



Medical Cannabis: Facts and Fiction

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Disclosures

I have NO actual or potential conflict of interest to disclose with regard to the subject matter of this presentation



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Hazlin Hassan
Malaysia Correspondent

THE STRAITS TIMES

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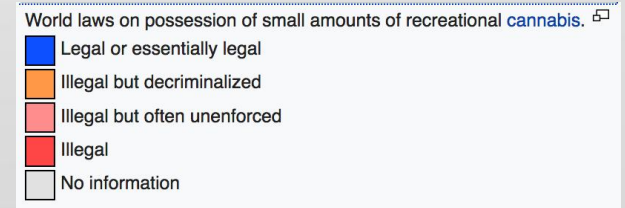
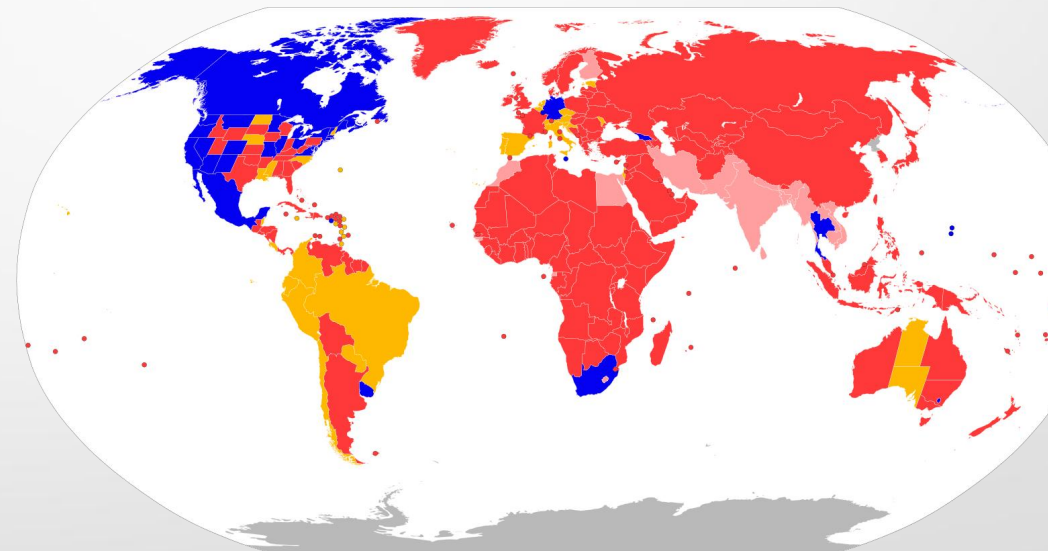
KUALA LUMPUR - The Malaysian Cabinet will discuss policy issues relating to legalising cannabis for medical use and developing the industry, the parliamentary caucus on medical marijuana has said.

"More than 40 countries have legalised consumption of cannabis for medicinal purposes. The caucus believes that Malaysia has the space and a huge opportunity in this industry for medicinal and research purposes which could deliver a lot of benefits for the country," it said in a statement on Tuesday (April 12) after a caucus meeting that was attended by Prime Minister Ismail Sabri Yaakob.

"The Prime Minister responded positively on issues concerning the industry and said the matter will be discussed in further detail by the Cabinet."

Countries which have legalised medical cannabis

- Argentina (2017)
- **Australia (2016)**
- Austria (2008)
- Canada (2001)
- Chile (2005)
- Colombia (2016)
- Croatia (2015)
- Czech Republic (2013)
- Finland (2008)
- Germany (2016)
- Israel (2016)
- Italy (2013)
- Jamaica (2015)
- **Korea (2020)**
- Macedonia (2016)
- Netherlands (2003)
- Portugal (2001)
- Romania (2013)
- Spain (legal loophole)
- **Thailand (2019)**
- USA (1996, California)
- Uruguay (2013)



<https://en.m.wikipedia.org/wiki/File:Map-of-world-cannabis-laws.svg>

Malaysian laws on cannabis possession

Dangerous Drugs Act 1952 S39B



Offence	Penalty
Possession of >200 g of cannabis	Mandatory Death
Possession of 50-200 g of cannabis	Life imprisonment or Imprisonment >5 y + whipping >10 strokes
Possession of 20-50 g of cannabis	Imprisonment 2-5 y + whipping 3-9 strokes
Cultivation of cannabis	Life imprisonment + whipping >6 strokes



Fact of Fiction?



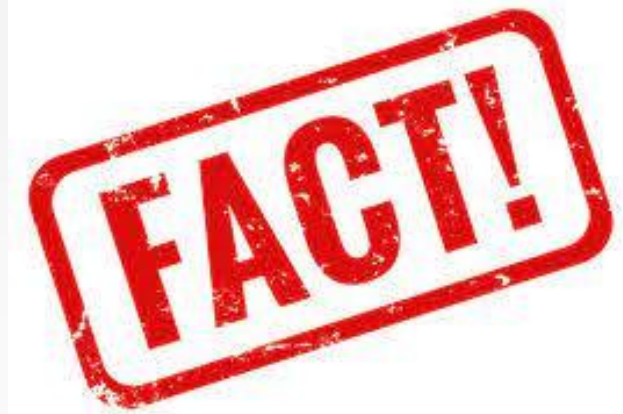
- Cannabis is the most widely used substance in the world
- All cannabis products are the same
- Cannabis has been proven to relieve all kinds of pain
- Cannabis can also be used for other symptoms including nausea and vomiting, anorexia, anxiety and depression, and insomnia
- Cannabis can cure cancer
- Cannabis has no harmful side effects
- Cannabis is not addictive

Fact of Fiction?



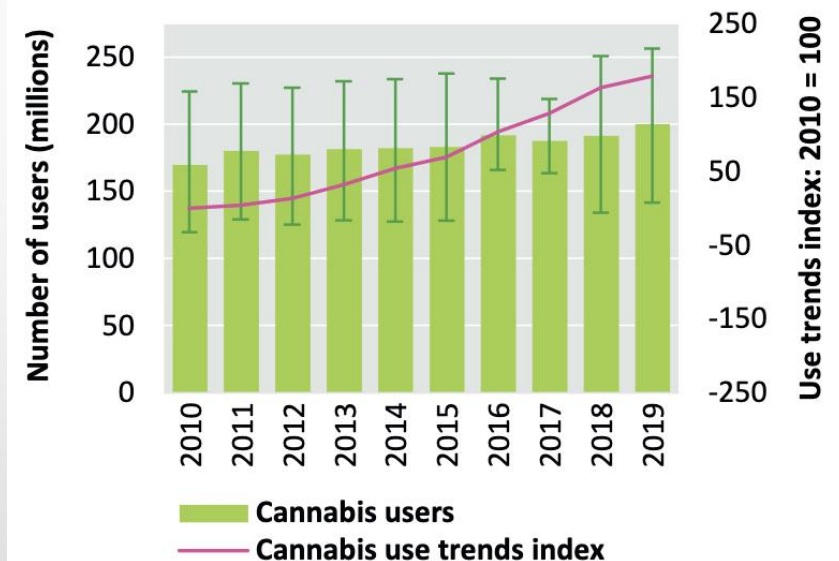
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Cannabis



- Is the most widely used substance worldwide
- An estimated 200 million people (4% of the world's population) aged 15 to 64 years used cannabis at least once
- Cannabis was included as a controlled drug in the United Nations' Single Convention on Narcotic Drugs (1961) and its use is illegal in most countries.

