up the staminate or male flower, while the pistillate (female flowers) are almost sessile and occur in pairs <sup>2, 21, 22</sup>. The fruit is an achene that houses a single seed with a tough shell. The ovary's thin wall closely encloses the shells, giving it an elliptical form. The seeds are brownish and speckled, have smooth surfaces, and range in length from 2 to 5 mm <sup>2, 22, 23</sup>.

**Phytochemical Constituents of** *C. sativa*: The Cannabis plant yields more than 538 different chemical components, including terpenoids,

cannabinoids, hydrocarbons, sugars and related compounds, compounds, nitrogenous noncannabinoid phenols, flavonoids, and fatty acids, with over 104 different types of phytocannabinoids 1, 2, 3, 4, 20, 24, 25. The presence of several chemical components confirms the complexity of the plant. Due to their origin, cannabinoids in the plant are called phytocannabinoids and are a special kind of terpene phenolic molecule with over 80 different <sup>1, 2, 24</sup>. Delta 9forms discovered so far tetrahydrocannabinol  $(\Delta 9\text{-THC}),$ cannabidiol (CBD), tetrahydrocannabivarin (THCV), cannabinol (CBN), cannabigerol (CBG), and cannabichromene (CBC) among are the phytocannabinoids that have been isolated and identified; with  $\Delta 9$ - tetrahydrocannabinol (THC) the cannabidiol (CBD) as and abundant cannabinoid <sup>20, 24, 30</sup>



FIG. 2: CHEMICAL STRUCTURES OF CANNABINOIDS PRESENT IN *CANNABIS SATIVA*. A. Δ9-TETRAHYDROCANNABINOL (Δ9-THC); B. CANNABINOL (CBN); C. CANNABIGEROL (CBG); D. CANNABICHROMENE (CBC) E. CANNABIDIOL (CBD)

There are two classes of phytocannabinoids in a cannabis plant: psychoactive and non-psychoactive types, with delta-9-tetrahydrocannabinol ( $\Delta$ 9-THC) and cannabidiol (CBD) as the most prevalent, isolated, and studied psychoactive and nonpsychoactive cannabinoid (active ingredients) respectively <sup>20, 26, 27, 28</sup>. Early studies divided the many varieties of cannabis into distinct groups based on the qualitative and quantitative differences their cannabinoid in ratios. distinguishing the medical-grade cannabis plants from the fibre grade.

Plants with tetrahydrocannabinolic acid ( $\Delta$ 9-THC), cannabinol (CBN), and cannabidiol (CBD) (THC + CBN/CBD) ratios greater than or equal to 1 are referred to as chemo-types, whilst ratios less than fiber-types equal to 1 are in this or chemotaxonomic categorization<sup>20</sup> . This system differentiates the putative and subspecies into the chemotype, intermediate, and fibre type Recently, an unusual chemotype with low levels of  $\Delta$ 9-THC and CBD ratio and CBG as the main constituent has been reported <sup>20, 22</sup>.



FIG. 3: GAS CHROMATOGRAPHY-FLAME IONISATION DETECTOR (GC-FID) OF (A.) HIGH CBD TYPE AND (B.) HIGH THC TYPE CANNABIS PLANT

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The quantity of cannabinoids such as  $\Delta 9$ -THC and CBD found in the tissues of the cannabis plant is another quantitative characteristic of the plant, establishing its potency. Nonetheless, the plant can be categorised into many morphological forms at various stages of its development based on age, offering a viable tool for classification <sup>20, 22, 24, 29</sup>.

