# PAIN MANAGEMENT NON OPIOID APPROACHES

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#### **MSK** pain

Around 1 in 3 Australians have a MSK condition MSK conditions that can lead to pain:

- Osteoarthritis
- Rheumatoid arthritis
- ▶ Juvenile arthritis
- Osteoporosis
- Back pain
- Back problems such as scoliosis
- Lupus





#### What is pain?

#### Pain is:

- your body's natural warning/protective system
- ▶ complex
- different for every person
- ▶ Real
- A new understanding of chronic pain





#### Acute pain vs. Chronic pain

#### **Acute Pain**

- Starts suddenly
- Short-lived
- Reduces or goes away as damage to your body heals
- Affected by your emotions, environment and lived experience

#### Chronic Pain

- ▶ Lasts longer than 3 months
- Can continue after damage to your body heals
- ▶ Also known as 'persistent pain'
- Affected by your emotions, environment and lived experience



#### Influences on chronic pain

- smoking
- story of the pain
- ▶ sleep
- nutrition
- ▶ mental health
- ▶ Covid





#### Mental health and chronic pain

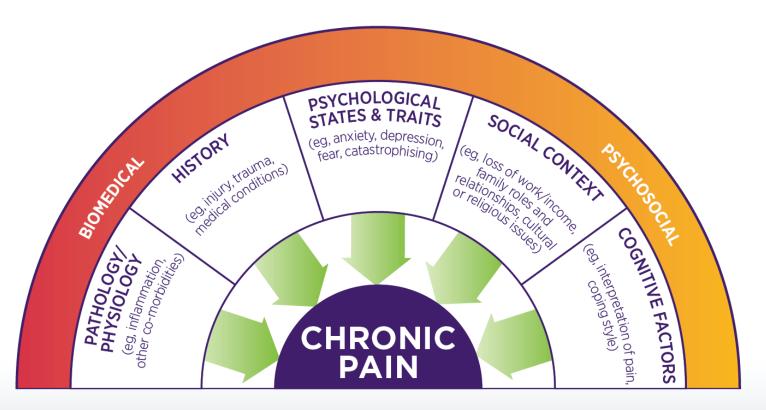
- Can be a chronic pain / mental health cycle
- Depression / anxiety
- Drug and alcohol use
- Employment
- Housing
- History of trauma

<sup>\*</sup> Mental health talk therapies and digital therapy options eg This Way Up





#### **CONTRIBUTORS TO PAIN**











#### Living with chronic non-cancer pain



Australians talk about living with chronic non-cancer pain



(2) 1. Living with chronic non-cancer pain - YouTube



#### Managing Chronic Pain=Whole Person



- Learning about your pain
- ▶ Focus on what is important to you
- Appropriate physical activity
  - Yoga /moving
  - Aquatic exercise
- Psychological treatments
- Social/ support networks
- Combination of options



#### **Focus on function**

- ► How does pain affect your activities of daily living?
- ▶ How does pain make you feel?
- ▶ Is there anything that makes it better, even for a short time?
- How does pain affect your relationships and role in your family?





#### Mindfulness



- ► Focus attention on mind/ body in the moment without judgement
- "present focused awareness"
- Can reduce pain intensity
- Develop acceptance
- Enhance mental flexibility



#### Stretch break

- ▶ Pace yourself through the day
- ▶ Set a timer if needed
- ▶ Move in meetings
- ▶ Active catch ups





#### **Stretch Break**





#### The advantages of physical therapies

- ▶ A range of therapies to improve strength and function
- Many with chronic pain avoid exercise, yet physical therapy can restore confidence
- Improving quality of life
- ▶ Focus on things you would like to do
- Affordability
- GP Chonic disease management plans access to chiropractic and physiotherapy





## Resources to help you navigate healthcare

- ▶ What questions should I ask when I see my healthcare professional?
- Choosing wisely 5 questions
  - Do I really need this test, treatment or procedure?
  - What are the risks?
  - Are there simpler, safer options?
  - What happens if I don't do anything?
  - What are the costs?





