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CURRENT OPINION

The Place of Cannabinoids in the Treatment of Gynecological Pain

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Abstract

Cannabis sativa (L), a plant with an extensive history of medicinal usage across numerous cultures, has received increased attention over recent years for its therapeutic potential for gynecological disorders such as endometriosis, chronic pelvic pain, and primary dysmenorrhea, due at least in part to shortcomings with current management options. Despite this growing interest, cannabis inhabits an unusual position in the modern medical pharmacopoeia, being a legal medicine, legal recreational drug, and an illicit drug, depending on jurisdiction. To date, the majority of studies investigating cannabis use have found that most people are using illicit cannabis, with numerous obstacles to medical cannabis adoption having been identified, including outdated drug-driving laws, workplace drug testing policies, the cost of quality-assured medical cannabis products, a lack of cannabis education for healthcare professionals, and significant and persistent stigma. Although currently lacking robust clinical trial data, a growing evidence base of retrospective data, cohort studies, and surveys does support potential use in gynecological pain conditions, with most evidence focusing on endometriosis. Cannabis consumers report substantial reductions in pelvic pain, as well as common comorbid symptoms such as gastrointestinal disturbances, mood disorders such as anxiety and depression, and poor sleep. Substitution effects were reported, with >50% reduction or cessation in opioid and/or non-opioid analgesics being the most common. However, a substantial minority report not disclosing cannabis consumption to their health professional. Therefore, while such deprescribing trends are potentially beneficial, the importance of medical supervision during this process is paramount given the possibility for withdrawal symptoms.

Plain Language Summary

Cannabis, whether purchased illicitly, or obtained through legal means, is commonly used by those with chronic pelvic pain, especially people with endometriosis. People report several benefits from using cannabis, including being able to reduce their normal medications including opioid based painkillers, but often don't tell their health professional about this. This could lead to issues with withdrawal symptoms, so clinicians should be aware of the high prevalence of use of cannabis in this population.

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Key Points

Robust clinical trial data is currently lacking for gynecological pain conditions.

Despite this, cannabis is being used to treat gynecological pain, especially in those with endometriosis or other forms of chronic pelvic pain, with reductions in symptoms such as pelvic pain commonly reported.

Cannabis consumption for gynecological pain should be undertaken under medical supervision, especially when reducing pharmaceutical interventions like opioids.

1 Introduction

Current global estimates suggest 39.6% of women and those assigned female at birth* (hereafter denoted as women)—or approximately 1.53 billion people, live with gynecological disease [1], with pain often a key symptom. The most common causes of gynecological pain are primary or secondary dysmenorrhea, with over 70% of women reporting dysmenorrhea (period pain) at some stage of their life [2]. Primary dysmenorrhea is defined as menstrual pain in the absence of underlying structural changes [3]. Primary dysmenorrhea's characteristic symptom is crampy, colicky spasms of pain in the suprapubic area, occurring within 8–72 h of menstruation and peaking within the first few days as menstrual flow increases [3, 4]. In addition to painful cramps, many women with primary dysmenorrhea experience other menstrual-related symptoms, including back and thigh pain, headaches, diarrhea, nausea, and vomiting [4]. The largest contributing physiological factor in primary dysmenorrhea is increased amounts of prostaglandins present in the menstrual fluid [5]. If there is no pregnancy after ovulation, progesterone levels decline in the late luteal phase of the cycle. Reduction in progesterone levels destabilizes cell membranes in endometrial tissue and causes the hydrolyzation of cell membrane phospholipids (mainly omega-6) to form arachadonic acid. Arachadonic acid is converted via the cyclooxygenase pathway to prostaglandins PGE2 and PGF2a [5, 6]. These excess prostaglandins are released when the endometrial lining breaks down during menses. Prostaglandins, especially PGF2a, stimulate myometrial contractions, reducing uterine blood flow and causing uterine hypoxia. This is responsible for the painful cramping that characterizes primary dysmenorrhea [5, 7]. Secondary dysmenorrhea is menstrual pain associated with structural changes in the pelvis or an identifiable cause such as endometriosis [4]. In Australia and other high-income countries, persistent dysmenorrhea is reported in over 90% of women and girls under age 25 years [8, 9]. Dysmenorrhea may lead to absenteeism at work [10], and affect attendance and academic performance both at school and in tertiary education [2], with many people reporting inadequate symptom management [11–13].