History of the Medicinal Uses of C. sativa: According to historical records dating back to 4000 BC, the cannabis plant was used for its euphoric and therapeutic effects <sup>5, 20</sup>, with many civilisations presently using it for recreational and medicinal purposes. The herb (either dried or as tonics) has reportedly been widely utilised as patent medicine in the United States in the 19th and early 20th century, with evidence of its uses described in the United States Pharmacopeia in 1850<sup>5, 20, 31, 32</sup> and its use continues to date. Several parts of the plant are reported to have therapeutic effects, making it one of the 50 essential herbs in traditional Chinese medicine. The Shennong Bencaojing, also known as "Shennong's Materia Medica Classic," is the first Chinese Pharmacopeia and provides a detailed description of the cannabis plant and its medicinal applications <sup>32, 33</sup>. A Chinese surgeon (Hua Tuo) also recorded the early use of cannabis as anaesthesia for surgery, where the powdered leaves are mixed with wine and administered before the procedure <sup>5, 34</sup>.

The seeds were also prescribed for nervous disorders, laxative (use continues to this day), antihelminthic, and as a diuretic agent; ii) the tonic of the bark was also used as a diuretic agent; iii) the juice of the roots used in the management of postpartum haemorrhage and expelling retained placenta; and iv) the tonic of the leaves and flowers are used for the management of menstrual disorders and wounds healing <sup>5, 34</sup>. Cannabis has a long history of use in India, dating back to at least 1000 BC, where it was used as a recreational drug and

herbal remedy <sup>5, 34, 35, 36, 37</sup>. Its use as an analgesic, anticonvulsant, hypnotic, anaesthetic, antiinflammatory, antispasmodic, appetite stimulant and expectorant are only a few documented medical uses <sup>5, 35</sup>. According to the recently discovered Ebers Papyrus document dated 1550 BC, the early Egyptians used cannabis as suppositories to treat the pain associated with haemorrhoids, inflammation and eye problems <sup>38, 39</sup>.

Although cannabis was first brought to Africa by early Arab traders in the 15th century, there are several documented medical uses for the plant, including the use of a tonic or extract to treat or manage snake bites, facilitate childbirth, treat fever, blood poisoning, malaria, asthma, dysentery, and other conditions <sup>5, 40</sup>. Although traditional medical practitioners (TMP) have documented its usage in pain, depression, and insomnia, the medicinal application in Nigeria has been constrained by the illegality of handling the plant and its related central nervous system (CNS) effects.

Recent Pharmacological Uses of C. sativa: The interest in cannabis as a starting point for drug discovery and synthesis of novel pharmacological moieties has gradually increased over the last 45 years; this is evident by the drastic rise in the number of research on the plant <sup>27</sup>. Cannabis plants and their derivatives have been accepted and used as alternative traditional and orthodox medicines over time, and their use is still growing globally  $^{41}$ . Information on the effectiveness/efficacy of cannabinoids as a medication is currently available as several researches have shown the therapeutic efficacy of separated/isolated cannabinoids on several conditions in man<sup>24, 41, 42</sup>. Consequently, herbal remedies and synthetic versions of the phyto-constituents found in cannabis plants have received FDA approval and are commercially available <sup>24</sup>.

TABLE 2: COMMERCIALLY AVAILABLE PREPARATIONS OF CANNABIS AND CANNABINOIDS

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Trade names	Preparation	Medical Uses
Epidiolex <sup>R</sup>	Plant derived CBD oral solution	Seizures associated with Lennox Gastaut Syndrome or
		Dravet Syndrome patients 2 years or older
Sativex <sup>R</sup>	Preparation containing equal	Muscle spasticity in multiple sclerosis
	quantities of THC:CBD	
Cesament <sup>R</sup> and Canemes <sup>R</sup>	Oral capsules of THC	Nausea and vomiting associated with chemotherapy
Marinol <sup>R</sup> and Syndros <sup>R</sup>	Dronabinol (THC)	Anorexia associated with weight loss in patients with
		AIDS. Nausea and vomiting associated with
		chemotherapy

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The treatment and management of chronic noncancer pains such as neuropathic pain, neck, back, and shoulder pains, headaches, and arthritis is the most popular use for cannabis and cannabinoids globally <sup>24, 41, 42</sup>. The data from a randomised clinical trial with inhaled vaporised herbal cannabis showed that patients who smoked the plant were three times more likely to report a 30 % reduction in pain (with odds ratio (OR = 3.2) than those who received a placebo<sup>43</sup>. Also, a Cochrane review demonstrated that patients receiving cannabis were likely to experience a 50% reduction in pain compared to those receiving a placebo<sup>44</sup>.

