Approaches to acute pain management in older people


Date of submission: 13 July 2017; date of acceptance: 11 September 2017. doi: 10.7748/nop.2017.e980

Abstract
Pain is a diverse, individual experience and is associated with distress and suffering. Uncontrolled acute pain has been linked to delayed recovery and prolonged hospital stay. Nurses have a duty of care to their patients and acute pain management is integral to this. However, acute pain in older people can be difficult to manage, often because of under-reporting or difficulties in assessment. Older people have altered physiology often compounded by multiple co-morbidities and polypharmacy, all of which affect the appropriateness of, and available, pharmacological pain management strategies. In addition, older people are at greater risk of adverse drug reactions, drug interactions and side effects from analgesia. Consequently, non-pharmacological strategies should also be integral to pain management.

Keywords
assessing, non-pharmacological approaches, older people, pain, pain management, pharmacological approaches

Aim and intended learning outcomes
The aim of this article is to help you explore acute pain management in relation to the specific needs of older people.

After reading this article and completing the time out activities you should be able to:

» Describe the potential consequences of poorly managed acute pain and its effect on older people.

» Outline the physiological changes associated with ageing that affect pain assessment and treatment options.

» Describe the effect of delirium on acute pain assessment and management.

» Discuss the non-pharmacological approaches available for acute pain management

» Summarise the appropriate use of pharmacological approaches.

» Recognise and report any adverse reactions or potential drug interactions from analgesia.

Relevance to The Code
Nurses are encouraged to apply the four themes of The Code: Professional Standards of Practice and Behaviour for Nurses and Midwives to their professional practice (Nursing and Midwifery Council (NMC) 2015). The themes are: prioritise people, practise effectively, preserve safety, and promote professionalism and trust. This article relates to The Code in the following ways:

» Information is provided about available analgesic and non-pharmacological options for acute pain management in older people. The Code requires that nurses keep their knowledge up to date.

» The Code states that nurses must assess patients’ needs and deliver treatment to the best of their abilities, based on the best evidence available and best practice. This article provides an approach that nurses can use to integrate their knowledge and skills to assess and manage acute pain in older people.

» Information about appropriate pharmacological management of pain can be used to inform safe practice, which is integral to The Code.

» Appropriate management of acute pain is essential to ensure the dignity and well-being of older people. The Code emphasises the need for nurses to treat all people with dignity and respect.

Introduction
Acute pain is pain of recent onset and probable limited duration, usually having an identified relationship to injury or disease (Schug et al 2015). It can have a significant negative effect on individuals and their care, causing unnecessary distress and suffering. Acute pain in older people is often under-recognised and under-treated, despite medical, pharmacological and technological...
advances (Macintyre and Schug 2014). Studies consistently demonstrate that pain is poorly controlled in older people (Kerner et al 2013, Gretarsdottir et al 2017, Keen et al 2017). In addition, people over 65 have the highest incidence of painful diseases (British Pain Society (BPS) 2013). Nurses need to be able to assess patients’ pain, listen to them and act as their advocates when planning pain management strategies (Gretarsdottir et al 2017). Therefore, nurses need appropriate pain management knowledge and skills to recognise and treat acute pain in older people.

The reasons for under-treatment of acute pain in older people are numerous. Many expect pain to be part of the normal ageing process, which results in under-reporting. Older people report less pain than their younger counterparts because of a variety of physiological, social and cultural reasons or language barriers (Keen et al 2017). Delirium is one reason which can have a profound effect on pain assessment and management (Rizk et al 2016). The BPS (2013) found that people over the age of 85 with poor cognitive performance were the most likely group to receive inadequate pain control in hospital. Attitudes, beliefs, coping mechanisms, mood and socio-economic status also affect the pain experience, contributing to difficulties in assessment, misdiagnosis or late diagnosis (Gretarsdottir et al 2017).

Older people often have multiple health problems that increase their risk of adverse effects and drug interactions, thereby limiting analgesic treatment options. Consideration must be given to age-related changes in drug absorption and metabolism (Phippin et al 2017). Although pharmacological interventions remain the principal approach to acute pain management in older people, there is growing recognition of the benefits of non-pharmacological interventions.