Chronic pelvic pain (CPP), defined as pain in the pelvis for > 6 months' duration that is severe enough to cause functional disability or require medical intervention [14] is a common type of gynecological pain [15–17]. CPP may be cyclic, non-cyclic or both [18] and commonly includes dysmenorrhea (period pain), non-cyclical pelvic pain, dyspareunia (painful intercourse), dysuria (pain on urination), and dyschezia (pain on defecation) [19]. CPP affects one in four women (26%) [18, 20], accounting for 40% of laparoscopies, 10% of specialist gynecology consultations, and 12% of hysterectomies in the USA annually [18]. CPP includes conditions such as endometriosis, adenomyosis, vulvodynia, interstitial cystitis, and bladder pain syndrome [19, 21, 22], with endometriosis the single most prevalent disease in this group [23]. Symptom management is frequently challenging due to involvement of neuropathic, nociplastic, and nociceptive pain pathways [21].

Current management strategies for gynecological pain depend on its underlying cause. Primary dysmenorrhea is commonly managed by non-steroidal anti-inflammatory drugs (NSAIDs) and/or the oral contraceptive pill as first-line treatment(s) [24], however a significant number of women report less than optimal symptom management, with 25% of those using ibuprofen and 35% of those using paracetamol reporting no reduction in dysmenorrhea severity [12]. This may explain why women are open to using other treatments such as cannabis to manage their primary dysmenorrhea symptoms [13]. Current treatments for endometriosis and chronic pelvic pain are generally considered suboptimal by those with the disease [15, 25], with only 25% of those with endometriosis being satisfied with their symptom management [25]. There are concerns about lack of effectiveness and problematic side effects of many medications for pelvic pain, leading to discontinuation rates of 25–50% [26]. Opioid analgesics are not recommended for chronic pelvic pain due to both a lack of efficacy and safety concerns with respect to ongoing use [27]. However, despite this they continue to be prescribed; women with endometriosis have a four times greater risk of chronic opioid use compared with women with no endometriosis [28]. For those with endometriosis, surgery is considered the gold standard but often has significant costs, long waiting times [29], and substantial recurrence rates, even with expert endometriosis surgeons [30].

Given the prevalence of gynecological pain, its deleterious effect on quality of life, and the current difficulties in managing this pain, finding effective, safe interventions with low addictive/dependence potential is identified as an international priority [31–33].

2 Historical Use of Cannabis

Cannabis sativa is one of the oldest cultivated plants utilized by humans, being used as a food, textile and as a medicine for millennia [34–36]. The Ebers Papyrus (1550 BCE) from ancient Egypt describes the use of cannabis to aid childbirth [37]. In ancient China, the use of cannabis for female reproductive symptoms was reported in the *Pen-Tsao Ching*, based on the oral traditions passed down from the Emperor *Shen-Nung*, who lived circa 2700 BCE [36, 38]. The age-old Indian *Atharva Veda* of 1000 BCE described cannabis as a sacred plant, used as an analgesic, anesthetic, anti-inflammatory, anti-spasmodic, and hypnotic medicine [36].

More recently, the Chinese *Bencao Gang Mu* compiled in 1596 recommended cannabis flowers for menstrual disorders [37], the Persians utilized it for calming uterine pains [37], African cultures utilized it to facilitate childbirth, and South American cultures reported its utility for menstrual cramps in the 16th century [36].

Cannabis was introduced to Western medicine in 1842 by the Irish physician O'Shaughnessy [37]. Soon after, it was acknowledged in the *Dispensatory of the United States*, and tinctures of cannabis were prescribed to manage uterine hemorrhage [39], assistance in childbirth [40], neuralgic dysmenorrhea [41], hyperemesis gravidarum, dysmenorrhea, and heavy menstrual bleeding—the latter being published in the *British Medical Journal* [37, 42]. In the 19th century, cannabis was also prescribed as an anodyne in chronic metritis, endometritis, and chronic cystitis [37]. Importantly, cannabis was found to have advantages over opiates for pain [43], and could also be useful for opiate withdrawal [44–46]. Notwithstanding its widespread popularity, cannabis started falling out of favor as a medical treatment in the early 20th century, due mainly to a lack of quality assurance and standardization from imported material [47]—factors that were being addressed by the newly birthed pharmaceutical industry and its single active drug model. However, with the implementation of the *Marihuana Tax Act* in 1937 [48], which effectively criminalized the possession and use of cannabis as a medicine in the US, widespread medical use largely ceased. Cannabis was subsequently removed from the *United States Pharmacopoeia* in 1942 and was added to the United Nation's *Single Convention on Narcotic Drugs* in 1961. Cannabis was prohibited through the US *Controlled Substances Act* of 1970 where it was classified as a Schedule 1 controlled substance—defined as having no accepted medicinal use, high abuse potential, and concerns for dependence [48]. Whilst history suggests that the drivers for this prohibitionist position were more idealistic than evidence-based [49, 50], the fact remains that *Cannabis sativa* remains a largely prohibited substance globally, with changes to legislation only relatively recently allowing for medicinal use in a growing number of nations.