Research has also shown that an extract containing equal amounts of THC and CBD, sold as Sativex<sup>R</sup>, was efficient in neuropathic pain and muscular spasms in people with neurodegenerative disorder multiple sclerosis <sup>41, 45</sup>. In addition, data from a randomised clinical trial showed that patients placed on Sativex<sup>R</sup> in addition to their regular treatments experienced fewer episodes of muscle spasms than patients who received a placebo <sup>45</sup>.

For over a decade, doctors in the United States have recommended dronabinol, a brand of THC commercially accessible, for the treatment of nausea and vomiting in advanced stages of malignancies and acquired immunodeficiency syndrome (AIDS)<sup>41, 42, 46</sup>. Marinol<sup>R</sup> (dronabinol/THC) was also authorised in the U.S. in the late 1990s as an appetite stimulant in patients with AIDS-related wasting syndrome<sup>47</sup>.

Recently, claims on the effectiveness of CBD oil preparations (available as drops) for treating several medical conditions such as depression, diabetes, and sleeplessness have been made <sup>48, 49</sup>. Parents of children with intractable epilepsy have stated that CBD-rich oil preparations reduce the severity and frequency of seizures. These reports were in line with the results of a multisite randomised clinical trial (RCT) and a significant open-label trial <sup>50, 51</sup>. Hence, cannabis plants, extracts, and oils are used for a wide range of symptoms in terminally ill patients, including pain, decreased appetite, anxiety, and insomnia <sup>41</sup>. Other uses of the plant and bioactive cannabinoids include the management of diabetes and its complications, anxiety, post-traumatic stress, depressive and sleep disorders, chronic pain and

inflammatory bowel diseases such as Crohn's disease and others <sup>41, 50</sup>. Hence, recommendations for a large multisite randomised experiment to evaluate the efficacy of cannabis and cannabinoids in managing several disease conditions have been made.

**The Nigeria Situation:** The *Cannabis sativa* L. plant is not native to Nigeria; clear evidence suggests it was brought here from other parts of West Africa by traders, soldiers (during and after World War II), and sailors, with additional evidence of small-scale cultivation during the British colonial masters' rule <sup>52, 53</sup>. In Nigeria, cultivation spread rapidly from the 1960s to the 1980s before progressively becoming a public health concern amongst the nation's youth in the 1990s <sup>54</sup>. Cannabis is the only illicit drug grown and produced locally <sup>18, 54, 55</sup>.

In Nigeria, dried cannabis leaves and flowering buds are widely available, in addition to other preparations of the plant, and go by several street names, including igbo, taba, blaze, joint, pot, dope, ganja, sensi, kpoli, weed, and morocco, among others <sup>18, 55, 56</sup>. Although the plant's leaves and flowering buds are commonly smoked, several other methods are used to ingest them; these include infusing the dried leaves as tea, using the fresh leaves in soup as vegetables, or soaking the dried leaves in alcoholic beverages to make cocktails (monkey-tail)<sup>18, 54</sup>.

The Dangerous Drug Act (1935), supported by the Indian Hemp Decree (1966), continues to make it unlawful to possess, use, handle, and cultivate *Cannabis sativa* in Nigeria  $^{52, 56}$ . Despite the availability of these regulations and prohibitions, Nigeria has emerged as a significant exporter of African-grown cannabis, ranking second only to Morocco in terms of the amount of dried cannabis seized annually <sup>18</sup>.

