

A review of compliance with pain assessments within a UK ICU

Abstract

Background

Clinical audits are essential to ensure that safe and effective care is provided (Department of Health and Children, 2008; NICE, 2002). Audits can highlight areas where care may not be as high a quality as desired and therefore identifies areas for improvement (Quality and Patient Safety Directorate, 2013). Assessment and management of pain has been shown to improve clinical outcomes including reduced length of stay, reduced use of analgesia and reduced mechanic ventilation time (Sacco and LaRicca, 2016; Malchow and Black, 2008).

Aim

To gain an initial insight into the assessments of pain within intensive care, to identify compliance and possible recommendations for improvements to practice.

Discussion

Both the literature and the results identify that intensive care has significant areas for development to improve patient experiences and outcomes. By identifying this lack in compliance with assessments, changes can be implemented to promote the education of nurses and the use of appropriate pain assessment tools.

Conclusion

It has been well documented the need for appropriate analgesia with benefits to physical and psychological health within intensive care. This audit has identified areas for development to improve the patient experience.

Implications for practice

Re-education, introduction of a pain team link nurse, increased communication and updates to promote assessment and the implementation of guidelines are recommended to improve practice.

Keywords: Pain; Critical Care; Assessment; Quality improvement; Audit

Clinical audits are used in practice to evaluate care and services and to identify areas for improvement against a set criteria (Intensive care national audit and research centre (ICNARC), 2017; National Institute for Clinical Excellence (NICE), 2002). This clinical improvement process aims to highlight where standards are not being met so that ways to improve quality and provide safe, high quality care can be generated (National Health Service (NHS) England, 2017; NICE, 2002). Clinical audits are essential to ensure that safe and effective care is provided (Department of Health and Children, 2008; NICE, 2002). Audit can highlight where care may not be as high a quality as desired and therefore identifies areas for improvement which can be re-evaluated, resulting in a quality improvement process (Quality and Patient Safety Directorate, 2013). Not only can audit be beneficial to patients but to staff also, as it increases knowledge and promotes job satisfaction (Quality and Patient Safety Directorate, 2013).

Literature review

A library search tool was utilised to search a range of electronic databases used to search a range of academic journals relevant to pain assessment within the intensive care unit. This included articles from Intensive Critical Care Nursing and the American Journal of Critical Care. Alongside these, government documents and guidance from NICE, the Intensive Care

Society (ICS) and Department of Health were used to produce the literature review which led to the development of a pain assessment audit.

Barr et al (2013) have set out recommendations and guidelines for best practice in managing pain, agitation and delirium and these are recurrent throughout the literature. Pain assessment is useful in identifying why a patient is distressed when delirium and agitation has been excluded (ICS, 2015). The importance of adequate pain assessment has significant effects on physical and psychological health (Schug and Goddard, 2014). Regular assessment and management of pain has been shown to improve clinical outcomes including reduced length of stay, reduced use of analgesia and reduced mechanic ventilation time (Sacco and LaRiccia, 2016; Malchow and Black, 2008). Whitehouse et al (2014) identified 50 – 65% of patients recalled severe pain, with 15% unhappy with their pain management. This highlights that significant improvements need to be made with pain assessment and the management of pain. As well as a reduction in length of stay, adequate pain control can promote quality of sleep, ventilator compliance, reduced oxygen demand and reduced risk of atelectasis (Ehieli et al, 2017; Whitehouse et al, 2014). By providing too much analgesia ventilator weaning could be delayed, assessment of neurological status impaired and result in cardiovascular instability (Barr et al, 2013). This emphasises the importance of accurate assessment in achieving the best outcomes for patients.