#### Pain relief ≠ pain killer





#### Medicines for pain relief

- Paracetamol
- Non-steroidal antiinflammatories (NSAIDs)
  - Oral
    - Ibuprofen
    - Diclofenac (Voltaren)
    - Many more
  - Topical
    - Diclofenac

- ▶ Nerve pain medicines
  - Amitriptyline
  - Gabapentin/Pregabalin
- Opioid pain medicines
  - Codeine
  - Oxycodone
  - Morphine
- ▶ Cannabis medicines





## Managing pain /rethinking opioids



The opioid crisis has come to Australia.

#### **Opioids** – the evidence

#### Busse et al, 2018

- Opioids do not provide clinically important improvement in pain or function for most patients compared with placebo.
- Opioids were associated with less pain relief during longer trials which may be a result of opioid tolerance or opioid-induced hyperalgesia.

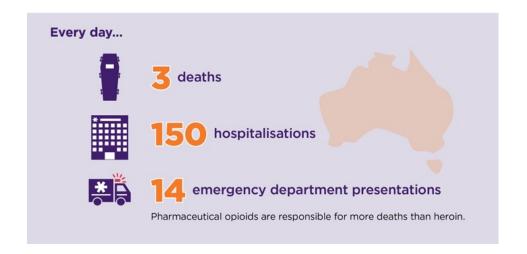
#### Krebs et al, 2018

- ► Treatment with opioids was not superior to treatment with non-opioid medications for improving pain-related function over 12 months.
- ▶ Results do not support initiation of opioid therapy for moderate to severe chronic back pain or hip or knee osteoarthritis pain.



#### Opioid pain medicines - risks

- Constipating
- Nausea and vomiting
- Can be addictive
- Increase risk of death
- Slow breathing
- Reduce hormone levels over time
- Can actually worsen pain over time





#### **Opioid-related harms**

▶ 80% of patients on long-term opioids will develop at least one opioidinduced adverse effect

#### **▶** Hormonal effects

- Opioids affect the release of hormones from the anterior pituitary (eg, growth hormone, prolactin, TSH).
- These are well recognised and include reduced adrenal function, reduced sexual function and infertility.
- Occur in about 50% of those taking long-term high-dose opioids.

#### Depression

- This is a common comorbidity of chronic pain.
- Some patients may experience depression as a reversible harm associated with opioid treatment.



#### **Opioid-related harms**

#### Overdose and death

- Opioid overdose risk increases in a dose-response manner.
- Risk factors include co-prescribing sedative medications and concomitant psychiatric symptoms (anxiety, depression).
- In 2018, more than half (58%) of druginduced unintentional overdoses were related to opioids.
- Epidemiological studies suggest fewer fatalities with 'atypical' opioids.

#### Respiratory effects

- Include respiratory depression and sleep disordered breathing.
- Effects appear related to dose and duration of use.

#### Falls and fractures

 Opioids use increases risk of falls through its CNS effects and hormonal effects.



#### **Opioid-related harms**

- Gastrointestinal effects
  - Include constipation, nausea and vomiting.
  - Opioid use increases the risk of bowel obstruction, and can result in hospitalisation or death.

#### Motor vehicle collisions

- Use of opioids by drivers is increasingly seen as a factor in fatal motor vehicle crashes.
- Tolerance, physical dependence and withdrawal
  - For some patients, the primary benefit of opioids becomes the avoidance of withdrawal.



#### Hyperalgesia and tolerance

- Opioid-induced hyperalgesia (OIH): increased sensitivity to pain mediated by opioid use.
- ▶ **Tolerance**: a decrease in opioid pain relief effect over time,



## Individual approaches to pain management



Individual approaches to pain management



(2) 2. Individual approaches to pain management - YouTube



#### **Tapering – the evidence**

#### Fishbain et al (2018)

▶ Tapering opioids for patients with chronic pain does not lead to increased pain, but can lead to decreased (or the same) pain once tapering is completed.

