BARRIERS TO PAIN MANAGEMENT IN EMERGENCY DEPARTMENTS

MARTIN DUIGNAN and VIRGINIA DUNN explore the literature to identify possible reasons for sub-optimal pain management in emergency departments

Research shows that pain is the primary issue for more than 70 per cent of patients who present at emergency departments (EDs) (Tanabe and Buschmann 1999, Tcherny-Lessenot et al 2003), making it the most prevalent reason for attendance.

Although there have been many studies exploring the barriers to pain management, a recent survey by the Health Service Executive (HSE), in Ireland, found that only 60 per cent of patients presenting at EDs with pain either requested or were offered pain relief (HSE 2007). This illustrates that there are still significant barriers to comprehensive pain management in clinical practice.

This article is a review of the relevant literature on the barriers to pain management in EDs that formed the basis for a study we undertook in 2006. This study set out to determine emergency nurses’ perceptions of the barriers to pain management, and we expect to publish our findings in a subsequent article in Emergency Nurse.

BACKGROUND
For the purpose of the study, pain management was defined as the comprehensive process of identifying, assessing and addressing patients’ pain (Crooks 2002).

Many of barriers to pain management are common to all clinical areas but some, such as lack of time, are more salient to EDs.

The Agency for Healthcare Research and Quality (2005), in the United States, divides barriers to pain management into:

- Healthcare system related
- Healthcare provider related
- Patient related.

HEALTHCARE SYSTEM RELATED BARRIERS
Many healthcare system related barriers have been identified, including lack of time and poor levels of clinician education (Bird 2005). Inadequate policy and standard setting by organisations also lead to oligoanalgesia, the sub-optimal use of analgesics, in EDs.

Lack of time
Lack of time is documented as an issue for emergency nurses that may contribute to oligoanalgesia (Collins 1999, Ehrenberg 2001). Indeed, lack of time is the most frequently cited barrier to effective pain management (Schaffheutle et al 2001).

Hwang et al (2006) suggest that, during periods of high ED attendance, staff are likely to be less attentive and responsive to complaints of painful conditions, especially when managing patients who are vulnerable and therefore unable to advocate for their own care.

In this study by Hwang et al a significant association between ED overcrowding, as measured according to ED census levels greater than 120 per cent bed capacity, and poorer pain management is found.

However, while it is indisputable that EDs operate in a climate of staff shortages and increasing workload, there is evidence to suggest that nurses prioritise physical issues when caring for patients and attribute lower priority to aspects of care such as pain management.

A study by Wood (1979) for example uses a structured observational research design to show that emergency nurses spend only brief amounts of time interacting with patients and prioritise physical care over more subjective measurements.

This is supported by Walsh and Dolan (1999), who find that emergency nurses view psychological and holistic dimensions of caring as less important than do nurses from general wards.

It is further reinforced by Byrne and Heyman’s (1997) assertion that emergency nurses think that the more time they spend with any one patient the less time there is available for others.

Emergency nurses also perceive that they must concentrate on transferring patients through departments quickly rather than on spending time talking with them (Byrne and Heyman 1997).

Nurses’ knowledge
Deficits in nurses’ knowledge about pain and its management are also cited extensively in the literature as contributing to oligoanalgesia (Bell...
Jastrzab et al. (2003) for example used a questionnaire to ascertain levels of knowledge of analgesia among 272 nurses at a large teaching hospital in Sydney. The authors found that emergency nurses scored an average of 61 per cent correct answers, which they considered ‘moderate’. They also found that younger, less experienced nurses are more knowledgeable than their colleagues. Nurses demonstrated least knowledge about pharmacological management, with a correct answer rate of 51 per cent.

These findings are supported by Horbury et al. (2005), whose study aimed to assess nurses’ intention to treat different patients’ pain. Using a questionnaire comprising eight vignettes, their study revealed that 60 per cent of the 221 nurses in the study selected options that would have resulted in patients’ pain continuing or worsening.

Another study, by Innis et al. (2004), employed McCaffery’s Nurses’ Knowledge and Attitudes Survey Regarding Pain to assess the level of knowledge among 93 nurses before and after an in-service lecture on pain assessment and management. The mean correct response before the lecture was 59 per cent, which increased to 71 per cent afterwards.