TIME OUT 1
Perceptions of ageing
Identify how a patient’s perceptions of ageing seemed to influence the way that they worked with you to identify and manage pain. If the patient expressed the view that ‘one shouldn’t grumble’ what rationale did you use to explain why you needed to understand the patient’s pain accurately?

Consequences of unrelieved acute pain
Inadequate acute pain management in older people not only causes suffering and distress, it increases the risk of the development of persistent pain, lengthens hospital stay and reduces quality of life (Schug et al 2015).

Uncontrolled acute pain in older people leads to delirium, falls, slow rehabilitation, sleep and appetite disturbances, depression, social isolation and loss of function (Macintyre and Schug 2014). In the current climate, the financial effect of unrelieved acute pain on the NHS and social care systems must also be considered.

**Physiological changes associated with ageing**
As people age, the risks of physiological complications related to pain increase (Table 1). Older people also experience age-related differences in pain experience, analgesic effectiveness, sensitivity and toxicity (Schug et al 2015, Schofield 2017).

Increasing age is associated with a reduction in the number and sensitivity of nerve fibres that conduct pain signals to the brain, combined with a reduction in brain volume. These changes explain why older people may experience myocardial infarction, pneumonia, acute bowel obstruction or acute peritonitis without pain and also why they appear to have a higher pain threshold (Schug et al 2015). However, research also suggests that some older people have increased vulnerability to severe pain, which is also related to detrimental changes in the nervous system (BPS 2013). This contradictory evidence contributes to the difficulties in acute pain management for this group.

Age-related functional impairment of organs detrimentally affects health, reducing the ability to recovery from illness, disease and surgery as well as altering absorption, distribution, metabolism and excretion of analgesics (BPS 2013, Schofield 2017):

- Changes to gastric pH and delayed gastric emptying and reduced peristalsis affect drug absorption.
- Increased body fat may cause lipid-soluble drugs to accumulate in reservoirs. Cachexia (weight loss and deterioration in physical condition) can alter drug concentration.
- Decreased hepatic blood flow and reduced liver mass can have a detrimental effect on metabolism of analgesics, resulting in a longer effect or increased risk of side effects. This risk is increased with any degree of liver disease.
- By the age of 65, a person’s glomerular filtration rate will have fallen by approximately 30%, even in healthy individuals. Reduced renal blood flow and function result in decreased ability to excrete drugs and prolonged effects of their metabolites.
Pain assessment tools
Review with colleagues the pain assessment tool(s) available to you. For each tool reflect on its use for older people – is it applicable, comprehensive and easy to use for you and the person in pain?

Assessment
The BPS (2013) emphasise the need for nurses to have a good understanding of the range of behaviours that may indicate the presence of pain in older people. Factors known to influence pain reporting in older people include stoicism, self-doubt, culture and beliefs, cognitive function, emotional and spiritual factors (BPS 2013). These factors differ between individuals. For example, older people with cognitive impairment may not demonstrate expected pain behaviours such as crying, rubbing the affected area or verbalising their pain. In fact, the less common pain behaviours demonstrated in this group, such as agitation and distraction, are often attributed to progressive dementia rather than pain (Long 2013).

Documentation of pain is often substandard and the use of pain assessment tools and pain evaluation methods is limited, especially in care homes (Long 2013). Appropriate and effective acute pain management for older people requires nurses to be skilled in assessment to evaluate pain intensity and frequency and to establish the effectiveness of pharmacological and non-pharmacological treatments. Pain management must take into consideration more than just physical symptoms. Most importantly, any chosen pain assessment tool must be used consistently and be appropriate to the individual and the setting.

The person’s own report is the current recognised best indicator of acute pain and there are many different pain assessment tools available to assist the nurse. However, a common misconception is that a person who does not complain about pain has none. Research suggests that nursing home residents do not inform staff about any pain they experience if they feel staff are stressed or appear unconcerned about them (Kerner et al 2013). Pain assessment and screening must take place regularly as older people may not disclose pain for a variety of reasons. It is important to consider the presence of pain in all situations.

