Non-prescription pain relievers

By Madeline Thompson

People often choose to self-treat pain using non-prescription pain relievers. When used short-term, these medicines are safe for most people to take. However, all medicines need to be used carefully to work effectively and avoid possible side effects and drug interactions. As pharmacy assistants, you can play an important role in helping customers to select an appropriate medicine to treat their pain and in advising them on the safe and correct use of pain relievers. You can also assist customers by recognising when it is appropriate to refer to the pharmacist for further advice.

What is pain?

Pain is the unpleasant sensation or feeling we experience when the body is damaged or stressed. Pain is experienced when nerves carry a message from the affected area of the body to the brain. It can be caused by surgery, injury or medical conditions, although sometimes the cause of the pain cannot be found. The type and severity of the pain will depend on the area of the body affected (e.g. the skin, bones and joints, or internal organs). Pain may be felt in one area of the body, or be widespread. It can be mild or severe and range from a dull ache or cramp to sharp, stabbing or throbbing pain. Everyone responds to pain differently. Emotional stress and fatigue can make pain feel worse, and different people can tolerate different degrees of pain. Pain can worsen anxiety and other emotional problems, and interfere with mood, sleep and work.

Types of pain

Pain is the most common reason people self-treat using medicines available without a prescription from a pharmacy, supermarket or other shop. This often occurs without the knowledge or advice of a health care professional. Advice and information from trained pharmacy staff is important to make sure use of non-prescription pain relievers is safe and appropriate.

Common types of pain that people often try to self-treat include sports injuries (e.g. sprains, strains), back pain, headache, migraine, period pain, osteoarthritis and toothache. Whenever you recommend a pain reliever or offer advice about how best to manage pain, it is important to find out whether the pain is acute or chronic, and the severity of the person’s pain. This will help to determine whether it is appropriate for the customer to self-treat using a non-prescription pain reliever or whether referral to the pharmacist is necessary.
Acute and chronic pain

Acute pain starts suddenly and lasts for a short period of time (minutes to weeks). There is usually an obvious cause such as a cut or graze, headache, broken bones or recent surgery. This type of pain tends to go away as the body heals.

Chronic pain (or ‘persistent pain’) is pain that lasts for three months or longer. This type of pain can be related to medical conditions such as arthritis or cancer. It can also be pain that continues after the original cause has gone. Chronic pain can develop from acute pain that wasn’t managed properly. Chronic pain can impact on peoples’ ability to carry out normal daily activities, and can affect their emotional and physical health and quality of life.

Some people think that chronic pain is something they have to live with. This is not correct as most pain can be relieved with proper pain management.

Chronic pain can be a type of pain called neuropathic pain. Neuropathic pain is caused by damaged nerves that become very sensitive to stimuli such as touch or pressure that wouldn’t normally cause pain. Neuropathic pain is often described as tingling, burning, shooting or electric-type pain. Causes of neuropathic pain include nerve damage from an accident or surgery, post-herpetic neuralgia (pain that persists after shingles), uncontrolled diabetes and multiple sclerosis. Effective treatment of neuropathic pain generally requires prescription medicines.

Severity of pain

Mild to moderate acute pain can often be managed with non-prescription pain relievers. However, the severity of the pain a person is experiencing can be difficult to assess. What is mild to one person may be unbearable to another. Sometimes it helps to ask customers to rate their pain on a scale from 1–10, where 1 is little or no pain and 10 is unbearable pain (see Table 1). Severe pain may be described as distressing, intolerable or intense, and may be affecting a person’s sleep, mood or concentration. People who appear to be experiencing severe pain require referral to a pharmacist.

Management of pain

Pharmacy assistants may be asked to assist customers to choose a medicine to treat their pain. You can play an important role by recommending an appropriate pain reliever or referring the customer to a pharmacist.

Pain can be managed with pain relieving medicines or other measures which may be used alone or in combination with pain relieving medicines. These include massage, acupuncture, application of heat or cold, complementary medicines, braces and strapping, or exercises recommended by a physiotherapist. Acute pain and chronic pain are managed in very different ways. Mild to moderate acute pain can be managed with non-prescription pain relievers to provide quick, short term pain relief until the cause of the pain goes away. Any customer with stronger acute pain or persistent, chronic pain should be referred to the pharmacist. Non-prescription medicines should only be used long term under medical supervision.