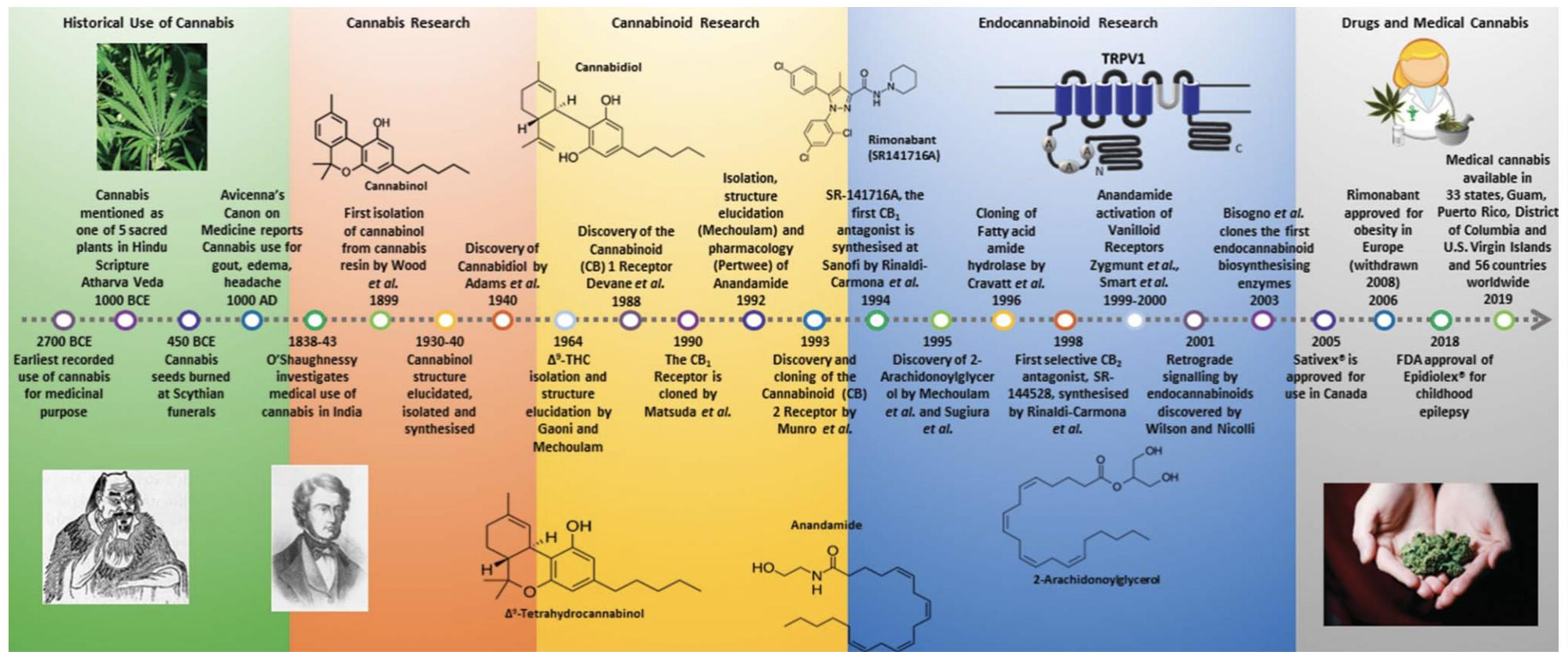
FIG. 11 Trends in the global number of people who use cannabis and reported trends in cannabis use, 2010–2019



United Nations Office on Drug and Crime (UNODC) report 2023

Cannabinoids, the endocannabinoid system, and pain: a review of preclinical studies

David P. Finn^{a,*}, Simon Haroutounian^b, Andrea G. Hohmann^c, Elliot Krane^d, Nadia Soliman^e, Andrew S.C. Rice^e

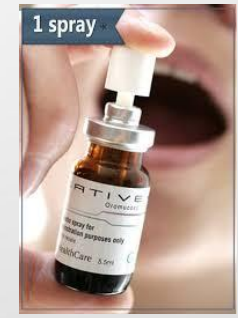




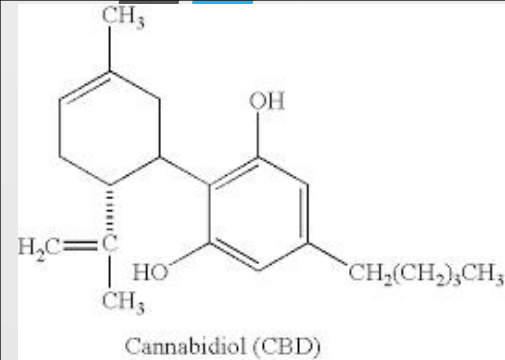
Cannabinoids



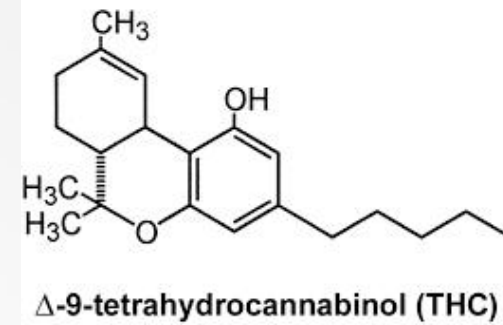
- can be administered orally, sublingually, topically
- can be smoked, inhaled, mixed with food, made into tea
- can be taken in herbal form, extracted naturally from the plant or manufactured synthetically
- Cannabinoids approved by FDA
 - Dronabinol capsules (e.g. Marinol)
 - Nabilone capsules (e.g., Cesamet)
 - Oromucosal spray Nabiximols (e.g. Sativax)
 - Cannabidiol (e.g. Epidiolex)
- Thai products available:
 - THC/CBD (25/27 mg/ml)
 - THC (13 mg/ml)
 - CBD (100 mg/ml)
 - DTAM Decha Oil THC 2mg/ml
 - DTAM Metta Ostot 81 mg/ml



Thanks to Dr Nanthasorn for info and photos of Thai products



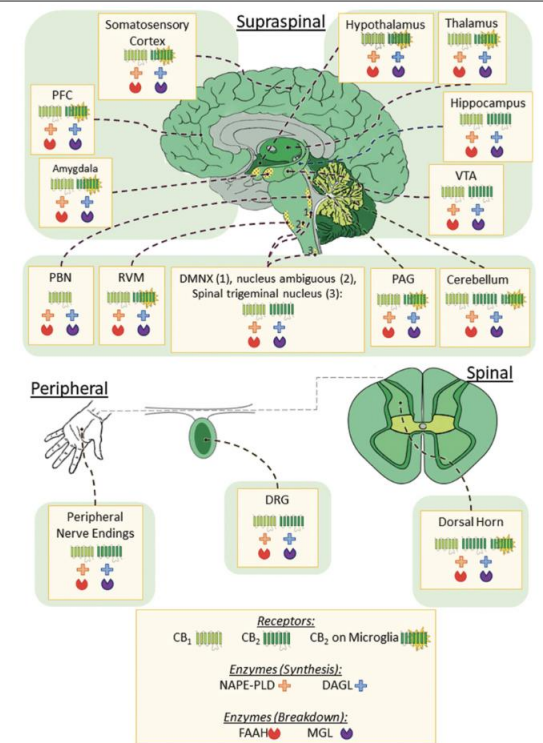
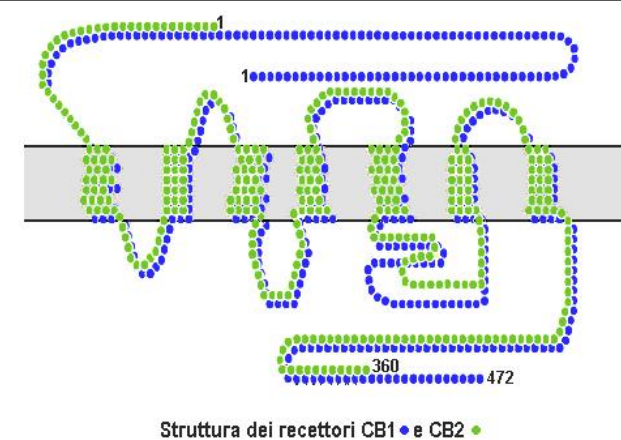
Pharmacology



- Medicinal preparations made from the cannabis plant contain several hundred chemical substances
 - **varying concentrations in different plant strains & environments**
- Main ingredient is phytocannabinoids
 - **Delta9-tetrahydrocannabinol (Δ 9-THC)** has psychogenic effects
 - **Cannabidiol (CBD)** - no psychoactive effects; CBD has antiemetic, analgesic, anxiolytic, anti-inflammatory, and antipsychotic effects

Pharmacology

- Cannabinoid receptor subtypes: CB₁ and CB₂.
- CB₁ receptors are predominantly distributed throughout the central and peripheral nervous system
 - mediate inhibition of neurochemical transmitter release and are associated with analgesic and mood modifying effects
- CB₂ receptors predominantly occur on immune cells
 - associated with modulation of cytokine release and have an anti-inflammatory effect
- Endogenous cannabinoid ligands (endocannabinoids) are derived from arachidonic acid (e.g. anandamide) and act on the CB₁ and CB₂ receptors



Pharmacokinetics and Pharmacodynamics

- Absorption: oral bioavailability 30% of inhaled form → SL form (to bypass)
- onset of action 0.5- 2 hr
- Distribution: very lipophilic
 - plasma T1/2 20-30 hr
 - tissue T1/2 up to 30 days
- Metabolism: liver metabolism to psychoactive metabolite
- Elimination: urine, bile, feces
- **THC**: agonist at CB1 and CB2 receptors
- **CBD**: inhibits CB1, interacts with glycine, serotonin and TRPV1

Fact of Fiction?