There is no evidence that any one pain assessment tool is better than another (Schug et al 2015). The most commonly used pain assessment tools for acute pain are one-dimensional, measuring only intensity of pain. For example, the numerical tools ask...

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<tr>
<th>System</th>
<th>Physiological response to pain</th>
<th>Associated risks</th>
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<tbody>
<tr>
<td>Respiratory</td>
<td>Inability to breathe deep and cough</td>
<td>Chest infection, hypoxia, respiratory failure – especially in older people with pre-existing respiratory conditions</td>
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<tr>
<td>Cardiovascular</td>
<td>Increased sympathetic chain activity leading to increased hormonal activity, causing increased blood pressure, increased oxygen consumption and tachycardia</td>
<td>Myocardial ischaemia – more prevalent in older people with pre-existing cardiovascular disease</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Delayed gastric emptying, increased gastric pH, reduced gastric motility</td>
<td>Nausea and vomiting – leading to or exacerbating poor nutritional status, especially in cachexia</td>
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<tr>
<td>Endocrine</td>
<td>Activation of the ‘stress response’ – hormones released</td>
<td>Hyperglycaemia – especially problematic for the increasing numbers of older people with diabetes</td>
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<tr>
<td>Psychological</td>
<td>Increased cortisol levels</td>
<td>Anxiety, depression, sleep deprivation, behavioural changes – which may lead to delirium in older people</td>
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(Koneti and Jones 2013, Schug et al 2015)
people to score their pain on a 0-10 scale; the pictorial scales use pictures, often faces, to demonstrate different levels of pain and people choose the picture that best matches their pain; and the categorical tool asks people to describe their pain in words such as ‘mild’, ‘moderate’ or ‘severe’. A more comprehensive assessment may involve the use of a mnemonic tool, for example:

- **SOCRATES**: Site, Onset, Character, Radiation, Associations, Time course, Exacerbating/Relieving factors and Severity (Koneti and Jones 2013).
- **OLDCARTS**: Onset, Location/radiation, Duration, Character, Aggravating factors, Relieving factors, Timing and Severity (O’Donovan 2013).

However, these pain assessment tools require the person in pain to be able to understand them and communicate effectively. This can be a challenge when caring for older people who may have difficulty articulating their pain. Nurses consistently report difficulty in assessing pain in patients with any degree of communication problem, which leaves these people at higher risk of under-treatment of acute pain (Rizk et al 2016). Cognitive impairment, communication difficulties, language and cultural barriers all restrict a person’s ability to participate in pain assessment scoring and description.

**Special considerations when assessing pain in older people**

The BPS (2013) recommend that the appropriate recognition and treatment of acute pain in older people requires a multidimensional pain history and clinical assessment. This includes examining the intensity and nature of the pain and any physiological changes that suggest pain. To assist this process, observational and behavioural tools assessing non-verbal indicators of pain have been developed specifically for older people who may have little or no ability to communicate effectively, for example, the Abbey pain scale (Abbey et al 2004) or Geriatric Pain Measure (Schug et al 2015). These tools require the nurse to have good observation skills and an understanding of the person’s normal behaviour to recognise abnormal behaviour that may indicate pain. Many behavioural changes may be subtle and difficult to interpret (see Table 2). For this reason, it is often beneficial to involve friends or relatives who know the person well and are likely to recognise these subtle changes.

**Cognitive impairment**

Under-treatment of acute pain is more likely to occur in cognitively impaired older people (Rizk et al 2016, Swart et al 2017). Although acute pain assessment and management in older people with cognitive impairment presents specific challenges, nurses can dramatically improve care through the use of observational and behavioural pain assessment tools and timely administration of appropriate treatments.