Non-prescription pain relievers

There are two main types of pain relievers available without a prescription: paracetamol and NSAIDs. The decision to recommend a particular pain reliever or refer to the pharmacist will depend on a number of factors including the type, cause, severity, and duration of the pain; whether the person has already tried medicines for pain relief; and whether they are taking other medicines or have other medical conditions.

<table>
<thead>
<tr>
<th>Pain severity</th>
<th>Scale from 1–10</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Minor</td>
<td>1–3</td>
<td>Barely noticeable, uncomfortable, tolerable or bearable. Does not interfere with most activities. Can find ways to adapt to the pain or get used to it.</td>
</tr>
<tr>
<td>Moderate</td>
<td>4–6</td>
<td>Strong pain that is noticeable most or all of the time. Cannot find ways of completely adapting to the pain.</td>
</tr>
<tr>
<td>Severe</td>
<td>7–10</td>
<td>Unbearable, excruciating or very intense. Interferes with thinking, concentration, mood, appetite, energy levels and sleep.</td>
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</table>
Paracetamol
Paracetamol is often the first choice of pain relief for mild to moderate pain. Paracetamol is a very safe medicine when used at recommended doses. It has a low risk of side effects and interactions with other medicines.

Various products containing paracetamol are advertised for different types of pain (e.g. Panadol Back and Neck Pain Relief). Paracetamol is also available in combination with other ingredients such as phenylephrine and codeine for relief of cold and flu symptoms. Customers need to be aware of all products they are taking that contain paracetamol. Accidental overdose with paracetamol can occur when people use more than one paracetamol product at a time without realising it. Paracetamol is one of the most common causes of accidental overdose in Australia. In larger than recommended doses it can cause liver damage. Any person suspected of taking an overdose (on purpose or accidentally) should be referred to a hospital immediately.

Recommended dosage:
• Adults and children over 12 years of age: one tablet (500 mg) or two tablets (1 g) every 4–6 hours. Maximum of 4 g (8 tablets) per day.
• Children over one month of age: two tablets (1330 mg) every 6–8 hours. Maximum of six tablets per day.
• Children over one month of age: 15 mg/kg every 4–6 hours. Maximum of 60 mg/kg per day.

Customers who have not obtained pain relief from paracetamol may not be taking an adequate dose, or they may need a stronger pain reliever. If customers have been taking paracetamol and continue to experience pain, it is important to ask what dose they have been using. Paracetamol is available in combination with codeine as Pharmacist Only medicine for stronger pain relief. People requesting codeine-containing products or treatment for strong pain should be referred to the pharmacist.

Non-steroidal anti-inflammatory medicines (NSAIDs)
NSAIDs available without a prescription include aspirin, diclofenac, ibuprofen, mefenamic acid and naproxen. Most of these medicines are Pharmacy medicines and are only available from pharmacies. Small packs of aspirin and ibuprofen can also be purchased from supermarkets and other shops. All NSAIDs work in a similar way and may be used to treat mild to moderate pain. NSAIDs may be preferred to paracetamol for certain types of pain including inflammatory pain (e.g. muscle strains and sprains) and period pain. NSAIDs can cause side effects and appropriate advice from trained pharmacy staff will help to make sure they are used safely and correctly.

All NSAIDs can cause gastrointestinal side effects (e.g. nausea, indigestion, heartburn and discomfort in the upper part of the stomach). In the low doses approved for non-prescription use, ibuprofen is least likely to cause these side effects. Some research involving healthy people with no gastrointestinal conditions has found that when low dose ibuprofen is used for only a few days, it has similar rates of gastrointestinal side effects to paracetamol. However, when used in higher doses or for longer than 7–10 days, the gastrointestinal side effects of ibuprofen and other NSAIDs are more likely to occur. If used long term, NSAIDs can cause ulceration and bleeding in the stomach or intestine. NSAIDs should not be used for self-treatment of pain for more than seven days without medical supervision. Customers who have already been using a NSAID for seven days should be referred to the pharmacist. If people experience an upset stomach from NSAIDs, taking doses with or soon after food can help to reduce gastrointestinal side effects.