Nigeria has a documented drug use and abuse problem with a male-to-female ratio of 3:1 and a drug usage and abuse rate of 1.3% to 5.5%, with the South-West having the highest incidence, particularly in Lagos and Oyo States <sup>58</sup>. The United Nations Office on Drugs and Crime estimates that 14.4% of Nigerians (14.3 million) between the ages of 15 and 65 who use or abuse drugs did so in the

previous year <sup>18, 19</sup>. Cannabis continues to be the most widely used illicit/illegal drug in Nigeria, with proven evidence of its significant usage and abuse across all age groups <sup>19, 58</sup>, and a general population calculated prevalence use rate of 10.8%; adolescence  $\leq 25$  years of 22.7%; secondary

students of 0.6-34%; pooled prevalence rate of secondary students of 12.5%; and undergraduate prevalence rate of 8-11% depending on the location <sup>19, 59, 60, 61, 62, 63</sup>. Nigeria is currently the eighth-largest consumer of cannabis in the world <sup>52</sup>.



FIG. 4: DENSITY OF CANNABIS CULTIVATION IN SIX STATES IN NIGERIA (SOURCE- NIGERIA CANNABIS SURVEY  $^{\rm 18})$ 

Nigeria is currently one of the largest growers, suppliers, and users of the plant in West Africa. The plant grown in Nigeria is for both domestic consumption and export markets <sup>12, 13, 19, 59</sup>. Cultivation in Nigeria involves using large-scale organised farmers with evidence of the involvement of organised crime networks needed for the trafficking of the plant from the farms to the cities <sup>18</sup>.

Cannabis is grown in all 36 states of Nigeria and the Federal Capital Territory (FTC) in varied degrees/levels. However, its cultivation is highest in the following six states - Edo, Ekiti, Ogun, Ondo, Oyo, and Osun<sup>18, 19</sup>. The highest documented cultivation density is in the field border areas between Edo and Ondo States, in regions with a low human population density and a large forest cover <sup>18, 58</sup>; throughout these states, a total of 8,900 hectares of land are used <sup>18</sup>. Cannabis is cultivated in Nigeria sexually (using seeds) on large fields of abandoned farms, either as a standalone crop or growing beneath other crops to provide aerial coverage <sup>2, 18, 58</sup>. The majority of the cannabis farms in Nigeria are fields located in dense forests away from Urban settlements, with 85% of these farms over 3km away from major roads. However, small-scale cultivation occurs in gardens/small farmlands within urban settlements

for self-use/consumption <sup>18, 53</sup>. A clear relationship exists between deforestation and cannabis farming in Nigeria, with 35% of all cannabis farms reported to be cultivated on forest land cleared (areas of deforestation) within the same year <sup>18</sup>. Cannabis cultivation requires a steady water supply within the first few weeks of life; hence, farming in Nigeria occurs mainly during the annual rainy season.

Cannabis farms are harvested twice yearly – rainy and dry season, resulting in increased potential for the products <sup>18</sup>. Cannabis is a very cheap product in Nigeria, with price variations based on product availability<sup>18</sup>. According to reports, the location of purchase (higher in urban settings compared to rural settings) and distance to the source of cultivation (more expensive in the northern parts of the country) play a role in the final price/cost of dried plants <sup>18</sup>. The primary currency used in the cannabis trade in Nigeria is the naira, with a wholesale price of about three thousand (3,000) naira per kilogram of dried product. Cannabis is typically sold in wraps weighing 5 grams, enough for three wraps of cigarettes and very affordable. Retail of cannabis in Nigeria is as wraps of 5 grams with quantities enough for three cigarettes, with prices as low as ten to twenty (10-20) naira per gram <sup>18</sup>.