Cognitive impairment and confusion are common symptoms of dementia and delirium. Therefore, it can be a challenge for nurses to distinguish between the two. Dementia is a progressive cognitive disorder characterised by memory loss with impaired executive function. In contrast, delirium is a reversible cognitive disorder that is often under-recognised and under-treated. Research has suggested that healthcare professionals fail to recognise delirium in up to 84% of patients (Evans et al 2016). It is therefore vital that nurses have

<table>
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<tr>
<th>TABLE 2. Common non-verbal pain indicators</th>
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<tbody>
<tr>
<td>Indicator</td>
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<tr>
<td>Facial expression</td>
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<td>Vocalisation</td>
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<td>Bracing</td>
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<tr>
<td>Change in body language</td>
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<tr>
<td>Change in normal activity pattern/behaviour</td>
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<tr>
<td>Physiological change</td>
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(Koneti and Jones 2013, Schug et al 2015)
a good understanding of delirium and its relationship to acute pain.

Older people with any degree of cognitive impairment are more likely to become agitated, abusive or hostile towards caregivers when experiencing acute pain (Evans et al 2016). This can be distressing for families and carers. It is important to appreciate that this anger is unlikely to be related to caregivers and more likely to be related to a pain behaviour. By understanding this, nurses can provide the care required but also provide the necessary explanations and support to families and caregivers. It is also worth noting that an angry person, even without cognitive impairment, is unlikely to be able to listen and understand explanations.

Delirium

There are two subtypes of delirium: hyperactive delirium characterised by heightened arousal and restlessness, agitation or aggression; and hypoactive delirium characterised by people becoming withdrawn, quiet and sleepy. The latter is often more difficult to recognise, but more common (Clinical Knowledge Summaries (CKS) 2015). Although the restlessness and agitation of hyperactive delirium may prompt pain assessment and management, hypoactive delirium may mask pain, especially in older people (Evans et al 2016).

Both types of delirium are more likely to develop when multiple predisposing factors and precipitating facts occur together (Swart et al 2017). Predisposing factors include (Swart et al 2017):

» Older age.
» Poorer baseline functional status.
» Unrelieved pain.
» Depression.
» Alcoholism.
» History of mental status change.
» Co-morbid medical conditions.
» Mobility impairment.
» Diagnosis of dementia.

Precipitating factors include (Swart et al 2017):

» Illness.
» Pain.
» Infection.
» Dehydration.
» Physical restraints.
» Malnutrition.
» Polypharmacy.
» Urinary catheterisation.
» Surgical procedures.
» Iatrogenic events.

Any older person with predisposing factors is at risk of developing delirium when a precipitating factor is added. In addition, delirium is more prevalent during acute illnesses in older people and occurs in up to 80% of older postoperative patients (CKS 2015).

Pain has only recently been recognised as a potential precipitating factor for delirium development. Older people who experience uncontrolled acute pain are at high risk of delirium development (Rizk et al 2016, Swart et al 2017). This is unsurprising given that pain tends to interrupt thought processes and demand the person’s attention. Effective pain management reduces the risk of delirium and nurses should implement individualised pain management strategies with older people at risk of or experiencing delirium (Pandharipande et al 2008, Rizk et al 2016).

Opioids are one of a number of drugs that are known to precipitate delirium. Other drugs include benzodiazepines, antihistamines, atropine, sedative hypnotics and corticosteroids (Rizk et al 2016). Concerns have also been raised that delirium may be misinterpreted as pain, resulting in inappropriate administration of opioids, causing opioid toxicity and complicating the delirium. However, appropriate use of opioids for acute pain management in older people is not associated with the development of delirium (CKS 2015).

Non-pharmacological management

Acute pain is usually a symptom of a physical problem and requires further investigation. Therefore, non-pharmacological interventions should not be considered as the primary treatment for acute pain and their use may be limited in this situation. However, non-pharmacological approaches have been shown to reduce anxiety and to be effective when used in combination with analgesia, reducing analgesic requirement (Schug et al 2015). This is especially important in the older, frail person who is at higher risk of adverse drug reactions (ADRs).