To reduce the possibility of side effects, the lowest effective dose should be used for the shortest period of time and only one oral NSAID should be used at a time. Use of more than one oral NSAID can increase the risk of side effects without any further improvement in symptoms. However, sometimes doctors recommend that people take low dose of aspirin (75–150 mg) to prevent blood clots, as well as a NSAID for pain relief. This combination should only be used on doctors’ advice. NSAIDs are not always suitable because of possible side effects or drug interactions. NSAIDs can interact with a number of other medicines. Customers who are taking other medicines should always be referred to the pharmacist. NSAIDs can also interfere with some other medical conditions such as asthma. About 3–11% of people with asthma experience worsening asthma symptoms or an asthma attack after taking NSAIDs. Symptoms tend to occur within 1–3 hours of taking a dose, and include runny nose, shortness of breath and wheezing. If a person with asthma has previously taken NSAIDs without any worsening of their asthma

| Table 2. Non-prescription non-steroidal anti-inflammatories (NSAIDs) |
|-----------------|-------------------|-------------------|
| **Recommended dosage** | **Important information** |
| **Aspirin** | Adults: 300–900 mg every 4–6 hours (maximum of 3600 mg per day). | Avoid in children under 16 years of age unless directed by a doctor. It can increase the risk of Reye’s syndrome, which is potentially fatal. |
| **Diclofenac** | Adults and children over 14 years of age: 25 mg initially, then 12.5–25 mg every 4–6 hours (maximum of 75 mg per day). | Higher doses may be recommended by a pharmacist or prescribed by a doctor. Available in a 25 mg strength tablet as a S3 Pharmacist Only medicine. |
| **Ibuprofen** | Adults and children over 12 years of age: 200–400 mg three or four times a day (maximum of 1200 mg per day). Children from 3 months to 12 years of age: the dose is based on the child’s weight. Recommended dose is 5–10 mg/kg three to four times a day (maximum of 1200 mg per day). | Some ibuprofen products are advertised for the treatment of specific types of pain, for example Nurofen Tension Headache and Nurofen Migraine Pain. Make sure customers are aware these products contain the same medicine, to make sure they do not double up and increase their risk of side effects. Ibuprofen is the only oral NSAID recommended for use in children under 5 years of age. It can be used in infants from 3 months of age. |
| **Mefenamic acid** | Adults and children over 14 years of age: 500 mg three times a day from the onset of period pain for a maximum of seven days. | Marketed for period pain, although all NSAIDs are considered equally effective. |
| **Naproxen sodium** | Adults: 550 mg initially, then 275 mg every 6–8 hours (maximum of 1375 mg per day). | |

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symptoms, then NSAIDs are generally safe to use. NSAIDs can also prolong bleeding time. It may be necessary to avoid taking NSAIDs before surgery because of the increased risk of bleeding. Any customer who requests a NSAID and has other medical conditions or has surgery or dental surgery planned should be referred to the pharmacist.

Other treatments for pain
Topical NSAIDs including benzydamine, diclofenac, ibuprofen, ketoprofen and piroxicam are available as topical creams/gels for application to the skin. These products are normally massaged gently into the affected areas two to four times a day for the short term treatment (1–2 weeks) of musculoskeletal inflammation and injury such as sports injuries, sprains, tendinitis and swelling. Topical NSAIDs are absorbed through the skin into the bloodstream in small amounts and are generally considered safer but less effective than oral NSAIDs. They should be used with caution in people taking certain medicines and with certain medical conditions. Oral and topical NSAIDs should only be used together on medical advice.

Other treatments for pain include acupuncture, massage, transcutaneous electrical nerve stimulation (TENS), hot and cold packs, braces and strapping, complementary medicines and exercises that are tailored by a physiotherapist. Some of these treatments are available from pharmacies.