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- Cannabis can also be used for other symptoms including nausea and vomiting, anorexia, anxiety and depression, and insomnia
- Cannabis can cure cancer
- Cannabis has no harmful side effects
- Cannabis is not addictive



International Association for the Study of Pain Presidential Task Force on Cannabis and Cannabinoid Analgesia position statement

IASP Presidential Task Force on Cannabis and Cannabinoid Analgesia

**INTERNATIONAL ASSOCIATION FOR THE STUDY OF PAIN
COMPLETES COMPREHENSIVE REVIEW OF RESEARCH ON THE USE
OF CANNABINOIDS TO TREAT PAIN AND FINDS THAT THERE IS A**

ORIGINAL ARTICLE

Cannabis and Pain

An Overview

Winfried Häu

Background: There are conflicting interpretations of the evidence regarding the efficacy, tolerability, and safety of cannabinoids in pain management and palliative medicine.

Methods: We conducted a systematic review (SR) of systematic reviews of randomized controlled trials (RCT) and prospective long-term observational studies of the use of cannabinoids in pain management and palliative medicine. Pertinent publications from January 2009 to January 2017 were retrieved by a selective search in the Cochrane Database of Systematic Reviews, the Database of Abstracts of Reviews of Effects, and Medline. The methodological quality of the SRs was assessed with the AMSTAR instrument, and the clinical relevance of quantitative data syntheses was assessed according to the standards of the Cochrane Collaboration.

Results: Of the 750 publications identified, 11 SRs met the inclusion criteria; 3 of them were of high and 8 of moderate methodological quality. 2 prospective long-term observational studies with medical cannabis and 1 with tetrahydrocannabinol/cannabidiol spray (THC/CBD spray) were also analyzed. There is limited evidence for a benefit of THC/CBD spray in the treatment of neuropathic pain. There is inadequate evidence for any benefit of cannabinoids (dronabinol, nabilone, medical cannabis, or THC/CBD spray) to treat cancer pain, pain of rheumatic or gastrointestinal origin, or anorexia in cancer or AIDS. Treatment with cannabis-based medicines is associated with central nervous and psychiatric side effects.

Conclusion: The public perception of the efficacy, tolerability, and safety of cannabis-based medicines in pain management and palliative medicine conflicts with the findings of systematic reviews and prospective observational studies conducted according to the standards of evidence-based medicine.

Cannabinoids, cannabis, and cannabis-based medicine for pain management: a systematic review of randomised controlled trials

Emma Fisher
Simon Harcourt
Christopher

h Gilron^{h,i,j},

Evidence of benefit (30% or 50% reduction in pain intensity) was found for cannabis <7 days and nabiximols >7 days. No other beneficial effects were found for other types of cannabinoids, cannabis or CBM... 81% of subgroup analyses were negative.

Abstract

Cannabinoid
of their efficacy
randomised controlled
and 50% reduction
GRADE. Studies
delivering cannabis
benefit was found
quality evidence
quality evidence
81% of subgroup
Studies in this
little confidence in the estimates of effect. The evidence neither supports nor refutes claims of efficacy and safety for cannabinoids, cannabis, or CBM in the management of pain.

Cannabis, nabiximols and THC had more AEs than control....
Studies in this field have unclear or high risk of bias and low quality evidence....
"The evidence neither supports nor refutes claims of efficacy and safety for cannabinoids, cannabis, or CBM in the management of pain"

Understanding
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es were 30%
evidence using
participants)
Evidence of
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Keywords: Cannabis, Cannabis-based medicine, Cannabinoids, Systematic review, Meta-analysis, Pain, Chronic pain

Acute Pain Management Scientific Evidence 5th Edition

Evidence for cannabis in pain management: Key messages

- Current evidence does not support the use of cannabinoids in acute pain management (Level I).
- Cannabinoids appear to be mildly effective when used in the treatment of pain and spasticity associated with multiple sclerosis and HIV (Level III-2 SR).
- Smoking cannabis has short-term efficacy in neuropathic pain in patients with HIV/AIDS, although potential study bias means that this is not recommended as routine treatment (Level I)

NICE Guidelines (2021): Cannabinoids for chronic pain

Studies on CBD in combination with THC, THC alone, dronabinol and nabilone

- Some evidence showed that CBD reduced chronic pain, but the treatment effect was modest (an average improvement of about 0.4 on a scale ranging from 0 to 10).
- The evidence did not show a reduction in opioid use in people prescribed medicinal cannabis
- The potential benefits offered were small compared with the high and ongoing costs
- There was no evidence for intractable cancer-related pain or pain associated with painful childhood diseases.



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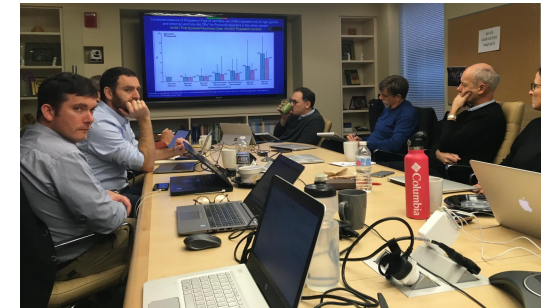
Recommendations of International organisations

- **European Pain Federation (2018):** Should be considered as adjunctive treatment esp for chronic neuropathic pain
- **NICE (2020): Do not offer for chronic pain, period!!**
- **IASP (2021):** Due to the lack of high-quality clinical evidence IASP **does not currently endorse general use**

PAIN

International Association for the Study of Pain Presidential Task Force on Cannabis and Cannabinoid Analgesia: research agenda on the use of cannabinoids, cannabis, and cannabis-based medicines for pain management

Simon Haroutounian^{a,*}, Lars Arendt-Nielsen^b, Joletta Belton^c, Fiona M. Blyth^d, Louisa Degenhardt^e, Marta Di Forti^{f,g,h}, Christopher Ecclestonⁱ, David P. Finn^j, Nanna B. Finnerup^k, Emma Fisher^l, Alexandra E. Fogarty^m, Ian Gilronⁿ, Andrea G. Hohmann^o, Eija Kalso^p, Elliot Krane^q, Mohammed Mohiuddin^r, R. Andrew Moore^s, Michael Rowbotham^t, Nadia Soliman^u, Mark Wallace^v, Nantthasorn Zinboonyahoon^w, Andrew S.C. Rice^u



slide courtesy of Dr Nantthasorn Z, Siriraj hospital, Bangkok

Recommendation:

Based on the above review, there was limited evidence available on the effectiveness and safety of cannabis for medical use. These are the recommendations on their therapeutic potential for these disorders based on synthesis of the retrieved evidences:

a. Non-cancer pain

The current available evidence is inadequate for the committee to recommend the use of medical cannabis for chronic pain in clinical use.

b. Cancer-pain

The currently available evidence is inadequate for the committee to recommend the use of medical cannabis in cancer pain. Well-designed RCTs are recommended to evaluate the use of medical cannabis in cancer pain.

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Authors' conclusions

Cannabis-based medications may be useful for treating refractory chemotherapy-induced nausea and vomiting. However, methodological limitations of the trials limit our conclusions and further research reflecting current chemotherapy regimens and newer anti-emetic drugs is likely to modify these conclusions.