Despite decades of prohibition and Schedule 1 relegation, research into the therapeutic potential of cannabis continued largely unabated, with two of the main active constituents of cannabis, the terpeno-phenolic cannabinoids cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC) discovered in 1940 and 1964, respectively [51, 52]. Cannabidiol, a non-intoxicating cannabinoid, has a wide range of pharmacological activities, including neuroprotective, anti-convulsant, anxiolytic, analgesic, anti-depressant, antioxidant, and anti-inflammatory properties [53–58]. THC also has a broad array of pharmacological actions, including analgesic, anti-emetic, anti-inflammatory, muscle relaxant, and sedative properties [59–62]—all of which can be of potential benefit to gynecological pain conditions, but must be balanced with its intoxicating effects. To date, there are over 144 different cannabinoids identified across the *Cannabis* genus [63], with research ongoing into their pharmacological activities and potential benefit in human health. Additional research has also identified an entire neuromodulatory system within the body—the endocannabinoid system (ECS)—with receptors identified in most organ systems, including the female reproductive system, resulting in various changes to physiological processes [64].

3 Mechanisms of Action

The ECS consists of G-protein coupled receptors (i.e., Cannabinoid 1 and 2 receptors), endogenous ligands (i.e., the endocannabinoids), and ligand metabolic enzymes [65] responsible for the synthesis and degradation of endocannabinoids. More broadly, the ECS is involved in the modulation of a host of physiological responses, inclusive of inflammation, nociception, appetite regulation, respiration, and metabolism [66], with more recent research highlighting ECS involvement across many aspects of the female reproductive system. The ECS engages in a complex interplay with the hypothalamic pituitary ovarian (HPO) axis to exert control over certain female reproductive processes [67], including pain modulation, oocyte maturation, ovarian endocrine secretion, folliculogenesis, uterine decidualization and placentation, implantation, and embryo transport [67–69]. Research into the role of ECS in gynecological conditions has highlighted that elevated systemic levels of endocannabinoids (i.e., anandamide and 2-arachidonoyl glycerol [2-AG]), along with decreased local cannabinoid 1 receptor (CB1) expression are present in people with endometriosis [70], and that the ECS may be a promising target to address endometriosis-related pain [71–73]. Furthermore, alterations in ECS homeostasis may lead to dysfunctional modulation of cellular processes involved in reproductive pathologies, namely pre-eclampsia, miscarriage, and ectopic pregnancy [74]. Research also posits that ECS dysfunction is involved in the pathogenesis of dysmenorrhea in adenomyosis [75].

Proposed mechanisms by which both endocannabinoids and cannabinoids exert analgesic effect across gynecological pain and associated disorders are numerous and interrelated. Neural and non-neural cells produce arachidonic acid derivatives known as endocannabinoids in response to tissue injury [76]. These endocannabinoids, mainly anandamide and 2-AG, modulate neural pain signal conduction by mitigating sensitization and inflammation via activation of cannabinoid receptors, which are also targets for phytocannabinoids such as THC [77, 78]. Cannabinoid 1 (CB1) receptors are predominantly expressed throughout the central nervous system where they modulate neurotransmitter

release; however, they are also present in the pain-modulating areas such as the dorsal root ganglion [78], periaqueductal grey, and rostral ventral medulla [79, 80]. Additionally, CB1-mediated analgesia is not solely via nervous system modulation, but also potentiates anti-inflammatory effects on mast cells [81]. Cannabinoid 2 (CB2) receptors are widely expressed in high concentrations throughout the periphery and immune cells [80], but are also found in lower amounts in the brain and spinal cord [78]. CB2 receptors increase in response to peripheral nerve damage, interfere with inflammatory hyperalgesia, and modulate neuroimmune activity [78, 82]. Furthermore, CB2 activation inhibits proinflammatory signaling released near nociceptive nerves and can propagate downstream release of opioids [81, 83], and has demonstrated antinociceptive activity in inflammatory hyperalgesia and neuropathic pain [84, 85].