Psychological intervention in the management of acute pain is often undervalued. Identified psychological factors that increase acute pain include anxiety, perceived inability to manage and control pain, unrealistic expectations and poor coping strategies (Bishop and Warr 2003, Hansen and Strelitzer 2005). The experience and expression of acute pain are complicated and multifactorial. They are strongly affected by an individual’s thoughts, memories, expectations and emotions and every individual will have a unique understanding of what pain means to them. Information about expected pain may not improve the reaction to the pain.
but knowing how long pain will last has been shown to improve the reaction (Carr and Mann 2009). However, the nurse must choose information that fits with the person’s preferred method. For example, if an older person has a painful leg ulcer that requires dressing, some people would prefer to be given detailed information about the procedure. For others, this could potentially increase anxiety and make the procedure unbearable.

Well-known interventions for injury or trauma-related acute pain include ice, elevation and splinting. However, there is a growing body of evidence for the effectiveness of other non-pharmacological interventions. For example, acupressure provides good pain relief and reduces anxiety (Lang et al. 2007), while transcutaneous electrical nerve stimulation results in significant pain reduction (Yilmazer et al. 2012) and reduces pain scores, anxiety and nausea (Mora et al. 2006). Local warming and continuous-flow cold therapy have been shown to reduce analgesic requirements (Bertalanffy et al. 2006). Complementary therapies such as acupuncture and reflexology are also helpful (Carr and Mann 2009).

Although nurses may think that they have limited non-pharmacological strategies available to use locally, they can often use simple measures to reduce acute pain for older people. By finding out an older person’s previous pain experiences and normal pain coping mechanisms, nurses can tailor care to individuals’ preferences. Use of coping strategies such as distraction, for example, listening to music, reading and watching TV, and simple relaxation techniques such as deep breathing can also help by reducing the pain perception, muscle tension and anxiety.

Basic movement and exercises can enhance function and avoid the joint stiffness that many older people experience when their mobility is restricted by pain. Some people feel their pain has a spiritual dimension and that it is a punishment from their God or deity for their past sins – this is more common in older people (Carr and Mann 2009). Appropriate counselling and referral to clergy may be helpful in these situations. However, every non-pharmacological intervention must be considered on an individual basis (Carr and Mann 2009).

**Analgesic management**

Appropriate analgesia can minimise the adverse effects of acute pain in older people but any pharmacological intervention has risks and morbidities (Phippin et al. 2017). A pain-free state is not always possible; the aim of acute pain management is to reduce pain and improve function while minimising side effects, ADRs and drug interactions. Older people are a diverse population and the effectiveness of analgesics varies between individuals, making optimum dosing and side effects of any drug difficult to predict. It is imperative to consider all these issues in addition to age-related physiological changes when administering analgesics to older people.

**World Health Organization pain relief ladder**

The World Health Organization’s (WHO) (1986) pain ladder is a common pharmacological strategy implemented for pain management worldwide (Huxtable et al. 2011). Although initially designed for cancer pain management, it is applicable to acute pain management. It advocates a simple step-by-step approach to titration of analgesia and doses, with increases in dose or strength of analgesic only occurring if pain remains moderate or severe. For acute pain management, it can be used in reverse – reducing analgesic dose and strength as pain reduces (Huxtable et al. 2011).

**TIME OUT 3**

**WHO pain ladder**

Visit the WHO website (www.who.int/cancer/palliative/painladder/en) and familiarise yourself with the pain ladder. Do you implement this strategy in your practice? Consider if there are any situations when this strategy is not applicable when managing acute pain in older people.

Several other considerations should be taken into account when using the WHO (1986) pain ladder for acute pain management in older people:

**Current analgesic use**

Many older people take analgesics on a regular basis, and therefore are already at step 2 or 3 of the ladder. Taking analgesics long term can result in physical tolerance to the drugs, which limits their effectiveness and results in acute pain management strategies becoming more complex.

**Frequency of administration**

For acute pain management, rapid-onset short duration analgesics are likely to be more effective than sustained release preparations. Administering regular doses of analgesic may be more appropriate for people who have difficulty communicating and who cannot request analgesia as required. However, this must be accompanied by frequent and accurate pain assessment to minimise the risk of inappropriate doses being administered when not required.
Route of administration
The route of administration will affect analgesic metabolism and therefore speed of effect. The most appropriate and safest route of administration of analgesic should always be considered first. Oral is the recommended route of administration if a person can eat and drink normally (WHO 1986).