Table 3. Pharmacy assistant protocol for managing symptom-based requests for non-prescription pain relievers
(adapted from May 2008 inPHARMation)

<table>
<thead>
<tr>
<th>Check</th>
<th>Important Information</th>
</tr>
</thead>
</table>
| Who is experiencing the pain? | Children under 12 years of age  
Pregnant or breastfeeding  
People aged over 65 years |
| What are the symptoms? | Pain:  
• is severe  
• is getting worse  
• does not have an obvious cause  
• reduces ability to function  
• shows signs of being neuropathic pain  
• possible side effects |
| How long have the symptoms been present? | Pain has been present for more than 3 months  
Pain relievers have been used for more than 7 days without medical advice |
| What has been tried? | Non-prescription pain relievers have been tried and are ineffective at recommended doses  
Possible side effects from use of non-prescription pain relievers |
| Using any other medicines? | Any other medicines |
| Any other medical conditions? | Any other medical conditions  
Allergy  
Planned surgery or dental surgery |

Assess

| Is the diagnosis clear? | No obvious cause of pain |
| Is a non-prescription pain reliever the most appropriate treatment? | Not clear if medicine is appropriate |
| Are there any possible interactions? | Any other medicines |
| Are you trained and confident to manage this? | Not trained and/or confident |

Respond

| Recommend appropriate therapy | Uncertain |

Explain

| Verbal directions (Dosage, how often, when to stop, other product specific information) |
| Written support (e.g. Self Care Fact Cards) |
| What to do if no improvement  
When to see a doctor | Advise customer to return for pharmacist advice, or visit a doctor if pain is not relieved or pain comes back |
Assessment questions for the pharmacy assistant

Select one correct answer from each of the following questions. 
Answers due 31 May 2012.
Use the Counter Connection module to answer the following questions. Photocopy and/or use the answer sheet provided. Make sure to include your ID number or go online to submit your answers at: www.psa.org.au/selfcare

The pass mark for each module is five correct answers. Participants receive one credit for each successfully completed module. On completion of 10 correct modules participants receive an Achievement Certificate.

Submit answers online
To submit your response to these questions online, go to the PSA website: www.psa.org.au/selfcare

1. Choose the INCORRECT statement about pain.
   a. Pain can be a dull ache or cramp or sharp, stabbing or throbbing pain.
   b. Different people can tolerate different degrees of pain.
   c. Chronic pain tends to go away as the body heals.
   d. Emotional stress and fatigue can make pain feel worse.

2. Choose the INCORRECT statement.
   a. Neuropathic pain is often described as tingling, burning, shooting or electric-type pain.
   b. Mild to moderate acute pain can be managed with non-prescription pain relievers.
   c. Pain that is affecting a person’s sleep, mood or concentration requires referral to the pharmacist.
   d. Non-prescription pain relievers are generally effective for treatment of neuropathic pain.

3. Choose the INCORRECT statement about NSAIDs.
   a. Gastrointestinal side effects are more likely when NSAIDs are used for longer than 7–10 days.
   b. Using more than one NSAID at a time provides better pain relief without any risk of side effects.
   c. Aspirin is not recommended for use in children under 16 years of age unless directed by a doctor.
   d. Ibuprofen is the only oral NSAID recommended for use in children under 5 years of age.

4. When is it necessary to refer to the pharmacist?
   a. A mother asks about the dose of paracetamol to give to her three-week old daughter.
   b. A woman is having her wisdom teeth out next week and wants to take aspirin for pain relief in the mean time.
   c. A 69-year-old man has been taking ibuprofen every morning for a couple of months for the pain and stiffness in his knees.
   d. All of the above.

5. Choose the CORRECT statement.
   a. Oral and topical NSAIDs can be recommended to be used together without medical advice.
   b. People taking low dose of aspirin to prevent blood clots should only use NSAIDs on medical advice.
   c. About 50% of people with asthma experience worsening asthma symptoms or an asthma attack after taking NSAIDs.
   d. NSAIDs can be recommended for self-treatment of pain for up to one month without medical supervision.

6. Referral to a pharmacist is generally necessary for which of the following customers?
   a. Has had pain for more than three months.
   b. Is pregnant or breastfeeding.
   c. Requests a codeine-containing pain reliever.
   d. All of the above.

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