Barriers to the provision of effective pain management

**AUTHOR** Carolyn Middleton, BSc, RGN, is clinical nurse specialist, Pain Service, Nevill Hall Hospital, South Wales


Despite major advances in the management of pain since the Royal College of Surgeons and the Royal College of Anaesthetists announced in 1990 that postoperative pain management in British hospitals was inadequate, pain continues to be an unacceptable but common sequel to surgery (Wood, 2002). Pain assessment is simple, but unfortunately it is infrequently performed. When clinicians do not obtain pain ratings from patients they are unlikely to underestimate the patients’ pain. Improving pain management requires that pain is recognised as a priority and that nurses are encouraged to play an active and pivotal role within the multidisciplinary team to recognise, prevent and treat it.

According to the Agency for Health Care Policy and Research, institutions have a responsibility for pain management and patients should have access to the best level of pain relief that may safely be provided (McCaffery and Pasero, 1999). The Royal College of Anaesthetists (2000) supported this statement in its audit ‘recipes’, recommending that fewer than seven per cent of postoperative patients should experience a failure of analgesia. Despite this, Wood (2002) suggests that millions of people worldwide suffer from unnecessary pain following surgery as a result of ineffective pain management. Barriers to effective pain management are numerous and complex (Box 1).

The treatment of acute pain is important not only for humanitarian reasons of patient comfort but also because it significantly improves outcome by reducing the incidence of postoperative complications, therefore shortening hospital stays (Macintyre and Ready, 2001).

**Pain assessment**

Pain is often underestimated and under-treated. Cursory or inaccurate assessments, or no formal assessment, all contribute to this problem (Hawksley, 2000). Pain assessment is simple, but unfortunately it is infrequently performed. Assumptions or guesswork are often used, but these are not sufficiently accurate foundations on which to base health care interventions.

Research has demonstrated that when clinicians do not obtain pain ratings from patients they are likely to underestimate the pain of these patients (McCaffery and Pasero, 1999).

To facilitate accountability of pain management the Royal College of Surgeons and the Royal College of Anaesthetists (1990) have recommended that pain becomes the fifth vital sign that needs to be assessed and documented accurately, regularly and appropriately. Failure of clinicians to ask patients about their pain and to accept and act on their reports is probably the most common cause of unrelieved pain and unnecessary suffering (McCaffery and Pasero, 1999).

Pain is completely subjective and cannot be proved or disproved: ‘Pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does’ (McCaffery and Beebe, 1994). Those who are experiencing the pain should therefore make the

**BOX 1. BARRIERS TO MANAGING PATIENTS’ PAIN EFFECTIVELY**

**NURSES**

- Lack of pain assessment
- Inadequate pain assessment
- Lack of agreement between nurse and patient about the patient’s level of pain, resulting in inadequate analgesia being given
- Failure to recognise and respond to a patient’s pain
- Failure to administer prescribed doses of medication
- Lack of knowledge
- Misconceptions about opioids
- Misconceptions about addiction
- Misconceptions about respiratory depression

**DOCTORS**

- Inappropriate prescribing of drugs or dosages
- Inappropriate frequency of dosing
- Inappropriate mode of delivery of drugs
- Misconceptions about opioids and addiction
- Misconceptions regarding respiratory depression
- Lack of knowledge

**PATIENTS**

- Reluctance to report pain
- Reluctance to take analgesia
- Concerns regarding addiction
- Concerns regarding side-effects
- A belief that pain is inevitable and that ‘good’ patients do not complain
- Low expectations of health professionals’ ability to relieve pain

*Source: Adapted from Wood (2002)*
critical observations about its intensity. The tenets of good pain management include regular pain assessment, which is acted upon with appropriate drug administration (Box 2).

**Patient self-reporting**
Nurses often distrust patients’ self-reporting of pain, which suggests that they have their own benchmark of what is an acceptable level of pain before analgesia is necessary. McCaffery and Pasero (1999) suggest that nurses consistently document lower pain scores than those reported by patients. Many clinicians believe that patients exaggerate pain, therefore high pain ratings by patients do not necessarily result in nurses administering more analgesia (Wood, 2002).

The principles of advocacy apply to pain assessment, therefore nurses must remain non-judgemental and unbiased in their assessment of a patient’s pain. Pain is a two-way process, and believing the patient is the first step in this process (Scholfield, 2003). It is only in the light of an understanding of an individual person’s experience that as effective an intervention as possible can be put into place.

**Assessment tools**
Knowledge and attitudes to pain management are as relevant as the drugs and techniques used to deliver them. Thus an inappropriate choice of assessment tool may lead to poor pain management. A wide variety of tools have been developed to collect information from people who are in pain (Box 3, p44). Some are sophisticated and involve the completion of lengthy questions and the requirement to shade appropriate areas on a body map; others are far simpler, such as numerical or verbal rating scales, and are therefore more suitable for clinical application in the acute setting (Davis, 2000).

