

Persistent Pain (Osteoarthritis) Changing the Narrative

Take home messages from the Small Group meetings held Apr/May 21

- Pain is influenced by more than what is going on in the tissues
- Hauora Māori emphasises cultural and spiritual needs alongside physical and psychological
- Changing persistent pain requires treating the whole person
- Exercise is key: hurt ≠ harm
- Best evidence-based interventions are rehabilitation and weight loss
- Imaging does not correlate with level of pain and function
- Medications may be of limited benefit
- Do not underestimate the power of the placebo (and nocebo) effect

Included in this bulletin

- Evidenced based management
- Physical activity options: Mobility Action Programme and Moving Medicine
- Limited role of medications
- Inequity of health outcomes in chronic pain services

Clinical Quality and Education Team comment: The material from the Persistent Pain Small Group Round is available on Te Rau Ako (Pegasus Learning site). Consider use of the accredited Gabapentin audit also available on Te Rau Ako.

Changing the Narrative

The Small Group meetings challenged the current approach to managing persistent pain and osteoarthritis (OA), asking us to consider:

- The messages and images we give to patients via the language we use to explain OA and its possible trajectories
- Shifting the treatment focus from tissues to all biopsychosocial factors
- Facilitating health ownership transfer from the Healthcare Professional (HCP) to the patient.¹

The Te Whare Tapa Whā model, that explains the Hauora Māori approach to health and wellbeing, was used to explore factors that may contribute to an individual's pain experience. Assessing *all* elements that impact health and wellbeing, including negative beliefs, can more accurately delineate management strategies that will be effective for the individual.

The language we use to describe OA can have its own nocebo effect, as well as potentiating negative management strategies that act against the patients' best interests e.g., the belief that a 'degenerative' joint needs protection so should not be used, when in fact exercise is the most effective intervention.²

Education is key in empowering the patient to understand and manage their condition. This includes:

- How and why we hurt³
- Placebo and nocebo effects of linguistics⁴
- The evidence base of management interventions⁵
- The 'dial up' and 'dial down' effects of aspects of health and well-being that will affect pain experienced⁶
- The effectiveness of movement⁵
- The limitations of prescribed drugs
- The poor correlation of radiology to pain experienced^{7,8}

Re-framing activity with personal meaning for the individual also improves adherence;⁹ e.g. taking the mokopuna for a walk to the playground helps to improve the physical (tinana) but also whānau (social) and wairua (spiritual) aspects of health.

Evidence Based Management of Osteoarthritis (OA)

Education, exercise and weight reduction have been recommended as key management strategies for OA by multiple guidelines for many years.⁹⁻¹² Recent research and meta-analyses continue to reinforce this.^{13,14}

However, utilisation of these evidence-based treatments in primary care remains low^{15,16} with research showing pharmacotherapies and surgery commonly used.¹⁶

A 2022 telephone review of people recommended for non-surgical care of knee OA showed 42% used treatments inconsistent with guidelines, with older people less likely to

use any intervention at all.¹⁵ An earlier review and meta-analysis of community based OA care across several countries found <40% were referred for exercise.¹⁶

While exercise is a mainstay of treatment, to date no strong preference for one type of exercise over another exists.^{5,17,18} A recent review suggested that both aquatic and land based exercise regardless leads to improved function.¹⁹ Evidence from a meta-analysis also shows stretching²⁰ and use of a stationary bike²¹ can reduce pain in individuals with knee OA. Strengthening type exercises have been shown to be beneficial for mental health in people with knee OA.²²

A recent study utilised a free self-directed web based strength and exercise regime with automated text support over 24 weeks and found participants had clinically important improvements in pain.²³ While this may improve adherence and access for some, reflections from a pilot study in Wellington found face to face programmes work best for Māori participants and their whānau, improving engagement via whakawhanaungatanga (the process of establishing relationships, relating well to others²⁴).²⁵

There is an argument building that the evidence for exercise being clinically worthwhile and statistically significant in reducing pain in knee OA is robust and that further research is not required.²⁶

Putting evidence-based management of OA into practice however remains challenging.^{27,28} A qualitative review exploring barriers and enablers for management of OA, found no enablers. Barriers included clinicians trivialising OA, being underprepared or unfamiliar with the details of guidelines, or having beliefs that differed to the guidelines or those of the patients.

Mobility Action Programme (MAP)

Delivery of the MAP was again disrupted in 2021 due to Covid-19. However, 2021 data available shows MAP: continues to have a high engagement rate, an average completion of 58%, and average improvement in patient specific functional scores of 1-2 across the programmes. While referrals to MAP increased overall, low numbers of non-Europeans completed the programme including only three Māori.²⁹ This represents an inequity of access.

MAP continues to run. See HPW for referral details with updated information on the programme on Healthinfo.

Other private physical activity options include:

- GLA:D (Good Life with Arthritis: Denmark) programme (roll out remains limited in Aotearoa NZ due to COVID-19)
- PhysioFITT (see HPW for details)
- Registered Exercise Professionals

How to speak to people about moving more

Moving Medicine originated in the UK. It provides evidence-based and condition specific resources to help clinicians have conversations about physical activity within the time constraints of consultations. It uses the framework 'ask' 'explain' 'invite'. Conversation openers can be searched for by patient need, e.g., age (adult, child or young person) and/or condition with the evidence to back it: see <https://australia.movingmedicine.ac.uk/>

Medication in OA

Medication has a limited role in persistent pain and non-pharmacological therapy should always be considered first for OA.⁵ Medications may be useful for acute flare-ups and to provide 'windows' of opportunity for patients to rehabilitate, exercise and undertake other meaningful activities.⁹

First line treatment includes topical or oral NSAIDs or topical capsaicin cream.^{30,31} A recent large meta-analysis found topical diclofenac is effective and safe for OA, it also found that doses of oral diclofenac below the maximum daily doses may still have a good treatment effect, however the usual cautions for NSAID use still apply.³¹ Paracetamol is still recommended by some guidelines although recent research shows the benefits may be of limited clinical value for individuals with OA.³¹⁻³³

The clinical benefit of opioid treatment for people with hip and knee OA, regardless of preparation or dose, does not outweigh the harm it might cause.³¹

Gabapentinoids are not recommended for people with OA (only indicated for use in neuropathic pain), there is

insufficient evidence of benefit and adverse events are common.³⁴ Consider use of the endorsed Gabapentinoid Prescribing Audit to identify patients taking them and apply best practice prescribing guidelines to maximise benefit and reduce medication related harm. The audit was distributed recently and is available on [Te Rau Ako](#) (the Pegasus Learning & Development website).

Vitamin K and OA risk

It is known that Vitamin K dependent proteins have a biological role in joint cartilage homeostasis^{35,36}, and that low vitamin K is associated with incidence and progression of OA. There is emerging evidence from observational studies that use of a vitamin K antagonist anticoagulant (e.g., warfarin) is associated with greater risk of a knee or hip replacement³⁷, and incidence and progression of OA.³⁸ However further research is needed to prove causation.

Inequity of health outcomes

A recent study of health outcomes for patients attending persistent pain services in Aotearoa NZ demonstrated inequity of outcomes, in particular poorer outcomes for non-Europeans in relation to mood and catastrophising.³⁹ The study also noted differences in baseline data, with European scores less severe; this may represent a greater need for treatment by the time people attend. Māori achieved similar outcomes at the end of the treatment but were worse off at 3-6 month follow up implying treatment gains were not maintained. The paper calls for clinicians to consider the cultural and spiritual needs of people relating to their pain and the impact this can have on whānau health and social activities³⁹ as guided by Te Whare Tapa Whā model.

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