Cannabinoids for nausea and vomiting in adults with cancer receiving chemotherapy (Review)

Main findings

This review of 23 randomised controlled trials (clinical studies where people are randomly put into one of two or more treatment groups) found that fewer people who received cannabis-based medicines experienced nausea and vomiting than people who received placebo (a pretend medicine). The proportion of people who experienced nausea and vomiting who received cannabis-based medicines was similar to conventional anti-nausea medicines. However, more people experienced side effects such as 'feeling high', dizziness, sedation (feeling relaxed or sleepy) and dysphoria (feeling uneasy or dissatisfied) and left the study due to the side effects with cannabis-based medicines, compared with either placebo or other anti-nausea medicines. In trials where people received cannabis-based medicines and conventional medicines in turn, overall people preferred the cannabis-based medicines.

Quality of the evidence

The trials were of generally of low to moderate quality and reflected chemotherapy treatments and anti-sickness medicines that were around in the 1980s and 1990s. Also, the results from combining studies on the whole were of low quality. This means that we are not very confident in our ability to say how well the anti-sickness medicines worked, and further research reflecting modern treatment approaches is likely to have an important impact on the results.

Cannabis-based medicines may be useful for treating chemotherapy-induced nausea and vomiting that responds poorly to commonly used anti-sickness medicines.

9. *Chemotherapy-induced nausea and vomiting*

The current available evidence is inadequate for the committee to recommend the usage of medical cannabis in patients with chemotherapy induced nausea and vomiting. Further studies are needed to explore the efficacy and safety of medical cannabis against the standard of care in patients with chemotherapy induced nausea and vomiting.

- Anorexia - no evidence Häuser W, et al. 2017
- Anxiety
 - decreases anxiety at low dose,
 - but increases anxiety at higher doses
- Insomnia
 - Studies suggest cannabis can help insomnia, but long-term use may negatively influence sleep.

<https://adai.uw.edu/pubs/pdf/2017mjanxiety.pdf>

<https://www.sleepfoundation.org/sleep-aids/cannabis-and-sleep>

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Cannabinoids for Cancer Treatment: Progress and Promise

Sami Sarfaraz, Vaqar M. Adhami, Deeba N. Syed, Farrukh Afaq, and Hasan Mukhtar

Chemoprevention Program, Paul P. Carbone Comprehensive Cancer Center and Department of Dermatology, School of Medicine and Public Health, University of Wisconsin, Madison, Wisconsin

- Cannabinoids, the active components of marijuana and their other natural and synthetic derivatives, have been used for centuries for medicinal purposes. In view of the fair safety profile of most conventional anticancer drugs, and for their potential role in the prevention of cancer, clinical trials are required to determine whether cannabinoids could be used for the inhibition of tumor growth in a clinical setting. Cannabinoids may also have an antitumor immune response.
- It is also reported that low doses of cannabinoid administration accelerate proliferation of cancer cells instead of inducing apoptosis and, thereby, contribute to cancer progression.

MEDICAL CANNABIS IN MALAYSIA: SUPPLY AND DEMAND ON FACEBOOK

Ekmil Krisnawati Erlen Joni¹, Shahrul Mizan Ismail^{2*} and Rohaida Nordin²

¹Department of Law, Universiti Teknologi MARA Cawangan Melaka, Melaka, Malaysia

²Faculty of Law, Universiti Kebangsaan Malaysia, Selangor, Malaysia

This study examines the current supply and demand of medical cannabis on Malaysian Facebook Pages. Researchers searched for cannabis Facebook Pages in Malay and English between April and June 2022, using the keywords associated with cannabis and marijuana in popular search engines. The Facebook content, including the posts and users' responses to supply and demand information for medical cannabis, were screened and analysed.

Subsequently, the contents of the Facebook Pages were categorised into five themes: (1) demand for medical cannabis; (2) testimony; (3) supply information; (4) adverse health effects of medical cannabis; and (5) product types and routes of administration.

The findings indicate that medical cannabis is available online and searchable via popular search engines, despite being illegal in Malaysia. A total of 46 Facebook Pages related to cannabis were identified in this study, where 13 pages sell medical cannabis directly, and 3 sell both medical and recreational cannabis. In addition to private messages via Facebook Messenger, most pages share contact details. The information on the sampled Facebook Pages reflected the growing demand and illegal sales of medical cannabis in Malaysia via online platforms since 2012. Thus, there is an urgent need for proper regulations and laws to

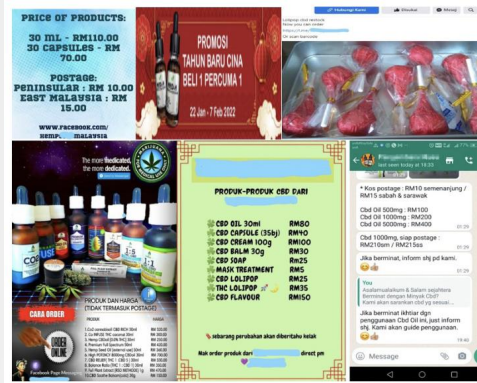


Figure 1: Types of medical cannabis products and price

Table B: Posts and comments categorised by types of diseases

Types of diseases	Example of posts
Cancer: Brain tumour, prostate, colon, nasal, breast, leukaemia, lymphoma, neuroblastoma, cervical, ovarian, gallbladder, peripheral nerve tumours	<p>Can blood cancer patients use this product?</p> <p>My wife has stage four cervical cancer, and the cancer has spread to the hip, bones, liver, and lungs. The doctor used morphine. The cost of treatment is very high. Therefore, I requested the doctor to discharge her from the ward. I want to try CBD oil as a painkiller. Where can I get this CBD oil? Thank you.</p> <p>Where can I get the CBD oil? My aunt is suspected of having liver cancer or lymphoma. I hope someone can help me to get this CBD</p> <p>🙏</p> <p>I would like to know if CBD oil is suitable for nerve cancer. My friend's wife is suffering from stage four nerve cancer.</p> <p>Hi everyone. I need Rick Simpson Oil for stage four breast cancer. Please private message me. My father was diagnosed with cholangiocarcinoma cancer.</p> <p>Do you have a contact number? My brother has stage four oral cancer.</p> <p>Excuse me, is medical cannabis suitable for lymphoma?</p>

Table C: Testimonies posted by the sellers or medical cannabis users on the benefit of medical cannabis

Breast cancer	After consuming CBD for one month, the lump in my breast has shrunk. The pus is also gone. Maybe the pus in the breast is all out. The wound has dried, but the pain remains.
Lymphoma	My dad suffers from stage four lymphoma. He exhibited positive results after using 1000 mg of CBD oil a week. My dad says CBD makes the pain bearable. He uses CBD oil instead pain killers. I would like to introduce 5000 mg CBD oils to him soon. I will update here if there are any improvements, InsyaAllah.
Brain tumour	I fully support the use of medical cannabis. I used it to treat my son, who had a brain tumour. My son is 90% paralysed. Alhamdulillah, my son is now healthy after consuming cannabis oil by Allah's permission.
Cancer	The CBD oil is suitable for all types of cancer. Alhamdulillah. My neighbour has stage four colon cancer. The doctor said there was no need for chemotherapy. Subhanallah, with God's permission. My neighbour only consumed six bottles of CBD oils.
Cervical cancer	My boss's mother-in-law, who had stage four cervical cancer, is now completely cancer-free. She consumed CBD oils.
Chronic pain	I have SLE, chronic eczema, graves disease, and anxiety. I use CBD oil, hemp capsules, and hemp oil. These products are effective for my anxiety and other chronic pain. I feel calmer and relaxed and have better control of my emotions.

Table C: Testimonies posted by the sellers or medical cannabis users on the benefit of medical cannabis

Anxiety, depression

I have anxiety and depression. Alhamdulillah, I thank God for my health after taking several drops of CBD oil under the tongue, according to the prayer time.

My anxiety is improving gradually. I can sleep peacefully and no longer wake up in the middle of the night. I used to suffer from panic attacks and breathing difficulties. My health has improved after taking this CBD oil.

CBD oil is good for anxiety. I have almost fully recovered from severe anxiety.

I am completely fine now. The CBD oil works for anxiety and depression.

Insomnia

I have been using this product for only four days, and I can already tell the difference. I sleep better, my mood has been uplifted, and I have more energy, memory, and focus. I recommend this remedy to everyone.

So far, so good. If I cannot sleep, I use two drops. It improves my sleep quality.

I consume CBD, but this product does not work for insomnia. This treatment is helpful for relaxation and to reduce my pain due to a broken leg.