Verbal indicators give patients a choice of words that can be used to describe their pain, but this type of assessment tool can also be problematic, because interpretation of the verbal descriptions of pain may not always be consistent (Davis, 2000).

If a tool is used to measure pain intensity but not its location, a potential problem arises. For example, a patient who has undergone orthopaedic lower limb surgery may score his or her pain as nine or 10, but the nurse may assume that this relates to limb pain whereas the patient may be suffering from chest pain as a result of cardiac or pulmonary complications. Unless the site of the pain is assessed, it is possible that this type of complication may be overlooked.

For patients who are unable to give either a verbal or written indication of pain, attempts have been made to catalogue behaviour, such as facial expressions, sounds, (cries or expressions of anger, for example), negative changes in mood, limb movements (for example, stiffness or lack of movement), and guarding of body parts. However, the accuracy of interpreting such non-verbal pain indicators is subjective and can be a major problem (Davis, 2000).

**Box 2. The tenets of good management of acute pain**

- Regular pain assessment and scoring using a recognised tool
- Believing patients’ assessment of their pain and acting appropriately on that assessment to reduce their level of pain
- Administration of appropriate drugs in correct doses at correct intervals via appropriate routes and delivery methods
- Staff education

**Prescribing analgesics**
The purpose of using drugs in pain control is to keep the patient free from pain. The main principles of analgesic choice to achieve efficacy are based on the World Health Organization’s analgesic ladder (Fig 1, p45). This staged approach to the prescribing of analgesia allows flexibility for different intensities of pain and has been shown in research studies to increase the analgesic effect for between 69 and 100 per cent of patients (McCaffery and Pasero, 1999).

If pain is mild to moderate and is not relieved by a non-opioid, the analgesic ladder indicates the addition of an opioid, thus building on the previous step. A common mistake made in practice is to stop the non-opioid when the opioid is started rather than adding to it – doctors will often fail to co-prescribe from these two classes of drugs. Alternatively, many nurses will fail to administer both medications, falsely believing that co-administration is not safe.

In practice, carefully considered co-administration is entirely safe. Different analgesics relieve pain in different ways and research over the past decade has recommended a multimodal approach to pain management commonly called ‘balanced analgesia’. It includes the use of drugs from each of the three analgesic groups:

- Opioids (morphine);
- Non-opioids (non-steroidal anti-inflammatory drugs);
- Adjuvants, ranging from antidepressants to topical anaesthetic agents.

**Dosing of analgesic drugs**
Patient body weight is the most commonly used indicator of drug dose rather than patient response in order to optimise the balance between achieving good analgesia and minimising side-effects. Titration of drugs is not always used to account for individual patient variation. However, intravenous patient-controlled analgesia and patient-controlled epidural analgesia devices allow patients to titrate the dose of analgesia to their specific requirements (Macintyre and Ready, 2001).

Under-dosing of analgesic drugs, either because of inappropriate prescribing or by failure to administer the prescribed medication, is unlikely to achieve freedom from pain. By allowing nurses to choose from a range of

**References**
dosages prescribed (for example, tramadol 50–100mg as required every four to six hours), it has been shown that the lowest dose will repeatedly be chosen, regardless of the patient’s response to the analgesia (Cohen, 1980). Overdosing, on the other hand, is likely to cause unwanted side-effects because, in general terms, side-effects are dose-dependent.

Dosing intervals

Research has established that many clinicians have insufficient knowledge about the principles of analgesic use and fail to tailor pain treatment plans to individual patients’ needs (McCaffery and Pasero, 1999). When pain relief is not effective, clinicians tend to blame the patient rather than the treatment plan.

The patient who is a ‘clock watcher’ probably should have a longer-acting opioid than has been prescribed, or the interval between doses should be changed. It is important that patients are not be blamed for trying to make the best of inadequate analgesia (McCaffery and Pasero, 1999).

Mode of delivery

The oral route is often the optimal route: it is convenient, flexible and produces relatively steady blood levels of the drug consumed. Nevertheless, it is often not used as a first-line choice. This route, however, is not an appropriate choice if a quick onset of analgesic effect is desired. In this case, intravenous administration is the most appropriate option.

Nurse-administered intermittent intramuscular opioid injection often results in poor analgesia for a patient. This mode of delivery requires good staffing levels so as to minimise delay between need and injection; staff shortages, distractions and controlled drugs regulations are all factors that increase delay for the patient. Intramuscular administration of opioids is also associated with wide fluctuations in absorption.

Delayed absorption results in a slow onset of analgesia that can be ineffective for the patient and is therefore a poor way to manage acute pain (McCaffery and Pasero, 1999). However, patient-controlled analgesia can be used to overcome some of these logistical problems.