Wallace et al. (1995) suggest that inadequate knowledge remains a significant barrier to pain management because clinicians fail to recognise their own knowledge deficit and therefore also the need for change.

There is evidence to suggest that knowledge deficit as a barrier to pain management is attributable to lack of educational preparation.

Ferrell et al. (2000), in a study of nursing textbooks, including those concerning health care in the UK, find that only 0.5 per cent of the total content is devoted to pain. This is supported by Wallace et al. (1995), who found that almost 75 per cent of their study’s participants claimed that they had been prepared inadequately in the use of analgesics.

Despite this, attempts to improve knowledge have not produced corresponding changes in pain management (Brockopp et al. 1998).

Such strategies include:
- The pain assessment standards published by the Joint Commission on Accreditation of Health Care Organizations (JCAHO 2001), in the US
- Musculoskeletal pain management guidelines published by the National Health and Medical Research Council (2003), in Australia
- Recent guidelines published by the British Association for Accident and Emergency Medicine (2007).

In the US, regulatory barriers such as affordability and restrictive prescribing laws are identified as barriers to pain and symptom management (Gee and Fins 2003).

Fear of regulatory scrutiny is also cited as a contributory factor in inadequate prescribing and poor pain management practice (Joranson and Gilson 1998).

HEALTHCARE PROVIDER RELATED BARRIERS

Staff attitudes
The literature recognizes that, that due to the subjective nature of pain, healthcare professionals’ attitudes and beliefs can contribute to under-treatment. This can happen when clinicians make pain management decisions for patients based on their own beliefs and do not accept patients’ self reporting as the ‘gold standard’ (Lipley 2002, McCaffery et al. 2000, Nash et al. 1999, Pasero and McCaffery 2001).

Nash et al. (1999) used focus based interviews with 19 participants to ascertain that nurses’ attitudes and beliefs affected pain, pain management and their administration of analgesia, particularly opiates.

Their study reveals a range of erroneous beliefs, for example that smaller patients need less analgesia, that terminally ill patients should have more analgesia, and that patients should not use opioids within 24 hours of discharge. This is supported by Fosnocht et al. (2005), who found that attitudes to pain management among clinicians can affect pain treatment in EDs enormously.

Beliefs about analgesia
The World Health Organization (1986) reports that the most significant barrier to pain relief among people with cancer is fear among the public, patients, healthcare professionals, legislators and drug administrators of opioid addiction. This has led to the phrase ‘opiophobia’, which describes an irrational fear of opioids even when they are prescribed to treat pain (Furrow 2001, McCaffery et al. 1990).

Drayer et al. (1999) also find that the most frequent reason that medication is not prescribed...
or wanted is fear of addiction. Their study used a numeric rating scale and interviews to assess pain among 50 patients and the attitudes of the nurses and doctors caring for them.

One of the healthcare professional interviewees spontaneously mentioned that fear of addiction was a reason for withholding analgesia from 11 of the 50 patients. These findings are supported by two studies; Cowan et al (2004) comment that misconceptions about pain control results in under treatment of pain while Rupp and Delaney (2004) suggest that an excessive tendency to relate requests for analgesia to drug seeking behaviour contributes to oligoanalgesia.

A further common cause of under-treated pain in EDs is a belief that analgesia masks clinical signs, which can lead to poorer patient outcome (Brewster et al 2000, Thomas et al 2003, Vermeulen et al 1999, Wolfe et al 2000).

A survey into emergency doctors’ beliefs for example finds that more than three quarters withhold opiates analgesia until surgical review is undertaken (Wolfe et al 2000).

Conversely though, Nissman et al (2004) suggest that analgesia is not withheld before surgical evaluation. Their study found that, of 60 emergency doctors who responded to a telephone survey, 59 said that they administered analgesia before surgical review.

Two randomised controlled trials to assess the effect of early analgesia on abdominal pain (Thomas et al 2003, Vermeulen et al 1999) demonstrate that analgesia is safe and does not hamper diagnosis. This is significant in view of a study by Yee et al (2006), which showed that almost half of the patients surveyed wanted a complete resolution of their abdominal pain after presentation at the ED.