It is usually acceptable to adult patients and staff, because it is convenient, cost effective and the least invasive route. Speed of onset of oral analgesia is usually around 20–30 minutes, which is considered acceptable for acute pain management. However, oral administration may be difficult or inappropriate in older adults with dehydration, dysphagia, confusion or cognitive impairment.

Analgesics should never be crushed or dissolved in water unless recommended by the manufacturer as this may alter the speed of absorption and could potentially lead to severe side effects. If an older person is unable to take analgesics by their prescribed route, alternative medications and routes need to be considered.

Alternative available routes of administration include sublingual, buccal, topical, transdermal, rectal, nasogastric, naso-jejunostomy, intramuscular, intravenous (IV) and subcutaneous. However, many of these routes are only available in the secondary care setting. In addition, not all these routes are suitable or licensed for acute pain management, for example, transdermal opiates (fentanyl or buprenorphine) are only licensed for persistent pain as they take 12–24 hours to achieve full effect and cannot be titrated quickly (British National Formulary (BNF) 2017).

Other medications
Caution is always required: see section on ADRs. Some older people may be unable to recall with accuracy their current medications or past medical history. A recent review suggested that older people use on average one to three non-prescribed medications (Phippin et al 2017), which may affect safe analgesic choices.

Individual preferences
Individuals’ perspectives on choice of drug and route of administration must be considered to achieve optimal analgesic concordance. Older people are more likely to have swallowing difficulties than their younger counterparts, therefore, it is important that nurses understand available choices and formulations of analgesics.

Analgesics used in acute pain management
Paracetamol
Paracetamol is the drug of choice for mild pain in older people (CKS 2015). Most importantly, paracetamol demonstrates improved analgesia when given alongside opioids (Schug et al 2015). However, concerns have been raised about hepatotoxicity with paracetamol, especially when administered to older, frail people or by the IV route which increases the bioavailability of drugs. The BNF (2017) recommends that any person weighing less than 50kg or at risk of hepatotoxicity should receive a maximum of 500mg paracetamol four times a day.

Compound analgesics
Paracetamol is often combined with weak opiates, for example, co-codamol and codeyrnal. Drug combinations tend to be popular with older people as they limit the number of tablets required. However, the drug components are not standardised and may vary with each formulation. Therefore, the BNF (2017) suggests that using these drugs increases the risk of side effects and overdose, without providing significant pain relief.

Non-steroidal anti-inflammatory drugs
This group of drugs, for example, ibuprofen and naproxen, has been shown to be beneficial in the treatment of inflammatory pain often experienced by older people. However, all non-steroidal anti-inflammatory drugs (NSAIDs) are associated with life-threatening side effects including renal toxicity, increased cardiovascular risk, gastrointestinal bleeding and ulceration and inhibition of platelet aggregation. Adverse effects from NSAIDs increase in frequency and severity with age, drastically limiting their use in older people (BPS 2013). Guidance suggests that the decision to use any NSAIDs in older adults requires individual risk-benefit analysis, even if a person has previously found NSAIDs helpful in pain control (BPS 2013). NSAIDs should be used with extreme caution for the shortest possible period in older people (CKS 2015). The safest route of administration is topical because it can provide effective analgesia with limited systemic adverse effects. However, this is only effective for localised pain.

Weak opioids
Codeine
Clinical trials have suggested that codeine alone is not an effective analgesic in single doses, but, when given in combination with paracetamol, there is considerable evidence to support its effectiveness (Franceschi et al 2013). However, codeine is constipating
and can accumulate in people who have reduced renal function. For these reasons, the appropriateness of using codeine for older people is often debated.

**Tramadol**

Tramadol is less likely to produce respiratory depression or constipation than other opiates. However, it often causes nausea and vomiting, hallucinations, dysphoria, dizziness and somnolence, especially in older people. Mercadante and Arcuri (2007) suggested that older people require 20% less tramadol than younger adults, although the pharmacokinetics (how drugs are absorbed, distributed, metabolised and excreted by the body) remained unaffected by age. Therefore, dose adjustment may be required in older people, especially those with renal or hepatic impairment or cardiac issues.