Iatrogenic problems and opioids

Iatrogenic problems have been caused by the misuse of many potent drugs. As a result, extreme caution is now taken before these are used, which leads to a new problem – inadequate treatment of pain.

Addiction

One very common reason for not acting on a patient’s report of pain is the belief that the patient is, or will become, addicted to an opioid. However, contrary to popular belief, drug exposure does not lead to drug addiction. Addiction occurs over time, certainly not as a consequence of one hospital experience. Research has shown that addiction occurs in less than one per cent of patients (McCaffery and Pasero, 1999). These authors’ definition of addiction is that it is ‘a pattern of compulsive drug use characterised by continued craving for an opioid and the need to use the opioid for effects other than pain relief’.

Some nurses believe that a patient who regularly asks for opioids is addicted; in fact, this usually means that the patient is in pain (McCaffery and Pasero, 1999). Often, patients are not appropriately assessed for whether or not they have an addiction, and a diagnosis of addiction is certainly not written in patients’ notes. Nevertheless, clinicians may continue to refer to these patients as addicts or as demonstrating drug-seeking behaviour. The stigma attached to being labelled in this way can have a negative influence on patient care and may lead to a situation where clinicians are reluctant to accept these patients’ report of their pain, and therefore they do not provide them with adequate and appropriate pain relief.

Some patients decline analgesia regardless of their pain scores because they say that they do not want to become addicted to the medication.

Clearly, appropriate education is vital to ensure that facts and not myths are disseminated to all involved, because addiction remains an enormous concern for physicians, nurses and patients. ‘If some of the myths
can be dispelled and the wider issues in practice demonstrated, these factors may be less likely to become barriers to effective pain management’ (Carr, 1997).

Respiratory depression
Respiratory depression is a well-documented side-effect of opioid analgesia and for this reason clinicians are often cautious in the extreme about administering drugs such as morphine. Pain stimulates respiration, therefore respiratory depression is rare when opioid doses are titrated slowly and reduced when increased sedation is suspected, because more opioid is required to produce respiratory depression than to produce sedation (McCaffery and Pasero, 1999).

Opioid-naive patients are at increased risk of respiratory depression, although the longer the patient receives opioids the wider the margin for safety. In most instances, respiratory depression can be prevented by close monitoring, along with careful titration of opioids. If not, it is treatable with naloxone.

Effective communication strategies
Although intravenous patient-controlled analgesia and patient-controlled epidural analgesia pumps are designed to meet individual patients’ needs, patients are often educated regarding the use of such equipment only in the recovery room directly after receiving an anaesthetic. At this time they are usually sleepy and find it difficult to understand somewhat complex instructions, consequently they tend not to use the equipment so as to get maximum benefit from it. However, visiting patients preoperatively to explain how to use the equipment will help them to manage their postoperative pain more effectively.

Written information
Providing written information about safe and effective management of pain will also increase compliance, and will help patients to feel in control and improve clinical outcomes (Wood, 2002). Written information should include instructions on how and when patients should communicate their pain to the staff caring for them.

Patients unable to communicate
Some patients will not be able to communicate their level of pain either verbally or by using aids; for example, the very young, people with severe learning difficulties or the very shocked patient. However, just because they are not able to tell the nurse caring for them that they are in pain, does not mean that they are not suffering. Behavioural or physiological assessments are particularly important for these patients (Davis, 2000).

Behavioural indicators include:

- Sound (cries and expressions of anger);
- Negative changes in mood;
- Facial expressions and tears;
- Limb movements;
- Guarding of body parts;
- Stiffness or lack of movement.

Because interpretation of behavioural indicators can be a major problem, some attempts have been made to catalogue indicators such as facial expressions in very young children (Davis, 2000).

It is also important when caring for patients who cannot communicate verbally or who use aids to indicate their pain, to take account of physiological changes that relate to changes in the sympathetic nervous system (Middleton, 2003).

Conclusion
Most of the reasons for patients receiving inadequate pain relief stem from a lack of education:

- Poor pain assessment or no assessment at all;
- Inappropriate prescribing of drugs and doses or failure to adjust dosing intervals as necessary;
- Misconceptions about addiction and about respiratory depression.

Research has shown that interprofessional education can contribute towards improved pain management by the development of multidisciplinary pain management programmes and acute pain services (Schofield, 2003).

If patients are to receive analgesia that is appropriate to their needs, they should have access to highly sophisticated equipment. This may be costly to purchase, but failure to use devices for intravenous patient-controlled analgesia and patient-controlled epidural analgesia will be to the detriment of good patient care.

Despite major advances in knowledge about pain and its management over the past two decades, pain continues to be poorly managed. Improving pain management requires that it is recognised as a priority and that nurses are encouraged to play an active and pivotal role within the multidisciplinary team to recognise, prevent and treat it (Campbell, 1995).