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Side effects and toxicity

- Dizziness (most common)
- Dysphoria; psychoactive effects (“feeling high”, “feeling stoned”)
- Impaired psychomotor performance, memory and concentration (affects driving)
- Sedation, fatigue, headache
- acute toxicity is extremely low (No reported deaths)
- Long term effects

General risks of harm with cannabinoids, cannabis, and cannabis-based medicine possibly relevant to patients receiving these for pain management: an overview of systematic reviews

Abstract

The growing demand for and cannabis-based medicine, and data from analgesic studies of patients receiving cannabinoids in systematic reviews, encompassing

Available evidence (from settings other than pain management e.g. non medical, recreational) suggest variable associations between cannabis exposure and psychosis, MVA, respiratory problems and other harms..

vehicle accidents, cardiovascular, respiratory, cancer-related, maternal/fetal, and general harms. Reviews, and their included studies, were of variable quality. Available evidence suggests variable associations between cannabis exposure (ranging from monthly to daily use based largely on self-report) and psychosis, motor vehicle accidents, respiratory problems, and other harms. Most evidence comes from settings other than that of pain management (eg, nonmedicinal and experimental) but does signal a need for caution and more robust harms evaluation in future studies. Given partial overlap between patients receiving cannabinoids for pain management and individuals using cannabinoids for other reasons, lessons from the crisis of oversupply and overuse of opioids in some parts of the world emphasize the need to broadly consider harms evidence from real-world settings. The advancement of research on cannabinoid harms will serve to guide optimal approaches to the use of cannabinoids for pain management. In the meantime, this evidence should be carefully examined when making risk-benefit considerations about the use of cannabinoids, cannabis, and cannabis-based medicine for chronic pain.

cannabinoids, cannabis, even limited harms relevant to patients. This review identified 79 adverse effects, motor

Medicinal cannabis in Thailand: 1-year experience after legalization

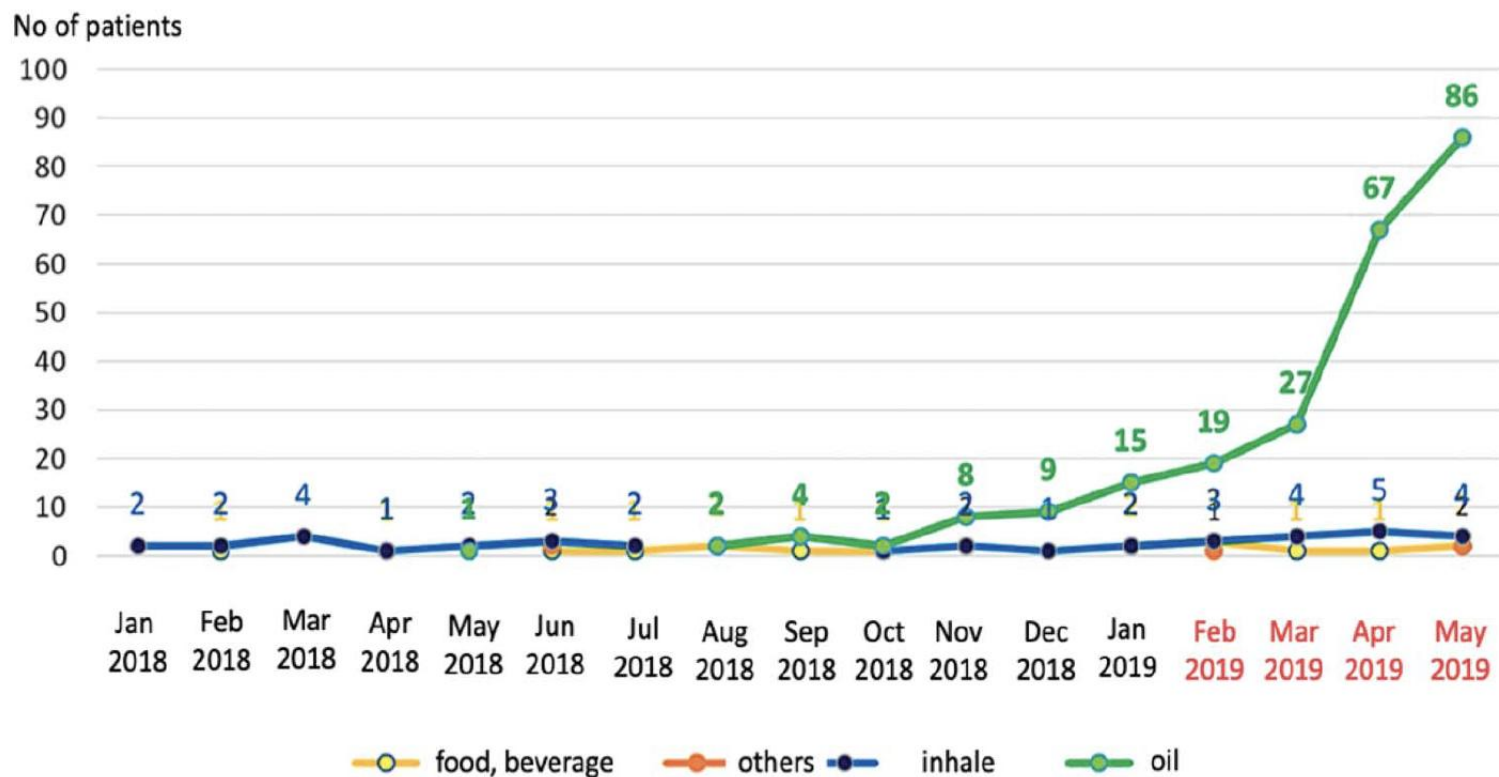


Figure 1. Number of patients reporting adverse effects from cannabis product exposures notified to Ramathibodi Poison Center, Thailand, between January 2018

Report on side effects after legalization

- **Three hundred and two** patients reported side effect of MJ:
Heart racing (133), palpitation (110), high blood pressure (110), dizziness (106),
nausea (76), agitation (49), sedation (43), **seizure (4), coma (4)**
- Treatment;
Admitted (198), IV fluid administrate (141),
Medication administrated; BDZ (59), dimenhydrinate (47), anti-emetic (44)
brain imaging; CT scan (2), MRI (4)
intubated (4)

Courtesy from Toxicology Unit, Ramathibodi Hospital, Mahidol University

slide courtesy of Dr Nanthasorn Z, Siriraj hospital, Bangkok

Cannabis and Addiction

- Cannabis use can lead to the development of a substance use disorder, a medical illness in which the person is unable to stop using even though it's causing health and social problems in their life
- Severe substance use disorders are also known as addiction. Research suggests that between 9 and 30 percent of those who use marijuana may develop some degree of marijuana use disorder
- People who begin using marijuana before age 18 are four to seven times more likely than adults to develop a marijuana use disorder

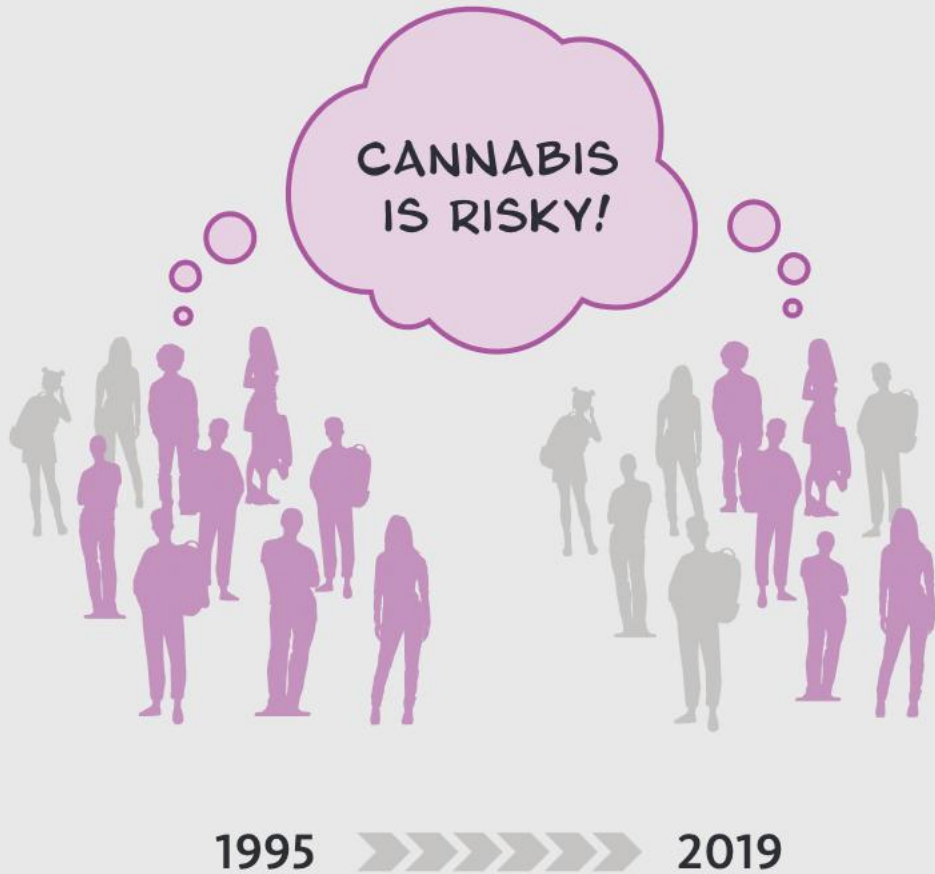
Hasin DS, et al. Prevalence of Marijuana Use Disorders in the United States Between 2002 and 2013. *JAMA Psychiatry*. 2015;72(12):1235-1242. doi:10.1001/jamapsychiatry.2015.1858.