**Strong opioids**

When used appropriately, opioids are safe and effective in older people (Schug et al 2015). Short-acting strong opioids can provide effective pain relief for acute pain and addiction is not a problem with short-term use. One advantage of opioids is that they have no maximum dose and therefore can be titrated until acute pain is improved. However, strong opioids used in doses larger than necessary to control pain, or in people who are dehydrated or have infection, can cause side effects. All opioid side effects, particularly in the older population, can occur even at subtherapeutic doses and irrespective of the route of administration. Therefore, repeated doses should be administered with caution.

Common side effects of strong opioids include constipation, sedation, confusion, delirium, hallucinations, dizziness and nausea. More severe side effects include respiratory depression and respiratory arrest. In particular, constipation and hallucinations can be problematic. However, older people sometime do not realise the importance of reporting side effects (Charlton and Thompson 2017). Therefore, individuals need to be questioned about any side effects experienced and dose adjustment may be necessary. In addition, standard practice with opioids is to use prophylactic stool softeners and to monitor bowel function closely.

**ADRs and drug interactions**

An ADR is ‘an unwanted or harmful reaction which occurs after administration of a drug or drugs and is suspected or known to be due to the drug(s)’ (CKS 2017). In exceptional cases, ADRs and drug interactions can cause death (Phippin et al 2017). Nurses need to be able to recognise and report any ADRs or potential drug interactions from analgesia.

The risk of ADRs increases with age and is proportional to the number of drugs prescribed. The effects of ageing and frailty on drug metabolism, especially in relation to hepatic and renal excretion, need to be appreciated (Charlton and Thompson 2017). Older people with multiple co-morbidities such as ischaemic heart disease, hypertension and respiratory conditions that require multiple medications are at increased risk of drug interactions. Individual factors that are known to increase risk of drug administration errors include cognitive impairment, poor vision and poor physical dexterity – all of which commonly affect older people (CKS 2017).

Analgesic management of acute pain in older people requires individualised decisions about which analgesic is most likely to reduce pain, while avoiding harm. Common ADRs with analgesics include liver failure related to overdose of paracetamol, gastrointestinal, renal and cardiovascular side effects from NSAIDs and cognitive impairment, constipation and nausea from opioids. Common symptoms of analgesia-related ADRs include hypotension, dizziness and confusion. These symptoms are of particular concern in older people who are at risk of falls (Schug et al 2015).

Several types of drug interactions exist, for example, drug-drug, drug-alcohol and drug-herbal products. Drug interactions can result in changes to drug concentrations and can also affect clinical response. For example, NSAIDs are known to enhance the effect of anticoagulants resulting in increased risk of bleeding and to increase the risk of nephrotoxicity when given in combination with diuretics (BNF 2017). Opioids increase the sedative effects of alcohol and antihistamines. Tramadol reduces the effect of antiepileptics thereby increasing the risk of seizures. There is also a risk of serotonin syndrome (a potentially life-threatening syndrome with symptoms including pyrexia, agitation, increased reflexes, tremor, sweating, dilated pupils and diarrhoea) if given concurrently with St John’s wort or some antidepressants. Even when healthcare professionals have taken care to ensure analgesics are prescribed appropriately and have given clear administration instructions, there remains a risk that the person may fail to follow this advice. In their study Phippin et al (2017) found that 37% of older people were taking drugs without their doctors’ knowledge and 6% were not taking medications as prescribed.
A nationally recognised recommendation for analgesic dosing regimens in older people is to start with the lowest possible dose, carry out frequent pain assessment and monitoring of analgesic effectiveness and increase analgesic doses cautiously to minimise risks and side effects – this is often referred to as the ‘start low, go slow’ approach (Schofield 2017). Any suspected ADR should be reported to the Medicines and Healthcare products Regulatory Agency, using the Yellow Card that can be found in the BNF or online (http://yellowcard.mhra.gov.uk). Potential drug interactions can be checked in appendix 1 of the BNF (2017).

