

SA Palliative Care Community Pharmacy Update

A joint initiative of South Australian Palliative Care Services

With the legalisation of medicinal cannabis, pharmacist must be aware of the available evidence for its use.

Evidence for Medicinal Cannabis

There are many cannabinoids found in *Cannabis sativa* plants which are used as the basis of clinically tested compounds.

Cannabinoid Receptors

- > CB1 is found predominantly in the CNS and gastrointestinal tract.
- > CB2 is found peripherally and more associated with immune system function.

Cannabinoid Compounds

- > Delta-9-tetrahydrocannabinol (THC) is a CB1 agonist and responsible for the psychoactive effects of cannabis.
- > Cannabidiol (CBD) has low affinity for CB1 and CB2 receptors, but has powerful indirect effects.
- > Cannabinol (CBN) is a CB2 receptor agonist.

THC, CBD and their derivatives are the most studied cannabinoids for clinical use. Published studies include non-approved medicinal cannabis products such as plant-based therapy. This makes it difficult to generalise the results due to differences in drug delivery, a lack of standardised doses and unmeasured effects of other cannabinoids. The studies include a range of patient numbers and length of intervention. A brief summary of the evidence is presented below.

Pain

There is a small amount of evidence to support some benefit of cannabinoids in the treatment of chronic cancer and non-cancer pain.

Cannabinoids are used in addition to other analgesics including opioids, rather than replacing all other analgesics. There is some early suggestion that cannabinoids may be opioid sparing in pre-clinical studies, but not confirmed in clinical studies.

In spasticity related to multiple sclerosis, THC + CBD spray (Sativex®) has demonstrated some benefits as add on therapy. This indication has been approved by the TGA, but the product has not been marketed in Australia.

In cancer pain, Sativex® was effective at lower doses (4 sprays), but no better than placebo at higher doses (10-16 sprays).

Nausea and Vomiting

Cannabinoids have some benefit in managing these symptoms, including chemotherapy-induced. They are better than placebo, but not significantly better than the comparator antiemetics though these comparisons do not reflect current practice.

Epilepsy

A recent study in Dravet Syndrome, a severe paediatric seizure syndrome, demonstrated that CBD significantly decreased seizure frequency, but was associated with increased drowsiness and liver enzyme abnormalities.

Useful resources

- > [The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research](#)
- > [Cannabis and cannabinoids for medicinal purposes: Reviewing the evidence](#) (due 12/2017)
- > [Trial of Cannabidiol for Drug-Resistant Seizures in the Dravet Syndrome](#)

For more information

Contact the Lead Palliative Care Pharmacists:

- > **Josephine To, Northern**
Josephine.to@sa.gov.au 8161 2499
- > **Cheyne Sullivan, Central**
Cheyne.Sullivan@sa.gov.au 8222 6825
- > **Paul Tait, Southern**
Paul.tait@sa.gov.au 8275 1732

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This update is intended to provide practical up to date and factual information relating to pharmacy and medicines management in the setting of Palliative Care and is based on critical review of available evidence. Individual patient circumstances must be considered when applying this information. Please feel free to distribute this update further to interested colleagues.

