

Pharmacological Pain Management Strategies

- Good pain management is finding a balance of therapies that provide maximum pain relief with minimal side effects.
- Always consider combining non-pharmacological options when using medications (see **Fact Sheet 4 on non-pharmacological pain management strategies** for more information).
- All medications should be used with caution in older people because of the increased risk of side effects.
- Use a multi-disciplinary approach to pain management. The inclusion of nursing, medical and allied health professionals and complementary therapists in the pain management team allows for a wider range of treatment strategies to be considered and implemented successfully.
- The resident's medical practitioner or GP has the lead clinical role and responsibility in medications, but nursing and care staff have a key role to play in assessment and reporting.
- How we respond to drugs changes as we get older. As we age, physiological changes in the body affects the absorption, distribution, metabolism and elimination of medications. For residents in aged care, the effect of a pain medication may be greatly reduced or enhanced. Likewise, the side-effects of medications may be more pronounced.
- It is important for all staff and health professionals working with residents to continuously monitor responses to medications and any side effects and to document and report this to the medical professional or GP.

Establishing the goals of treatment

When planning a pain management strategy, it is important to be clear about the goals of the proposed treatment. It is not always possible to achieve pain-free status, and this should be explained clearly to residents, family and other staff members.

A typical goal of treatment is to maintain or improve function. This goal will relate to the choice of medications because some medications can relieve pain but have side effects such as sedation or confusion that can impact on levels of function.

Clinical concerns due to medications

- **Falls** risk is increased by anti-hypertensives, antidepressants, psychotropics, opioids and polypharmacy.
- **Cognitive dysfunction** is affected by opioids, anticholinergics, anti-neuropathic medication as is poorly controlled pain and polypharmacy.
- **Constipation** is a common problem with opioids.
- **Polypharmacy** is typically defined as five or more (5+) medications. A complex pain medication regime will likely increase pill load.

Common medications for pain

There are a range of medications that may be appropriate for pain management in residential aged care. The following section provides a brief summary of common medications used.

Paracetamol

- Acts as an analgesic and lowers temperature but is not anti-inflammatory.
- Can be beneficial for residents with musculoskeletal pain, osteoarthritis of the hip and knee, and lower back pain. A lack of evidence exists for chronic lower back pain or neuropathic pain.
- Generally well-tolerated. Avoid exceeding 4g per day in divided doses.

Non-steroidal anti-inflammatory drugs (NSAIDs)

- Most commonly prescribed for osteoarthritis and back pain, and for other acute inflammation.
- Two broad classes of NSAIDs: selective and non-selective. Selective NSAIDs range from COX inhibitors that inhibit synthesis of prostaglandins with varying selectivity (e.g. celecoxib, etoricoxib), relative selectives (e.g. meloxicam) and non-selectives (e.g. ibuprofen, diclofenac, naproxen, indomethacin and aspirin).
- Can cause gastrointestinal, cardiovascular and renal adverse effects – use with extreme caution as harm increases with dose and duration, and use only when benefits outweigh risks.
- All staff should be alert for evidence of gastrointestinal bleeding, abdominal pain, dark stools, signs of impaired renal function including change in urine output, oedema and fatigue.

Opioids

- Used for acute nociceptive pain, surgical, cancer and chronic non-cancer pain (though opioids for chronic non-cancer pain has become increasingly questioned over recent years). Opioids are less useful for chronic neuropathic pain.
- Recommended for malignant cancer and end of life pain management.
- Opioids can be classified as: atypical (e.g. tramadol, tapentadol), weak (e.g. codeine and low dose buprenorphine),

or strong (e.g. oxycodone, morphine, hydromorphone, fentanyl, and high dose buprenorphine).

- Older people are more susceptible to side effects including: constipation, respiratory depression, falls, nausea, worsening sleep apnoea, hypotension, osteoporosis, sedation, dizziness, fracture, depression, delirium, opioid induced hyperalgesia and immunosuppression. All staff should be alert to these side effects and report them.
- ‘Start low, go slow’ to reduce side effects – use as little opioid as possible for the shortest duration.
- Time-limited opioid use can provide pain relief while establishing non-pharmacological therapies for treating pain long-term.
- Opioid conversion charts should be available at the point of prescription at the nurses’ station and should also accompany medication charts.

Adjuvant analgesics

- May reduce pain sensitisation in nociceptive pain.
- Antidepressant and anti-epileptic medications can be useful for treating pain in diabetic neuropathy and post-herpetic neuralgia.
- Tricyclic anti-depressants can produce side effects including dry mouth, postural hypotension, constipation, urinary retention, cognitive impairment and sedation.
- SSRIs and mirtazapine are better tolerated by older people than (TCAs).

Topical agents

- Creams and patches that can be applied externally can help with some types of pain (e.g. peripheral neuropathic pain or osteoarthritis of the knee or hand).
- These agents may cause skin irritation, so use with caution and monitor effects.
- Topical NSAIDs can also be effective for peripheral arthritic joint pain.