Winters KC et al. Likelihood of developing an alcohol and cannabis use disorder due to marijuana use.

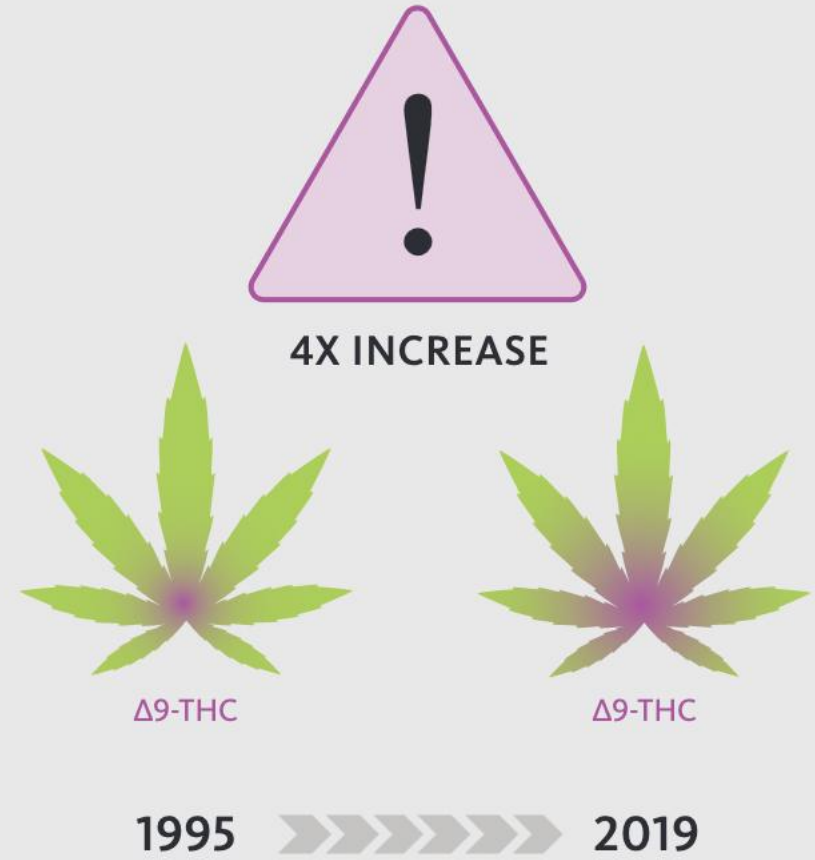
(from <https://nida.nih.gov/publications/drugfacts/cannabis-marijuana#/>)

CANNABIS IS MORE POTENT BUT FEWER YOUNG PEOPLE SEE IT AS HARMFUL

PERCEPTION AMONG ADOLESCENTS

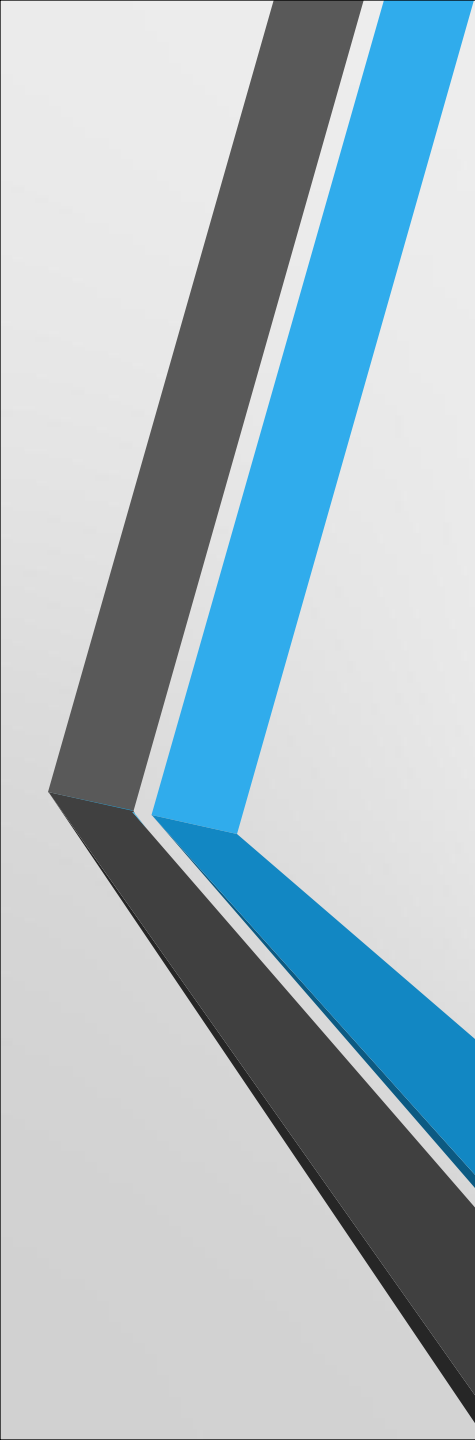


CANNABIS HERB POTENCY





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So what do we do if our
patient asks for advice on
taking cannabis for
symptom management?

CLINICAL DECISIONS

INTERACTIVE AT NEJM.ORG

N ENGL J MED 368;9 NEJM.ORG FEBRUARY 28, 2013

Medicinal Use of Marijuana

This interactive feature addresses the approach to a clinical issue. A case vignette is followed by specific options, neither of which can be considered either correct or incorrect. In short essays, experts in the field then argue for each of the options. In the online version of this feature, available at NEJM.org, readers can participate in forming community opinion by choosing one of the options and, if they like, providing their reasons.

CASE VIGNETTE

Marilyn is a 68-year-old woman with breast cancer metastatic to the lungs and the thoracic and lumbar spine. She is currently undergoing chemotherapy with doxorubicin. She reports having very low energy, minimal appetite, and substantial pain in her thoracic and lumbar spine. For relief of nausea, she has taken ondansetron and prochlorperazine, with minimal success. She has been taking 1000 mg of acetaminophen every 8 hours for the pain. Sometimes at night she takes 5 mg or 10 mg of oxycodone to help provide pain relief. During a visit with her primary care physician she asks about the possibility of using marijuana to help alleviate the nausea, pain, and fatigue. She lives in a state that allows marijuana for personal medicinal use, and she says her family could grow the plants. As her physician, what advice would you offer with regard to the use of marijuana to

alleviate her current symptoms? Do you believe that the overall medicinal benefits of marijuana outweigh the risks and potential harms?

Which one of the following approaches do you find appropriate for this patient? Base your choice on the published literature, your clinical experience, recent guidelines, and other sources of information.

1. Recommend the medicinal use of marijuana.
2. Do not recommend the medicinal use of marijuana.

To aid in your decision making, each of these approaches is defended in the following short essays by experts in the field. Make your choice and make recommendations for the patient at NEJM.org.