The use of cannabis in Nigeria in whatever form (fresh or dried leaves and oil) and for whatever purpose remains illegal to date <sup>18, 55</sup>. Despite illegality and stigma associated with its use, the use in Nigeria is fast growing amongst the productive age group (15-39 age bracket), with studies reporting its use ranked just below alcohol <sup>64</sup>. Its low cost, easy accessibility and ready availability have contributed to its rising use in Nigeria <sup>18</sup>. Several claims on the efficacy of the plant have been made, including its effectiveness in pain relief and improvement in sexual and academic performances <sup>65, 66, 67, 68</sup>.

Over the past two years, Nigeria has entered the global spotlight with its legalisation of cannabis debates <sup>24</sup>. The need to legalise *cannabis sativa* in Nigeria has been the subject of numerous discussions and counter-discussions for several reasons 52, 55, 69. The governor of Ondo State addressed a stakeholders' roundtable conference on the benefits and opportunities of the plant to the nation's economy and has been a leading proponent of this movement. He made his case by stating that Nigeria needed legal support to participate in the multi-billion-naira cannabis sector to diversify the economy and that the drug's benefits - medicinal and the economical outweigh its drawbacks. Whether Nigeria as a nation is ready to legalise the plant for whatever reason remains unknown, even though his argument was backed by existing factsestablished medical benefits and the cannabis market's multibillion-dollar size. "NO" remains the honest response.

Cannabis is still illegal to grow, possess, and consume in Nigeria presently, but the statistics on these Activities, local distribution and usage of the plant are concerning. An estimated 14.3 to 19.4% of the total population aged 15 and above have used or are using the plant currently <sup>18, 19, 70, 71</sup>. Nigeria is currently ranked first globally in per cent of use by the total population, giving the impression that the plant is legal for use and consumption.

Also, behind Morocco, we have the second-highest yearly quantity of dried cannabis seizures <sup>18</sup>. For the same price as a cigarette or even less, dried cannabis leaves are found on street corners, close to educational institutions and recreational locations.

It is also frequently served at social gatherings infused with drinks and now openly smoked without concern and fear of the authorities or shame over the associated stigma, as if it has become the norm. Cannabis-laced cakes, candies, and beverages are widely accessible in supermarkets and retail outlets<sup>65, 69</sup>.

Although the call for legalisation has cited several benefits, including the creation of jobs, high tax revenues from the farmers, and earning foreign exchange that would serve as an economic boost, one cannot help but consider the risks associated with an increase in the number of people who would have access and use the plant, early onset of use (in terms of age) as well as prolonged use on the Nations' already struggling and underfunded health care system.

The country's healthcare system is now dealing with several issues, including insufficient infrastructure, a shortage of professional workers, and a lack of people with the necessary training in mental health. Consequently, the legalisation would only result in driving the country into the ranking of first place in terms of number of mentally ill persons on the streets -"a country of craziness/madness".

The body in charge of Nigeria's drug laws and policies, the National Drug Law Enforcement Agency (NDLEA), is adamantly opposed to the legalisation of cannabis for any purpose. They have expressed concerns about the plant's legalisation on several fronts, arguing that it will also increase use and the chaos, criminality, and war that comes with it as it may not be possible to cultivate the plant under regulated conditions solely for medical reasons<sup>70</sup>. Although advantages exist in its therapeutic applications, looking at the Nigerian situation, the risks exceed the rewards. So, it is accurate to state that the debate about legalising marijuana in Nigeria has been put on hold. At the same time, one cannot completely rule out future discussions on the subject matter.

**CONCLUSION:** In many cultures around the world, *Cannabis sativa* L. has been used as a medicinal plant for many centuries. The abolition of prohibitions, decriminalisation, and legalisation of cannabis on a global scale have had both

beneficial and harmful effects, with an increase in the prevalence of abuse and use worldwide. The argument for the legalisation of the cannabis plant in Nigeria should never be given the green light, notwithstanding the proof of its economic and therapeutic benefits. One can conveniently argue that as a nation, Nigeria is not prepared to meet the challenges that would arise following the legalisation or decriminalisation of the plant.

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