Focusing on endometriosis as an exemplar, there are several drivers for the pain experience, including nociceptive, inflammatory, and neuropathic pain mechanisms which are interconnected and complex to manage [73]. Additionally, the psychological impact of the pain experience in people with endometriosis can cause anxiety and pain catastrophizing, with the related sequalae of impacting self-esteem and relationships, worsening the pain experience further [73]. Phytocannabinoids from *Cannabis spp* not only interact with CB1 and CB2 receptors to exert analgesic activity, but also modulate transient receptor potential vanilloid (TRPV) channels which are involved in neuropathic pain signals [81, 86]. Modulation of serotonin receptors (5HT1A) by phytocannabinoids such as cannabidiol can assist in pain through exerting anxiolytic and antidepressant activity, and other antinociceptive effects of cannabinoids have been proposed specific to endometriosis, including antiangiogenic, immunomodulating, and antiproliferative activities [81, 87, 88].Whilst more research is needed to fully elucidate the efficacy and safety of cannabis and cannabinoid-based medicinal products in endometriosis and other gynecological conditions, recent changes in regulatory scheduling of cannabis has opened up this field of research to the broader international scientific community.

4 Access to Medicinal Cannabis

With the enactment of the *Compassionate Use Act* (Proposition 215) in 1996, California became the first US state to permit legal access to cannabis for medical reasons under physician supervision [48]. This started a ripple effect throughout the USA, with 37 states allowing legalized medicinal cannabis, including seven states allowing access to CBD-containing products only. In contrast, Canada adopted the *Marijuana Medical Access Regulations* in 2001 that was replaced by the *Marijuana for Medical Purposes Regulations* in 2014 with no restrictions on the clinical indications for which cannabis could be prescribed [89]. More than 50 countries have followed suit, adopting assorted medicinal cannabis regulatory models [90], including Israel, the United Kingdom, Australia, and New Zealand. Different nations have varying degrees of regulatory oversight and product quality assurance standards. Changes to laws and regulations have also allowed the scientific community to research cannabis more rigorously and allowed people with gynecological pain to access cannabis legally for medicinal purposes.

5 Evidence for Gynecological Pain Conditions

Currently there are few properly designed and controlled randomized clinical trials investigating the efficacy of cannabis for gynecological symptoms, which limits clear guidance around clinical recommendations. Until such studies are undertaken, there is a reliance on evidence that is lower on the evidence pyramid, supported by a growing body of retrospective data, cohort studies, and surveys, reporting the positive effects of cannabis from patients with gynecological symptoms [91]. Given poor symptom management [15], long waiting times for endometriosis surgery in some jurisdictions [29], and side effects of many medications for pelvic pain [26], it is perhaps unsurprising that people with CPP are using cannabis as a substitute for, or in addition to, more orthodox treatments. A cross-sectional survey of 240 CPP patients recruited in an outpatient gynecology office reported that one-quarter of patients with CPP used cannabis regularly as an adjunct to prescribed medicines, with 96% reporting improvements in their symptoms, including 84% reporting improved muscle pain, 72% a reduction in irritability, depression, and anxiety, and 68% an improvement in sleep [92]. Similarly, a cross-sectional survey of 484 endometriosis patients in Australia on self-management of endometriosis reported illicit cannabis was the most effective self-management strategy [93]. In this survey, one in ten respondents reported utilizing illicit cannabis for therapeutic purposes to manage their endometriosis symptoms, with self-reported pain reduction rated at 7.6/10. In addition, over half (56%) of the cohort reported a 50% or more reduction in pharmaceutical medications typically used for endometriosis management [93, 94]. From a retrospective, electronic record-based cohort study of 252 patients with self-reported endometriosis, cannabis use for decreasing pelvic pain was described, with inhaled delivery being the most common mode of administration [95]. This preference for inhalation may be due to the rapid speed of onset of pharmacological effects for inhaled cannabis compared with oral forms [96], which could provide better control