Marilyn: the case for marijuana

- acetaminophen & oxycodone not effective for her pain of spinal and visceral metastases.
- ondansetron and prochlorperazine did not relieve the nausea,
- More aggressive narcotics could be prescribed
 - risk worsening of gastrointestinal symptoms
- Marijuana can treat both the pain and the nausea/vomiting
- Smoking better because of slow onset of oral preparations of medical marijuana
- Not enough clinical trials (due to illegality of marijuana)

Marilyn: the case against marijuana

“Although marijuana probably involves little risk in this context, it is also unlikely to provide much benefit. Simply to allow a patient with uncontrolled symptoms of metastatic breast cancer to leave the office with a recommendation to smoke marijuana is to succumb to therapeutic nihilism”

- Each dispensed quantity of marijuana is of uncertain provenance and of variable and uncertain potency and may contain unknown contaminants.
- marijuana’s cognitive side effects, particularly its effects on memory may exacerbate chemotherapy-induced cognitive dysfunction
- possible effects of marijuana on tumor progression
- Availability of other therapies for chemotherapy-induced nausea and vomiting
 - 5HT₃ antagonists, dexamethasone, and aprepitant → superior efficacy & fewer SE

Preventing Oversight on Medical Cannabis Legislation in Malaysia: Analysis of Risks, Benefits and

Conclusion

Since CBD and THC compounds originated from the same species of *Cannabis sativa*, there is a fine line between medical and recreational use of cannabis. Legalisation of cannabis might expose unnecessary risks of addiction and psychiatric disorders in the population. This is especially true if large-scale cultivation is allowed in this country, even with the implementation of strict rules and regulations. Most of the studies on the safety and efficacy of cannabis reported either weak or inconclusive results. Reviews of high-quality studies reported the use of cannabis is to have a better effect only for the treatment of chronic non-cancer pain and specific type of epilepsy. From the legislation perspective, comprehensive regulations and guidelines at every step of cultivation, production, handling and usage should be established before the legalisation to avoid any deviation. Not only that, enforcement of the laws must be at par with other countries such as Australia or Canada and capable of controlling the appropriate use of cannabis in the community, strictly for medical purposes. At this juncture, the motion to legalise the

Cannabinoids for adult cancer-related pain: systematic review and meta-analysis

Elaine G Boland,¹ Michael I Bennett,² Victoria Allgar,³
Jason W Boland ⁴

Boland EG, et al. *BMJ Supportive & Palliative Care* 2020;**10**:14–24. doi:10.1136/bmjspcare-2019-002032

CULTURE

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Is Malaysia ready to roll the dice and legalise cannabis?

An expert presents a cautious perspective on the potential legalisation of cannabis in Malaysia.



By WAN AHMAD ATARMIZI

[Follow](#)

22 Mar 2024 02:28pm



No recreational use of cannabis in Malaysia, says KJ

24 August 2022





Bernama - 24 Aug 2022, 09:00 PM

The health minister is in Thailand to study practices, research and the use of cannabis for medical purposes.

Malaysia To Look at Using Ganja and Ketum for Medical Uses

The issue is about growing them in a controlled manner.

[Dale John Wong](#) Jan. 31, 2023  

 > Life

Malaysia's Ministry of Plantation and Commodities is currently [looking at the viability](#) of cannabis and ketum (or kratom) plants in medicinal applications, and will enter discussions with the country's Ministry of Health regarding controlled cultivation and production of both plants.

This was confirmed by Malaysian Deputy Prime Minister Fadillah Yusof, who also holds the portfolio of Plantation and Commodities minister, on January 30, 2022 at a press conference at the National Kenaf and Tobacco Board (LKTN).

Should Malaysia make any move to legalize the cultivation and use of marijuana, the country could stand to open up a market with a sizeable potential revenue, as has been observed with Thailand set to see its legal cannabis market size [grow to US\\$9.6 billion by 2030](#).



ACCEPTANCE TOWARD DECriminalIZATION OF MEDICAL MARIJUANA

AP60



Sheikh Shafizal Sheikh Ilman¹, Abu Bakar Rahman¹, Mariatul Umeera Muhammad Dahaban¹,
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¹Institute for Behavioural Research, National Institute of Health, Malaysia.

INTRODUCTION

Marijuana may have therapeutic and medical benefits due to a variety of chemicals. The effect have gained global attention in recent years. Decriminalisation of marijuana means many will benefit from its medical potential. However, it may come together with much risk. Therefore the study gains acceptance among Malaysian on the issue.



METHODS

Study Design:
Cross Sectional
Online Survey



Study Population:
Malaysian who are 18
years and older



Sample Size:
2,047 people



Inclusion Criteria:
Aged 18 and above,
have access to the internet
and able to understand
Malay or English language



MEDICAL MARIJUANA

RESULT

over five in 10 respondents
54.3% strongly agree to
support the use of
medical marijuana
if there is evidence
from clinical research

50.3% strongly agree to use
medical marijuana for
my own treatment if
Malaysia law allows it
to be used

49.5% strongly agree to
support the use of
medical marijuana
among their family
members or close
acquaintance if there
is evidence based
from clinical research

53.8% strongly agree
marijuana use for
medical purposes
requires consultation,
prescription and
monitoring from
trained medical
doctor

40.2% strongly agree
medical marijuana
is safe for mental
and physical health

51.3% strongly agree on
decriminalization of
medical marijuana
for the purpose and
treatment in Malaysia

OBJECTIVE

To determine public acceptance towards decriminalization of medical marijuana



SOCIO DEMOGRAPHIC

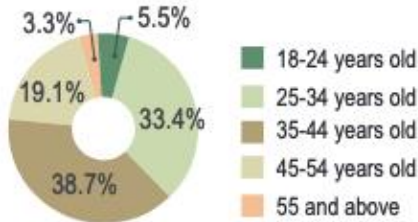
n=2,047

Gender

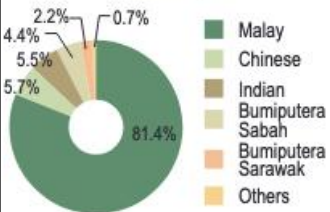
68.0%
Male (1,391)

32.0%
Female (656)

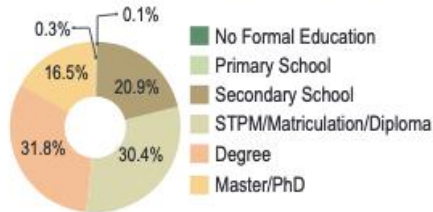
Age Group



Ethnicity



Education Level



Living Area:

72.3%
Urban (584)

27.7%
Rural (224)

Have you ever heard of medical marijuana:

95.4%
Yes (1,952)

4.6%
No (95)

	Disagree	Neutral	Agree
I support the use of medical marijuana if there is evidence from clinical research.	107 (5.7)	120 (5.9)	1810 (88.4)
I agree to use medical marijuana for my own treatment if Malaysia law allows it to be used.	164 (8.0)	198 (9.7)	1685 (82.3)
I support the use of medical marijuana among my family members or close acquaintance if there is evidence based from clinical research.	141 (6.9)	172 (8.4)	1734 (87.2)
I agree marijuana use for medical purposes requires consultation, prescription and monitoring from trained medical doctor.	133 (6.5)	130 (6.4)	1784 (87.2)
I agree medical marijuana is safe for mental and physical health.	152 (7.4)	414 (20.2)	1481 (72.3)
I agree on decriminalization of medical marijuana for the purpose of treatment in Malaysia.	171 (8.4)	210 (10.3)	1666 (81.4)

Table : Acceptance Towards Decriminalization of Medical Marijuana.

DISCUSSION AND CONCLUSION

The study shows that high acceptance towards decriminalisation of medical marijuana among the respondents. This research can be expanded with a focus group discussion to get the respondents' perspectives on the reasons for their high degree of support of decriminalisation

MARDI Study: Most Malaysians And Doctors Support Medical Cannabis

By CodeBlue | 29 March 2023



A MARDI survey of 1,722 Malaysians among the general public and 200 medical practitioners found 81% of the former back cannabis as alternative treatment, while 74% of the latter approve marketing of cannabis for specific patients under tight control.

The preliminary results of the study, which surveyed 1,722 members of the general public and 200 professional medical practitioners, indicate that 81 per cent of the general public supported the use of cannabis as an alternative treatment, while 74 per cent of medical practitioners agreed with the marketing of medical cannabis in Malaysia for specific patients, subject to strict government control.