**Conclusion**

Acute pain is undertreated, under-recognised and often presents atypically in older adults. As the number of older people has risen, acute pain management has become an increasingly important issue. Pain assessment of older people can present its own difficulties. The use of appropriate tools and good observation skills can assist the nurse in carrying out accurate pain assessment even in older people who cannot communicate.

Older people experience physiological changes as they age which can affect drug metabolism and excretion. In addition, co-morbidities often result in polypharmacy, increasing the risks of ADRs and drug interactions when analgesia is introduced. The risk of ADRs and drug interactions can be minimised by vigilant monitoring and thorough examination of risks and benefits.

Non-pharmacological interventions can reduce acute pain and should not be ignored or dismissed. Pharmacological management is possible if healthcare professionals have a good understanding of appropriate use of analgesics, their side effects and interactions. By carefully checking for ADRs and potential drug interactions, and ensuring older people are provided with clear instructions and communication, nurses can ensure safe use of analgesics.

**TIME OUT 4**

**The Code**

Nurses are encouraged to apply the four themes of The Code (NMC 2015) to their professional practice. Consider how effective acute pain management in the older person relates to The Code.

**TIME OUT 5**

**Reflection**

Now that you have completed the article you might like to write a reflective account as part of your revalidation.

**References**


Acute pain

TEST YOUR KNOWLEDGE BY COMPLETING THIS SELF-ASSESSMENT QUESTIONNAIRE 6

1. Which of the following statements about acute pain is true?
   a) It is usually of limited duration
   b) It is well controlled in older people
   c) People over 65 have the lowest incidence of painful diseases
   d) It is well recognised in older people

2. Acute pain is under-treated in older people because of:
   a) Delirium
   b) Cognitive impairment
   c) Under-reporting
   d) All the above

3. A consequence of uncontrolled acute pain is:
   a) Improved well-being
   b) Increased length of hospital stay
   c) Increased appetite
   d) Social engagement

4. In people who have reached 65, the glomerular filtration rate will have fallen by:
   a) 10%
   b) 25%
   c) 30%
   d) 60%

5. What does ‘O’ represent in the SOCRATES mnemonic?
   a) Organ
   b) Onset
   c) Order
   d) Older

6. A common non-verbal pain indicator is:
   a) Clenched teeth
   b) Rocking
   c) Sweating
   d) All the above

7. In what percentage of older postoperative patients does delirium occur?
   a) 25%
   b) 40%
   c) 80%
   d) 87%

8. Which of the following drugs is a common cause of delirium?
   a) Aminophylline
   b) Captopril
   c) Temazepam
   d) Paracetamol

9. Which of the following non-pharmacological interventions has been shown to reduce the need for analgesia?
   a) Splinting
   b) Elevation
   c) Local warming
   d) Ice

10. What is the recommended route of analgesic administration?
    a) Intravenous
    b) Subcutaneous
    c) Rectal
    d) Oral

How to complete this assessment
This self-assessment questionnaire will help you test your knowledge. It comprises ten multiple choice questions broadly linked to the previous article. There is one correct answer to each question.

You can read the article before answering the questions or attempt the questions first, then read the article and see if you would answer them differently.

When you have completed the questionnaire, cut out this page and add it to your professional portfolio. You can record the amount of time it has taken you to complete it.

You may want to write a reflective account. Visit rcni.com/reflective-account

Go online to complete this self-assessment questionnaire and you can save it to your RCN portfolio to help meet your revalidation requirements.

Go to rcni.com/cpd/test-your-knowledge

This self-assessment questionnaire was compiled by Lisa Berry

The importance of nutrition in preventing and treating pressure ulcers, which appeared in the July issue, are:
1. a, 2, 3, 4, 5, 6, 7, 8, 9, 10, c

This activity has taken me minutes/hours to complete. Now that I have read this article and completed this assessment, I think my knowledge is:

Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory ☐ Poor ☐

As a result of this I intend to:

________________________________________________________________________________________