Introduction

There is limited clinical evidence on the use on cannabis-based products for medical purposes and cannabis-based medicines, including, long-term use and efficacy. Evidence is currently emerging to help us understand the potential therapeutic uses of cannabis-derived products.¹

1.0 What will I learn?

This Royal College of General Practitioners desktop guide provides practical information to support GPs to hold informed discussions and make decisions when patients request for cannabis. The guide outlines the key issues to consider around the use of cannabis-based products for medicinal purposes. The UK Government announced that from 1 November 2018, specialist doctors (defined as having specialist knowledge and expertise AND being on the specialist register of the General Medical Council) are able to prescribe cannabis-based products for medicinal use under license for patients with an exceptional clinical need.

In addition, cannabis-based products for medicinal use have moved to schedule 2 and can be prescribed by a specialist doctor for unmet clinical need on named patient basis, provided approval is granted by the Trust Drug and Therapeutic Committee Chair or Trust Medical Director. The product must be supplied by a specialist doctor and there are no shared care arrangements.² GPs should not prescribe these products but record them in their clinical systems as hospital supplied drugs.

1.1 What is the difference between cannabis and cannabinoids?

The cannabis plant contains at least 750 chemicals, among which are some 104 different cannabinoids. The bioavailability of active cannabinoids in cannabis, delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD), cannot be predicted because differences in smoking or vapor inhalation vary between users and types of delivery systems.³

1.2 Legalities of use

Cannabis is a class B drug under the Misuse of Drugs Act 2001, which means that an individual in possession of cannabis can be sentenced for up to five years in prison and or an unlimited fine.⁴ Two forms of cannabis (Sativex and Nabilone) can be legally prescribed in accordance with the data sheets for those products. CBD is also legally available in the UK as a herbal supplement and not a medicine.

1.3 What conditions could cannabis-based products be used in?

There is evidence of the use of cannabis derived products in some conditions.

- **Multiple sclerosis**: Sativex is an oral spray containing cannabis extracts which is licensed for use by the Medicines and Healthcare products Regulatory Agency (MHRA) to treat spasticity in adults with Multiple sclerosis. It can be prescribed as an oromucosal spray and initiated and supervised by a physician with specialist expertise in treating spasticity in that population.

  The National Institute for Health and Care Excellence (NICE) guidance does not recommend offering Sativex to treat spasticity in people with MS because they do not consider it a cost effective treatment, however, it has been recommended by the Wales Medical Strategy Group's (AWMSG).⁵

- **Epilepsy**: there is limited evidence within the paediatric population that pharmaceutical grade CBD (Epidiolex) may reduce seizure frequency as an adjunct treatment in drug resistant epilepsy.⁶ While many other indications have been proposed, there is a lack of evidence and a clear need for high quality studies to inform treatment options.⁷

- **Nausea and vomiting in chemotherapy**: The MHRA has licensed no other cannabis products as medicines. However, a synthetic cannabinoid medicine, Nabilone, is licensed in the UK for use in treatment resistant nausea and vomiting caused by chemotherapy,⁸ however evidence is limited.⁹

- **CBD** used for non-medical indications, for example, sold as a food supplement, is legal.

- **Other conditions**: Some evidence has been presented on the use of medicinal cannabis in chronic pain. However, benefits are relatively small, evidence is limited, and adverse effects present.¹⁰ ¹¹ ¹²

  Evidence for use in mental health conditions is uncertain due to a lack of, or small studies,¹³ ¹⁴ and confusion between association and causation.¹⁵ ¹⁶
1.4 What are the formulations

The products licensed for use in the UK are available as capsules (Sativex) or as an oromucosal spray (Sativex). Non-licensed products which do not make medical claims are available for purchase and include lotions, balms, sprays, oils and creams. There are no cannabis products delivered by smoking that have a medical license.

Uncertainty about dosage in unlicensed or illegal products is a key concern. Dosage and bio-availability will vary according to inhalation/ingestion, as well as strength and purity of the product.

- **Licensed medications**: For the legally available prescribable medicines (Sativex and Nabilone) prescription information about dosage is available on the data sheets.

- **Health Food Supplements**: Patients may acquire health food supplements containing CBD commercially which will likely not contain dosage information. These products are unregulated and should not make health claims.

- **Herbal or synthetic street acquired cannabis**: If patients request advice, GPs should take into account the lack of evidence for effectiveness in all but a few indications, lack of clear dosage information, and the safety concerns as outlined.

1.5 What are the issues around safety and monitoring?

Cannabis-based medicines should meet the defined safety and quality assurance standards required for prescription. Prescription and pharmacovigilance should be conducted as with any other prescribed medicine. For specialist support GPs should contact their local prescriber advice services.

Illegally obtained cannabis or non-regulated cannabis products may pose a risk to patients from side effects, via from impurities and adulterants, and variability in the dosage. Herbal cannabis is generally regarded as having a low addiction potential.\(^1\)\(^7\)\(^14\)

Synthetic cannabinoids are available illegally, such as ‘Spice’ and ‘Mamba’. There is evidence of harm from use, including death, across different patient populations and vulnerable groups (such as homeless people).\(^19\)\(^20\)\(^21\)

**Short term Side effects - Natural cannabis:** commonest effects from natural cannabis are dizziness, euphoria, drowsiness, dry mouth, confusion, disorientation, somnolence, balance problems, hallucinations, paranoia and fatigue.\(^22\) Many varieties of street cannabis contain a high proportion of THC with increasing risks from potency\(^23\) and are used for their psychoactive properties.