The ongoing study, aimed at evaluating the potential of the medical cannabis market in Malaysia, is set to conclude in April 2023. The focus of the study is on the development of the medical cannabinoid industry, Health Minister Dr Zaliha Mustafa said in a written Dewan Negara reply last Thursday to Senator Dominic Lau Hoe Chai.



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Emerging Trends in Drugs, Addictions, and Health

journal homepage: www.elsevier.com/locate/etdah



Full-research article

Motives and Perceptions of Cannabis Use among a Sample of Employed Graduates in Malaysia: A Qualitative Study



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Results: The majority were females (52%, n=12/23), and Malay (57%, n=13/23). Nearly 87% (n=20/23) were single (including one divorcee). The respondents' mean age was 30.9 years (SD=5.2), and the mean age at which cannabis was first used was 20.5 years (SD=3.1). The majority used cannabis for recreational (60%, n=16/23), and medicinal (30%) purposes. Cannabis use was associated with perceived positive effects and the belief that it is a safe substance. It was also regarded to be safer than conventional pharmacotherapy in treating self-disclosed psychological symptoms. The few who wanted but had difficulty abstaining from cannabis use avoided seeking treatment due to the fear of prejudice from treatment providers. Users also felt that drug laws are being applied unevenly to favour the well-connected. In general, users want a more liberalized approach to cannabis use.

Conclusions: The use of cannabis among educated, employed individuals persists because they remain functional and appear to be unharmed by extended use. They are either unconcerned or unaware of the negative side of cannabis use. Making them aware of the negatives in an intelligent and fact-based manner will help them make informed decisions.

Cannabis 'addictions' surge in Thailand after decriminalization

Number said to be addicted quadruples as politicians play the blame game

KOSUKE INOUE, Nikkei staff writer

January 10, 2023 05:18 JST ● Updated on

BANGKOK -- In the six months since the legalization of marijuana, the number of people addicted to the drug by health authorities here has quadrupled. A wave of finger-pointing among

In June 2022, the Thai government decriminalized a list of narcotics banned for use in Thailand for medical and culinary uses. In the months since, policymakers added a number of new regulations, including prohibition of sales to the pregnant and young. Smoking marijuana is also out

In the first five months of 2022 prior to the decriminalization, there was an average of 72 recorded cases of marijuana addictions per month, according to the Ministry of Public Health. Between June and November, the number shot up to 282 cases.

Last year, those said to be addicted to marijuana accounted for roughly 17% of psychiatric patients needing intensive care -- a five-year high and a sign that the drug's legalization may have resulted in additional pressure on hospitals.

Anutin Charnvirakul, the public health minister who pushed for the legalization of marijuana, said weed dispensaries would not be allowed to display signage advertising their wares. Despite that declaration, several shops continue to display signs featuring

Cannabis Crunch: Thailand's Sudden Reversal on Marijuana Legalization

The country is tightening its laws on marijuana use, just 18 months after becoming the first Southeast Asian nation to legalize the drug.

THE | DIPLOMAT

READ THE DIPLOMAT, KNOW THE ASIA-PACIFIC

January 18, 2024

On January 10, Thailand's government announced that it is reversing its progressive policies toward cannabis, just 18 months after becoming the first nation in Southeast Asia to legalize the drug. The new government, led by Prime Minister Srettha Thavisin, aims to limit cannabis use strictly to medical purposes, as indicated by a recently proposed bill. After taking office last year, Srettha pledged to "rectify" cannabis laws within six months due to concerns that decriminalization had led to a spike in recreational drug use.

Malaysians lament end to 'safe and cheap' holiday highs in Thailand as 'Asia's Amsterdam' considers cannabis pivot

- A U-turn in Thailand's cannabis policy would undo the liberalisation of views in Asia in the past year on the recreational and medicinal use of cannabis
- Malaysian cannabis smokers have flocked across the border in droves, entering by car through the south or flying to tourist hotspots

LEGAL?

TOBACCO
5 million deaths per year



ALCOHOL
2.5 million deaths per year



ILLEGAL?

MARIJUANA
No Deaths EVER Recorded
Known Medicinal Qualities



 Food for thought.

Medical Marijuana

Pharmaceutical Opioids



16,651 Deaths in 2010

Marijuana

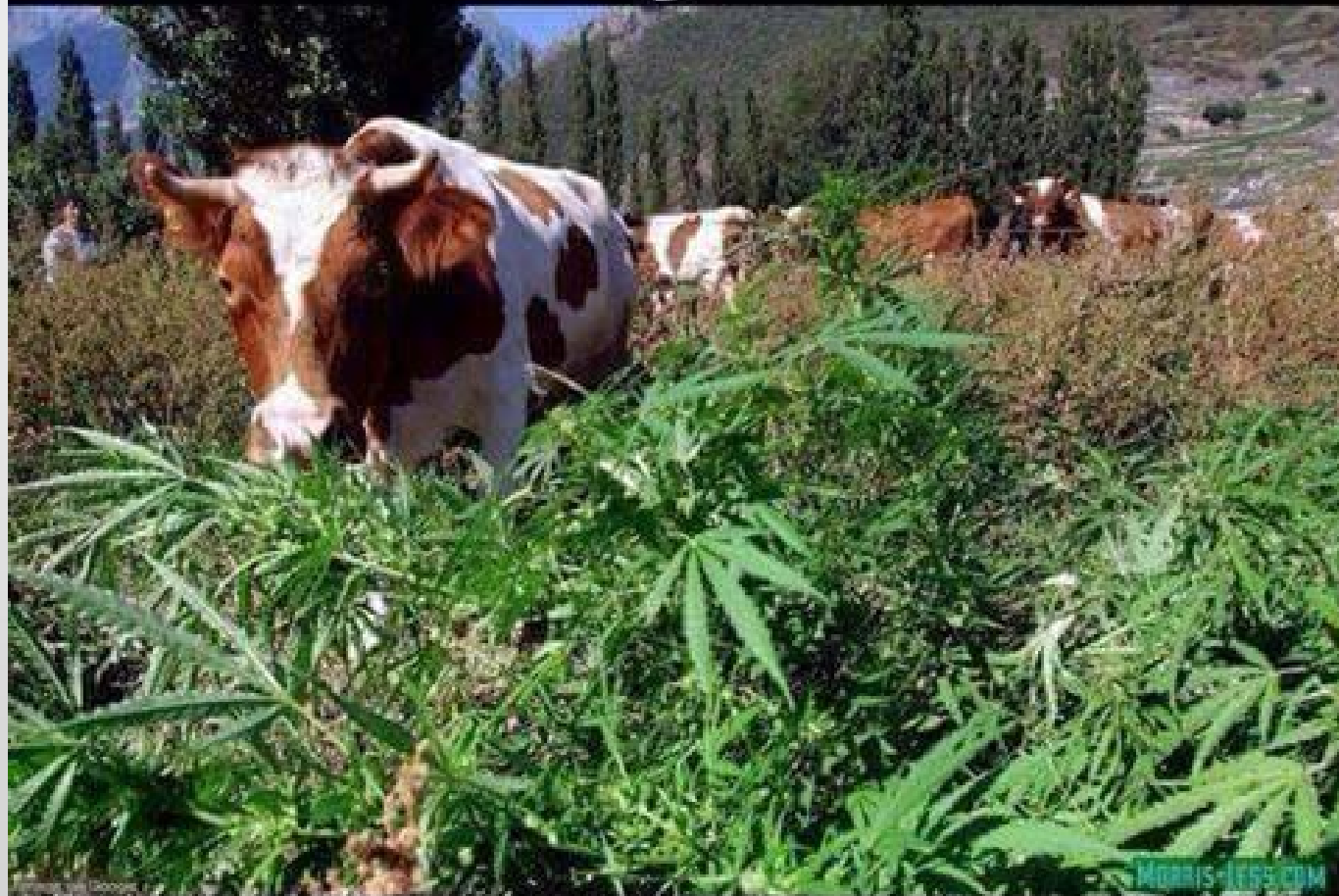


0 Deaths in 5,000 years

Marijuana: The Non-Toxic Pain Medication



**Why did the cows return
to the marijuana field?**



It was the pot calling the cattle back.

Cannabineae.



Cannabis sativa L.

W. Müller

Thank you
for your attention

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