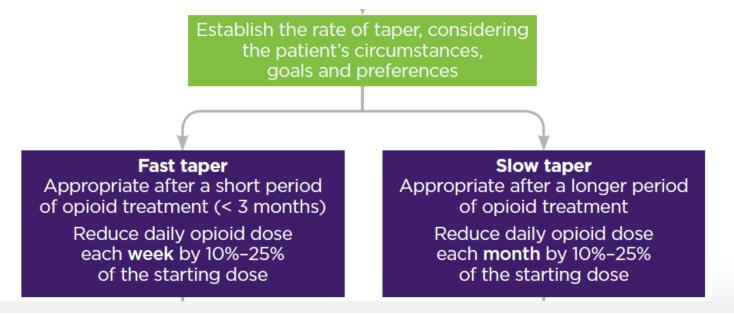
#### **Frank et al (2017)**

- ▶ Tapering opioids can improve pain, functioning and quality of life.
- Strategies for effective tapering of long-term opioids including:
  - tapering opioids with input from patients
  - an emphasis on non-pharmacological and self-management strategies
  - multidisciplinary care through interdisciplinary pain programs



#### Develop a tapering plan

The rate of taper should be individualised for each patient as part of an agreed plan between the doctor and the patient.





## Complementary and Alternative Medicines

- Widely used
- Evidence base is lacking
- Can interact with other medicines
- Are not free from harm
- Discuss all medicines with a trusted healthcare provider





### MEDICINAL CANNABIS

Resources for health professionals and consumers



#### MOUNTING CONSUMER INTEREST

Consumer groups keen to embrace anecdotal claims that medicinal cannabis is a safe, effective panacea;

'Thousands of years of use – so it must be safe!'

'It's legal now, so I should be able to grow my own.'

'If my doctor won't prescribe it, I'll just order online.'

Safety issues eg, ingesting, smoking, CBD dose per mL?

If obtaining online - toxins, additives, pesticides

Individuals respond differently





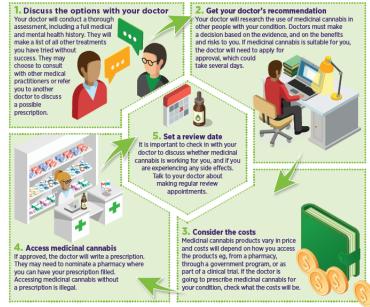
#### Is medicinal cannabis suitable for me?

Medicinal cannabis may be suitable for some health conditions, where all other treatments have been unsuccessful. These include:

- ▶ Chronic non-cancer pain
- ▶ Epilepsy
- Nausea and vomiting

- ▶ Palliative (end-of-life) care
- Multiple sclerosis
  - due to chemotherapy

Your safety is important. By following these 5 steps, you and your doctor can work together to reach the best decision for your health.



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#### What about medicinal Cannabis

- Cannabis plant extract
- ▶ Plant contains 80 to 100 cannabinoids
- THC which gets people high is not in medicinal cannabis
- Research is continuing for it's role in pain management
- May have side effects including diff concentrating, problems with balance, thinking and memory impacts
- Tightly regulated in Australia
- Discuss all medicines with a trusted healthcare provider







#### **EVIDENCE SUMMARY**

#### **Medicinal cannabis:**

#### Chronic non-cancer pain

This fact sheet summarises the evidence and clinical guidance in the Therapeutic Goods Administration's (TGA) <u>Guidance for the use of medicinal cannabis in the treatment of chronic non-cancer pain in Australia</u>.

There has been increasing interest in recent years regarding medicinal cannabis\*. However, there is a limited body of evidence to support its efficacy and safety in clinical practice.<sup>1-3</sup>

While anecdotal reports, animal data and some research on human subjects have suggested some therapeutic potential, there is insufficient evidence from high quality studies, such as randomised controlled trials (RCTs), for most conditions.<sup>2</sup>

In response the TGA has published <u>guidance documents</u> to assist health professionals and patients in the use of medicinal cannabis, including the document for chronic non-cancer pain (CNCP).