**Long term side effects - Schizophrenia and psychosis:** cannabinoids can induce transient symptoms similar to both the positive and negative cognitive symptoms of schizophrenia in healthy individuals although this does not constitute a psychiatric condition. However, research suggests that cannabinoids can exacerbate symptoms of psychosis in individuals who are schizophrenic or have a family history of schizophrenia or other psychosis.\(^24\) Lung disease and cardiovascular disease is more common in people smoking herbal cannabis. In utero exposure is of concern.\(^25\) A causal link between cannabis use and psychosis has not been fully verified but will be of concern to GPs counselling individuals particularly those with a personal or family history of schizophrenia/psychosis or a family history of those conditions. There is no reliable evidence on the effects of long term use.

Please report all suspected adverse reactions to the product (both licensed and unlicensed) to the MHRA's Yellow card Scheme.

1.6 What is good practice for GPs in the interim?

The initiation of the small number of cannabis containing medicines currently exists within specialist practice. The evidence for, and balance of benefits and harm, should be assessed in the same way as any other medicinal product. GPs may be asked for opinion regarding cannabis containing products and it may be useful to have some knowledge of the classifications and legal situation. Similar to any other medical intervention, there should be rigorous criteria for cannabis containing products to obtain medical licenses along with cost-benefit analysis to weigh its therapeutic potential alongside its detrimental effects to individuals and to society.

Due to the limited evidence base and their unlicensed nature, the Government has chosen to restrict the decision to prescribe cannabis-based products for medicinal use to only those clinicians listed on the Specialist Register of the General Medical Council. This restriction has been set out in regulations.

If a patient has an appropriate condition, such a person with intractable epilepsy or multiple sclerosis, a referral needs to be made to a relevant specialist. The GP needs to help manage the patient and carers’ expectations as this is new and complicated process and is unlikely to be fast. Please direct them to the GOV UK website. ([www.gov.uk/government/publications/cannabis-based-medicines-expert-review-panel/cannabis-and-cannabis-based-medicinal-products](http://www.gov.uk/government/publications/cannabis-based-medicines-expert-review-panel/cannabis-and-cannabis-based-medicinal-products))

In England Cannabis based medicines can be prescribed by a specialist doctor for unmet clinical need on named patient basis provided approval is granted by the Trust Drug and Therapeutic Committee Chair or Trust Medical Director. This must be supplied by a specialist doctor and there are no shared care arrangements. GPs should not prescribe these products but record them in their clinical systems as hospital supplied drugs.

In Scotland, Wales, and Northern Ireland, the hospital specialist will decide whether an application to the home office is appropriate. Once an application has been submitted to the expert panel through the formal procedure set out by the Home Office. The expert panel will assess and then make a finding which will be shared with the Home Office or the Department for Health in Northern Ireland.
Once this stage is reached, the applying specialist clinician will be invited to register their licence application with the Home Office or the Department of Health in Northern Ireland. Once registered, further information will need to be submitted by the applicant to show that they are able to comply with the UK government’s regulatory framework concerning misuse and diversion of drugs. The Home Office or the Department of Health in Northern Ireland will then assess whether the licence can be issued. The Home Office and the Department of Health in Northern Ireland lead on regulatory governance and are independent of the expert panel.

There may be unintended consequences of this process such as increased demand on GPs for information and referrals for a range of conditions, increased referral rates to pediatric neurologists and general neurologists with lengthening of waiting times for all other patients with neurological conditions and the issue of the license fee which are currently paid by the institution where the specialist works.

1.7 Where can my patients get further information?

Information is available on the NHS website (www.nhs.uk/conditions/medical-cannabis/)

1.8 What questions might my patients ask?

Can I drive while being treated with medicinal cannabis?

At present patients should not drive or operate machinery while being treated with medicinal cannabis. This may be detected in urine many days after the last dose. Patients should discuss the implications for safe and legal driving with their specialist doctor.

Can I travel abroad with medicinal cannabis or carry this on board my hand luggage?

This is unlikely to be possible without checking the law thoroughly in the countries you are visiting and writing to the authorities in these countries in advance. In addition it will be important to check with the airline or transport provider you are travelling well before hand and to carry full documentation.

1.9 Where can I get further information?

There is interim guidance for prescribing for children with epilepsy from the British Paediatric Neurology Association. (www.bpna.org.uk/?page=cdmp)

There is interim guidance covering chemotherapy induced nausea and vomiting and chronic pain from the Royal College of Physicians. (www.rcplondon.ac.uk/projects/outputs/recommendations-cannabis-based-products-medical-use)

Additional UK guidance for clinicians was issued in November 2018.26

Guidance from the National Institute for Health and Clinical Excellence on the use of cannabis based products for medicinal use is expected in October 2019.

References:


