PAIN ASSESSMENT AT NURSE TRIAGE: A LITERATURE REVIEW

DAMIEN BIBLE provides a critical review of the literature and highlights the need for consistent pain assessment and management at nurse triage in A&E.

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Research suggests that most patients who attend emergency departments (EDs) experience some degree of pain (Loveridge 2000). Triage nurses have an important role to play therefore in assessing and managing this pain, both in their capacity as the first point of contact for patients and in terms of their code of professional practice (Nursing and Midwifery Council 2004).

Clause 1.4 of this code states that nurses ‘have a duty of care to their patients and clients, who are entitled to receive safe and competent care’, while Clause 6.5 states that they ‘have a responsibility to deliver care based on current evidence, best practice and, where applicable, validated research when it is available’ (NMC 2004).

It was deemed appropriate therefore to examine the role played by triage nurses in the assessment and management of pain, and to discuss the implications of this for clinical nursing practice, in the context of the literature.

An assessment of pain is often vital for good clinical care, judging the progress of patients and the efficacy of their treatment, and for arriving at proper diagnoses. Inconsistencies in pain assessment, on the other hand, can lead to patient suffering.

It is hoped that this literature review will highlight and illustrate the importance of conducting pain assessments, even without structured tools such as the Manchester Triage System (MTS).

LITERATURE SEARCH METHODS

Internet and library literature searches were undertaken to discover the currently accepted best practice in pain assessment and management at nurse triage in UK EDs.

The search strings ‘nurse triage’, ‘pain assessment/management’ and ‘emergency care’ were used in CINAHL and Medline search engines, with ‘combination’ and ‘limiting’ techniques being used to ensure that only relevant and current literature on this subject were highlighted.

NURSE TRIAGE

The Audit Commission (2001) suggests that more than 15 million people attend EDs in England and Wales every year. Illingworth and Simpson (1998) estimate that three quarters of these patients probably experience some level of pain.

Many patients encounter the NHS for the first time in EDs. Teanby (2003) suggests that their initial contact is usually with triage nurses and, as demands on ED services increase, the triage nurse role grows more important, not only for patients but also for EDs and the NHS as a whole.

Before triage, patients attending EDs used to be screened by non-professional members of staff, such as receptionists (Larsen 2000, Teanby 2003), but, after the implementation of The Patient’s Charter (Department of Health 1992), it is now mandatory that all ED attenders are assessed first by healthcare professionals.

As a result of this national requirement, a number of emergency nursing and medical specialists formed the Manchester Triage Group in 1994 (Teanby 2003).

Finding that there was no common nomenclature or definition of triage, they decided that a national triage scale should be adopted throughout the UK (Mackway-Jones 2006).

The group designed the MTS, a triage methodology centred on presenting complaint and clinical priority, to aid triage nurses in decision making processes.

This system includes flow charts that help practitioners to select triage categories for patients by interpreting signs and symptoms of pain, and discriminators that help them to calculate levels of clinical priority (Mackway-Jones 2006).

The Manchester Triage Group (Mackway-Jones 2006) claimed that the system would develop decisions that were reproducible, valid and comparable between departments.

One of the unique features of the MTS is that, in its use, pain must be assessed as part of the triage process (Larsen 2000).
The MTS combines patients’ own assessment of pain, using verbal descriptors and visual analogue scales, with a behaviour tool for practitioners to make objective assessment. These are combined to form the measurement units of a ‘pain ruler’, with the results being used as key discriminators to determine the urgency with which patients need care (Mackway-Jones 2006).

The group claims that this pain assessment has been validated to give reliable and reproducible results, although, as Robinson (1998) states, there is no evidence of auditing by the group, nor any references to support their claims. Nor were any references found in the literature review of this subject.

Nevertheless, by 1998, more than 138 EDs in the UK and Republic of Ireland had implemented the MTS (Marrow 1998).

PAIN ASSESSMENT IN ED
The Audit Commission (1996) states that triage facilitates early assessment and administration of analgesia to those who are in severe pain or discomfort.

Carr and Goudas (1999) suggest that the prompt control and reduction of pain is fundamental to healthcare professionals’ role, and is a core service of EDs. Graham (2002) however points to studies that reveal that pain management in EDs is often suboptimal, while Larsen (2000) notes that, although there are few studies on pain management in EDs, it is known that pain is not managed to patients’ satisfaction.

Teanby (2003) says that there are advantages to assessing pain as part of the triage process in that, because it raises patients’ expectations that their pain will be managed, it can improve patient satisfaction.

Moreover, according to Mackway-Jones (2006) moreover, assessing pain at triage helps nurses to manage pain effectively at the earliest opportunity, which in turn can decrease patient anxiety and improve communication between patients and nurses.

Teanby (2003) also notes however that pain assessment in EDs can be difficult because patients often feel that, to justify their attendance in EDs, they should say that their pain is severe.

Teanby (2003) also points out that people in severe pain often find it difficult to describe their discomfort because, as Chapman et al (1985) state, pain is a highly personal and complex phenomenon and the words that patients must use to describe their pain in MTS, such as ‘smarting’, ‘tingling’ or ‘rasping’, can seem to them ill defined or even irrelevant.

Pain and pain assessment, according to Teanby (2003), are vital to providing good care, judging patients’ progress, assessing the impact and efficiency of treatment, and sometimes to making correct diagnoses.

However, the literature search described above reveals that there are inconsistencies in pain assessment that can allow patients to suffer.

Thomas (1997) suggests that pain assessment tools aim to enhance patients’ verbal expressions of their suffering. Teanby (2003) claims however that there is a lack of knowledge and education about pain and pain assessment that has led to problems with using them.

In those EDs in which the MTS is used, all patients have their pain assessed, and failure to acknowledge pain scores, says Teanby (2003), can be considered negligent and a breach of duty of care.

RECENT STUDIES
After the literature search, four recent UK studies were examined more closely.

Inconsistent pain assessment
Colley and Crouch (2000) undertook an observational quantitative examination of the use of pain assessment tools during the triage assessment of patients attending two semi-rural EDs, in both of which about 65,000 new patients were seen a year.

The results show that less than 1 per cent of patients had their pain assessed with pain assessment tools and, where such tools were used, they were used inconsistently. Forty two per cent of patients meanwhile had no pain assessment at all, either formally or informally. There is clearly a need therefore to improve the education of nurses about pain assessment and the use of pain assessment tools.

The authors believe that these results are typical of UK EDs, although such generalisation is inhibited by the small size of the sample. The study was conducted before MTS was introduced in these departments and has not yet been repeated.

Individualised pain management
In Larsen’s (2000) investigation into the assessment and management of pain by triage nurses in Greater London, staff in 32 EDs were surveyed by questionnaire. There was a response rate of 94 per cent.

The main aims of the study were to determine whether or not staff use pain assessment tools at triage, what pain management and intervention options are available to triage nurses, and the factors that can influence implementation of the MTS.
The MTS had been implemented in more than three quarters of the EDs surveyed and pain assessment was a factor in the implementation of MTS in 14 of these. Staff in the six EDs that had not implemented MTS were asked if they used other pain assessment tools; staff in five said that they did. Of these, two used a combination of linear and verbal descriptors, while another two used a combination of linear descriptors and other pain assessment tools.

Larsen found that some interventions to manage patients’ pain were used in all the Greater London EDs studied.

The most frequently used of these was elevation, although ice packs and splints were used in 21 EDs. Nineteen EDs (63 per cent) used or were in the process of implementing patient group directions.

The study found a huge variation in the range and number of analgesics available through patient group directions, and only five EDs had facilities for intramuscular or per rectum medication. From a patient’s perspective, pain management appeared to depend on which department they attended.

The study states that most EDs in Greater London use either formal or informal pain assessment tools, most of which form part of the MTS. The use of group protocols is common practice but many departments do not follow the recommendations of the ‘Crown report’ (Crown 1998).

Larsen suggests that effective pain management should be tailored to individual patients, not based on standardised ritual, and, to facilitate this, patient group directions should be broadened to enable nurses to choose analgesia and routes of administration.

Analgesia administration
Overton-Brown et al’s (2001) research, which evaluated the role of triage nurses in EDs, was highlighted in the literature review because of its small but relevant section on administering analgesia.

The researchers distributed questionnaires to all 316 EDs in the UK. Of these, 184 were returned, a response rate of almost 60 per cent.

The authors conclude that, in EDs in which more than 100,000 new patients are seen each year, triage nurses’ main treatment activity is the supplying and dispensing of oral analgesia.

Triage nurses in a half of the EDs dispensed analgesia at triage.

The study also concludes that there was no correlation between these findings and whether or not hospitals use the MTS.

Patients’ perceptions
Graham (2002) explored adult patients’ perceptions of pain management at triage. The study employed a broadly qualitative approach, using a descriptive exploratory non-emergent design.

References
In structured interviews, seven open-ended questions relating to opinions, experience and feelings about pain and pain management were asked, providing participants with opportunities to offer their perspectives on these subjects without compromising their access to clinical assessment. A sample of convenience produced a group of 65 patients, of whom nine men and nine women participated. Sixteen of these 18 patients presented in pain. Triage nurses trained to administer analgesia were available for seven patients, of whom two received analgesia. In three of the six patients who underwent pain assessment, the triage nurse involved was trained to administer analgesia. Sixteen patients considered pain management at triage to be important.

This study emphasises that pain is subjective and complex in nature, that sustained training is needed if nursing practice is to advance, and that further research on patients’ perceptions of pain management in EDs is needed. The small size and unrepresentative nature of the sample threatens the reliability of the study however, and its conclusions suggest that a larger study is needed.

**NURSE PRESCRIBING**

The government’s intention to allow nurses to prescribe and administer more medicines (DH 2000, 2006) should make pain management at triage in EDs more effective.

However, although nurse prescribing has been broadened in some EDs, no studies evaluating the clinical effectiveness of nurse prescribing or administering analgesia at triage in EDs were highlighted in this literature review. Colley and Crouch (2000) suggest that to evaluate the true benefits of providing analgesia at triage, effective assessment and re-assessment of pain, and good documentation, are essential. Further research studies are needed to evaluate this.

**CONCLUSION**

There are no large, published studies on the extent to which nurses carry out pain assessment and management at triage in EDs. Nevertheless, this literature review highlights that pain assessment at triage is paramount in good patient care, and that poor pain management leads to increased patient suffering.

Colley and Crouch (2000) suggest that the first stage in effective pain management should be formal assessment and documentation. However, as the literature review shows, pain assessment and management at triage are currently poor, while questions about the quality of training, evidenced based best practice and clinical auditing have been raised.

Further research relating to all aspects covered in this literature review is therefore necessary if service delivery is to be improved.

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**References**