for the sudden breakthrough pain that commonly occurs in endometriosis (so called 'endo flares'). This study also suggested improvements in comorbid symptoms such as mood and gastrointestinal symptoms, common in those with endometriosis [19], and had greater improvement for oral dosage forms compared with inhaled [95], suggesting that tailoring the mode of administration to target specific symptoms is an important clinical consideration. During the COVID-19 pandemic, an international cross-sectional survey found that 51% of 1634 respondents with endometriosis used cannabis in the 3 months prior [97]. Respondents with legal access were more likely to consume cannabis than those without and were also more likely to disclose their usage to healthcare professionals. In many of these studies, a deprescribing or 'substitution effect' is reported where uptake in cannabis usage results in a reduction in one or more pharmaceuticals [94]. From a cross-sectional study of 213 participants in New Zealand, illicit cannabis use for managing pain and to improve sleep was reported in 95% of respondents, with over 80% ($n = 176/213$) indicating that cannabis had reduced their normal pharmaceutical medication usage [98]. Almost two-thirds ($n = 128/213$) of respondents completely stopped a medication, most commonly analgesics (66%, $n = 85/128$), with opioids (40%, $n = 51/128$) being the most common analgesic stopped, followed by NSAIDs at 17% ($n = 21/128$), antidepressants (16%, $n = 20/128$), and benzodiazepines (15%, $n = 9/128$) [98]. In a separate study from Australia and New Zealand, 237 people with endometriosis reported substantial substitution effects utilizing predominantly illicit cannabis [99], with a 50% or more reduction in usage being reported for those who currently or previously used opioid analgesia (66%, $n = 121/183$), non-opioid analgesia (63%, $n = 147/233$), neuroleptics (61%, $n = 37/60$), and anxiolytic medications (47.9%, $n = 46/96$).

6 Risks of Cannabis Usage

Cannabis use for gynecological pain, whether legal or illicit, is not without side effects or risks [100]. Factors such as early age of initiation associated with mental ill health in vulnerable populations, dependence, and abuse potential (i.e., particularly THC-dominant cannabis) are important clinical considerations for clinicians to discuss with their patients before prescribing or recommending medicinal cannabis [96, 100]. The most common side effects reported by cannabis consumers in general include dry mouth, anxiety, nausea, dizziness, drowsiness/fatigue, and cognitive effects [96]. These are similar to those reported by people using cannabis for gynecological pain; 84% of those using cannabis for pelvic pain reported side effects, most commonly dry mouth, sleepiness, and feeling 'high' [92]. In those with endometriosis, just under a third (28%) of cannabis users reported side effects; 75% reported feelings of euphoria, 72% increased appetite, 67% dry mouth, and 35% feelings of mild anxiety or paranoia with medically diagnosed cannabis; hyperemesis syndrome was reported by only two respondents (<1%) [97]. However, cessation due to these side effects is relatively low, with just under 23% of those who reported cessation of cannabis indicated it was due to side effects [97].

Deprescribing associated with cannabis substitution is promising. However, research suggests that people are not informing their medical doctor of their use of illicit cannabis for therapeutic purposes, citing concerns over legal repercussions (combined 31.3%), societal judgment (29.2%), the doctor's reaction (29.2%), or the doctor's presumed unwillingness to prescribe (10.4%). This is concerning as many of the medications that are being reduced or discontinued, such as opioids and benzodiazepines, have potential for significant withdrawal [101, 102] if not tapered off correctly under medical supervision. Therefore, doctors who work with patients with endometriosis or other forms of chronic pelvic pain should be aware of the likelihood of potential cannabis usage, and try to encourage disclosure of usage, or at minimum, closely monitor usage of these medications over time.

7 Barriers to Usage

Whilst the distinct lack of randomized clinical trial data may be a significant barrier to cannabis adoption for gynecological pain conditions such as CPP and endometriosis, there may be more pernicious obstacles. The deleterious impact of stigma is well described in the medicinal cannabis cohort, and whilst some have proposed that stigma is diminishing due to normalization in certain localities, there is little evidence to suggest it has disappeared [103]. Recent data from the UK of 2319 patients utilizing cannabis-based medicines (CBMs) indicated that participants were afraid of what the police or criminal justice system (57.1%), other government agencies (55.3%), and healthcare professionals (40.2%) might think about their treatment choice, suggestive of a high prevalence of perceived stigma [104]. Qualitative research of people utilizing illicit cannabis for therapeutic purposes shows that stigmatization is related to, and perpetuated by, the ambiguous status of cannabis (i.e., both a legal medicine and illegal drug) and the lack of knowledge about medical cannabis amongst police, medical professionals, and the general public [105]. Additional qualitative research exploring the barriers, drivers and perceptions of cannabis use for primary dysmenorrhea (PD) in Australian women [106] goes further, showing that the perceived damage to their professional and social standing if their cannabis use became known was a serious concern, despite its legality for medical purposes. Participants spoke about the clandestine