Note that medicinal cannabis is not recommended as a first line treatment in any condition. Prescribing should always be considered on a case-by-case basis and once all other standard approved treatments have been unsuccessful.

#### Evidence4

About the TGA Guidance for the use of medicinal cannabis in the treatment of chronic non-cancer pain in Australia:

- a systematic review and meta-analysis of studies of conditions including: CNCP (mixed conditions; multiple sclerosis MS-related, and non-MS related), neuropathic pain (MS-related, and non-MS related), fibromyalgia, arthritis (mixed conditions) and rheumatoid arthritis.
- 102 studies (26 parallel RCTs, 23 cross-over RCTs and 53 observational studies) included; GRADE (grading of recommendations, assessment, development and evaluation) approach for evaluating evidence quality found most studies were moderate to very low quality.
- ▶ most evidence was derived from studies where medicinal cannabis was an adjunctive treatment.

#### All CNCP conditions

Meta-analysis of medicinal cannabis (as a class of products) for all the above CNCP conditions found they were more likely than placebo to achieve 30% and 50% pain reductions (primary endpoints) and more likely than placebo to produce a significantly greater reduction in pain intensity.

Statistical analysis of specific medicinal cannabis products, including:5

- nabiximols (plant extract of delta-9 tetrahydrocannabinol:cannabidiol (THC:CBD) 50%:50% combination; TGA-registered)
- ▶ nabilone (synthetic THC; not TGA-registered)
- ▶ THC extract from plant (not TGA-registered)

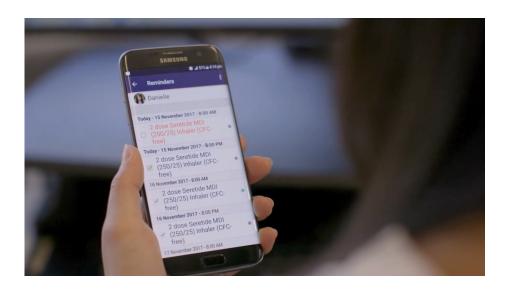
found they each were much less consistently superior to placebo for a 30% reduction in pain (primary endpoint) or reducing pain intensity. This finding probably reflects the small number of trials and their small sample sizes.

Of these specific products, nabiximols was highlighted as possibly having a modest effect in some CNCP conditions over a limited time. However, it also had a substantial risk of bias in the trials reviewed, tolerance was not addressed and the risk of harm with long term use was poorly documented.



## Resources to help you manage medicines

- MedicineWise App
  - Manage your medicines on your phone
- ▶ Dose administration aids
  - E.g. Webster Packs, blister packs
  - Discuss with your local pharmacy



(2) MedicineWise App: Manage Medicine - YouTube



Resources to help you live with your pain

- NPS MedicineWise My Pain Management Plan
  - Keep track of your goals for pain management and important details





#### If not opioids then what?



(2) 5. Non-opioid options for chronic non-cancer pain - YouTube



#### RESOURCES FOR CONSUMERS

- NPS MedicineWise –
  resources on opioids and chronic pain
- ► TGA <u>information for consumers</u>
- Painaustralia resources for patients
- ▶ Local community and online support networks such as the Pain Management Network, PainLink helpline or Chronic Pain Australia forum

- ACI NSW Pain Management
  Network –
  pain management information
- PainHealth –Pacing and goal setting
- ▶ ACI NSW Brainman Pain Management Resources
- Chronic Pain Australia www.chronicpainaustralia.org.au









#### RESOURCES FOR CONSUMERS



- Opioid prescribing changes improving safety, reducing harm
- Opioid medicines and chronic noncancer pain
- Opioids information video
- Managing pain and opioid medicines
- Chronic pain explained
- Pain: what is going on?
- Medicines for pain relief: what are the options?
- Nerve pain explained

- ► ACI NSW Pain management network, <u>Pain management: For</u> <u>everyone</u>, <u>Pain and thoughts</u>
- ► Hunter New England Local Health District, <u>Understanding pain in less</u> than 5 minutes, and what to do about it!