Under-assessment of pain

Good pain assessment is essential for good pain management but studies comparing clinician assessment with patients’ actual pain ratings frequently confirm that clinicians underestimate levels of pain (Gunnarsdottir et al 2003, Zalon 1993).

In an article about the JCAHO’s pain management standards, Curtiss (2001) identifies the most powerful predictor of poor pain management as the discrepancy between patients’ and clinicians’ perceptions of pain.

References


Further evidence of this discrepancy can be found in Puntillo et al’s (2003) work, in which emergency nurses’ assessment of their patients’ pain intensity and patients’ self reports were compared. Puntillo et al’s (2003) study, of 156 patients and 37 nurses, notes poor levels of assessment of pain intensity both at triage and in the clinical area. Concordance between nurses’ and patients’ pain intensity assessment, signified by nurses’ pain intensity scores using a numeric rating scale being within a point of those of the patients, was 50 per cent or less.

Sloman et al (2005) also find significant pain underestimation by nurses. Their study, which involved 95 nurses and 95 patients, finds that nurses significantly under-rated pain sensation, pain effect, pain both at rest and on movement, and overall pain intensity.

Oligoanalgesia may also exist because of misconceptions about who the authorities on patients’ pain are (Hunter 2000). Clarifying this, Pasero and McCaffery (2001) state that, because pain cannot be proved or disproved, patients’ reports should be accepted as the gold standard and take precedence over their behaviour and vital signs.

**PATIENT RELATED BARRIERS**

Barriers to effective pain management related to patients are usually attitudinal and based on misconceptions about pain and its management (Gunnarsdottir et al 2002, Ward et al 1993). They may be propagated by society’s traditional view that suffering is ‘noble’; while the stoicism of those who suffer in silence is admired, disdain is shown for those whose suffering is apparent (Brockopp et al 1998).

Gunnarsdottir et al (2005) recruited a convenience sample of 244 people from the general population of Iceland to determine the prevalent barriers to effective pain management among patients. Using a questionnaire with 27 questions, the authors found that patient related barriers can be categorised into:

- Fear of consequences, including fears that analgesics will harm the immune system, that patients will develop a tolerance to the effects of analgesics, and that they will be unaware of changes in their own bodies when using analgesics
- Fatalism, including the anecdotal belief that, because pain can aid diagnosis, it must be therapeutic
- Communication fear, including fears that reporting pain will distract clinicians from treating underlying disease and that ‘good’ patients do not talk about pain.

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These findings support those of Lin's (2000) study of patients and their primary caregivers, which suggests that patient barriers correlate with those of their primary caregivers. Meanwhile, Ward et al (1993), who examined unrelieved pain among cancer patients, note that another barrier to effective pain management involves patients’ belief about reporting and using analgesics.

Five years later, Ward et al (1998) published further research, this time into the extent to which patients have concerns about reporting pain and using analgesics, and find that older participants, and participants with lower levels of education, have higher levels of concern. They recommend that, not only should patients be taught about how erroneous some beliefs such as those about addiction are, but also about coping with the side effects of analgesia.

**Alcohol and drugs**

The use of alcohol or drugs by patients attending EDs is a further barrier to pain management that can impair patients’ ability to provide accurate histories and impede clinicians’ ability to assess pain accurately. Several studies highlight the incidence of alcohol and drug use among ED attenders in Ireland.

A review of hospital admissions by O’Farrell et al (2004), for example, finds an 80 per cent increase in the number of acute alcohol intoxication admissions in Ireland between 1997 and 2001. Meanwhile, Eager and Barton (2003) undertook a prospective study over three months to identify alcohol and drug use among young ED attenders and found that drug use was related to 1.4 per cent of attendances.

The authors acknowledge however that this is probably an underestimate because they excluded presentations where substance abuse was viewed as a contributing rather than a causative factor.

**CONCLUSION**

This literature review has identified several factors that place constraints on nurses’ ability to manage patients’ pain effectively. These factors comprise barriers that nurses themselves identify and acknowledge, and can be categorised as healthcare system, healthcare provider and patient related.

While this article is not exhaustive in its exploration of these factors, it describes how they can be identified, and challenges emergency nurses to examine barriers to pain relief in their own practices.

**References**