way they had to consume cannabis for their pain and symptoms, and that even the possibility of being perceived as irresponsible, simply by virtue of being a cannabis user, was a significant barrier to adoption [106]. Stigma not only impacts people directly, but also indirectly in the bias and opinions of the healthcare professionals they interact with. Surveyed pharmacists have highlighted the impact that stigma can have on patients, with the lack of public awareness and inability to distinguish between medicinal and recreational cannabis identified as key factors contributing to public stigma [107, 108]. Furthermore, effective treatment with medicinal cannabis may be compromised by negative attitudes, stigmatized perceptions, and subjective norms of nurses and physicians [109], highlighting that health education for both health professionals and the general public plays a crucial role in reducing the impact of stigma [110]. This is particularly detrimental given that women with CPP and associated conditions such as endometriosis already experience stigma and discrimination [111, 112].

The impact of such stigma permeates into government laws and corporate policies, notably drug-driving laws and workplace drug testing policies [113, 114]. This is a significant challenge as cannabis is one or more of (a) a legal medicine, (b) a recreational/adult-use drug, and (c) an illicit/illegal substance, depending on geographic location and legal jurisdiction. This is reflected in the haze of issues with preexisting drug-driving laws and workplace policies. Whilst road safety risks associated with the medicinal use of cannabis appear to be similar or lower than other potentially impairing prescription medications [90], including those commonly used in endometriosis such as opioids, in countries such as Australia, patients utilizing medicinal cannabis are still subject to drug-driving testing, which detects for presence of THC alone, not impairment. Such laws criminalize the presence of THC in body fluids irrespective of impairment and appears to be linked to the historical status of cannabis as a Schedule 9 substance with no recognized medical value [90]. Research has shown, particularly in those living in regional and remote locations, that facing such criminal prosecution for driving whilst using cannabis legally as a medicine is a significant barrier to adoption [106], giving rise to the need for updated drug-driving laws. Similarly, workers in high-risk industries such as defense, construction, railroad, transport, maritime, and mining operations are similarly disadvantaged as these occupations are usually subjected to workplace drug testing policies [49].

8 Illicit versus Legal Medicinal Cannabis

Illicit cannabis is unlikely to have any accurate indication of the level of THC, and the lack of any quality control precludes consistency, making consistent dosing for medical purposes next to impossible. Medicinal cannabis undergoes rigorous testing procedures including microbial limits, cannabinoid standardization, detection of foreign matter, aflatoxins, ochratoxin A, pesticide and solvent residues. This ability to cultivate and standardize cannabinoids and manufacture medicinal cannabis products to high quality standards with reproducible results means that accurate dosing is now possible [115, 116]. Unfortunately, the very ability to manufacture to these high standards is now contributing to a significant cost-to-patient burden, which can in turn drive people to illicit or recreational markets to source cannabis for therapeutic self-management. International survey data from this team (manuscript under submission) examining the use of cannabis for endometriosis pain and associated symptoms has identified that in countries such as Canada and the US, that have both legal medical and recreational/adult-use models, most survey respondents were utilizing recreational/adult-use cannabis for therapeutic self-administration over that of medical doctor prescription. Policy makers in countries with newly minted medical cannabis programs need to consider the impact to public health that initiating adult-use legalization may have on the medical cannabis sector and consider thoughtful approaches to ensuring a co-habitation of both is possible.

9 Conclusion

A variety of evidence shows that cannabis usage, either illicit or legally prescribed, is relatively common amongst those with chronic pelvic pain. Cannabis appears to reduce pain and other symptoms of endometriosis such as gastrointestinal issues, with corresponding reported reductions or cessation in medications commonly used to manage these symptoms such as opioids. Cannabis inhabits an unusual position in our modern pharmacopoeia, being both a legal medicine, a legal recreational drug, and an illegal drug, depending on jurisdiction. This has led to issues with driving, workplace laws, and stigmatization that limit its usage as a legal medication. Clinicians working with endometriosis patients should be aware of high levels of cannabis usage amongst this population and monitor any reductions in regular medication, especially in the case of opioids and benzodiazepines. While promising, the safety and effectiveness of cannabis for various gynecological pain conditions needs to be tested in rigorous clinical trials.

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