The ICS (2015) suggests that there should be regular pain assessment and appropriate analgesia as required, with recommendations from Barr et al (2013) suggesting regular pain assessment as being greater than four times a shift. This is also supported within paediatrics, with guidelines from The Royal Children's Hospital (RCH) (2012) supporting baseline assessments with a minimum four hourly assessment for all vented patients. NHS

Quality Improvement Scotland (2004) disagrees by suggesting pain assessment should be assessed as regularly as other vital signs, due to frequent changes in pain interventions. This best practice statement published by NHS Quality Improvement Scotland (2004) focuses on postoperative pain where a fluctuation in pain might be more expected than in a medical patient. Apfelbaum et al (2012) highlights the importance of a pain assessment which is appropriate to the patients cognitive ability, for example the critical care pain observation tool (ccpot) or visual analogue scale (VAS), both of which have been identified as gold standards in pain assessment (Barr et al, 2013; Gélinas et al, 2006; Whitehouse et al, 2014). Barr et al (2013) suggest that these regular assessments should be conducted with a validated pain assessment tool with the Faculty of Pain Medicine (2015) reinforcing the need for the assessment tool to be standardised to ensure reliability and validity of assessments (Royal College of Physicians, 2007). Recommendations also include pain to be treated within thirty minutes and then reassessed to identify the effectiveness of interventions (Barr et al, 2016; RCH, 2012). De Andrés et al (2005) supports frequent assessments before and after analgesia to assess the effectiveness of analgesia with a reduction in assessment frequency indicated by a reduction in pain intensity (Herr et al, 2011).

Rationale for clinical audit

A clinical audit was conducted within a United Kingdom (UK) intensive care unit to illuminate if there were any areas for service improvement in relation to the assessment and documentation of patients pain. Rationale for this is that pain assessments are commonly not and documented performed adequately. Research by Malchow and Black

(2008) and Rose et al (2011) have all highlighted documentation of pain assessment to be poor amongst intensive care units. 'If it's not documented then it's not done' is a phrase often used within nursing to promote accurate documentation (Andrews and St Aubyn, 2015). With regards to documenting pain assessments, a lack of documentation within a clinical area could suggest pain assessments are not being completed which therefore questions whether a patient's pain is managed effectively. This has implications for the care that a patient may receive and their experience whilst in hospital. The Nursing and Midwifery (NMC) code of conduct (2015) clearly states that records should be kept clear, accurate and documented as a way of demonstrating the care delivered and also protecting ourselves from litigation (Andrews and St Aubyn, 2015). The NMC code therefore supports the need for accurate and timely documentation and record keeping of pain assessments. Professional bodies and research have identified the importance of adequate pain control and suggest the use of recommendations as proposed by Barr et al (2016) to guide nursing practice (Malchow and Black, 2008). Yet Rose et al (2012) has identified a significant number of nurses who are unaware of these published recommendations and guidelines regarding pain assessment tools, this may identify why pain assessments are infrequent. The aim of this audit was to gain an initial insight into the assessments of pain within intensive care, to identify compliance and possible recommendations for improvements to practice. It is the reliable assessment of pain which provides the basis for effective pain management (Barr et al, 2013).

Conducting the audit

Following the literature search it has been identified that there is a lack of compliance in terms of conducting and documenting pain assessments across intensive care units. Due to extensive benefits of adequate pain management it is essential that pain assessment occurs frequently to ensure effective pain management (Barr et al, 2013). Pain should be acted on to promote high quality nursing care with benefits to patients physical and psychological health (Sacco and LaRicca, 2016; Malchow and Black, 2008; Ehieli et al, 2017). The importance of adequately assessing a patients pain to ensure that this is a controlled is a rationale for this audit to be completed. This would include whether pain is assessed at a minimum six hourly, is it being managed appropriately and also is it then reassessed to ensure interventions are effective (Barr et al, 2013). Table one displays the proforma used to collect the data. Consent for this audit was gained from the audit lead within the intensive care unit. Patient documentation was reviewed within the clinical area retrospectively over one twenty-four hour period, to include early, late and night shifts plus any admission assessment. Barr et al (2013) recommends that pain should be actioned within half an hour of being identified. However, as often is within intensive care, documentation charts only allow for hourly documentation of pain scores which unfortunately does not allow for more regular reassessments to be documented. Therefore, for this audit pain assessment and reassessment on an hourly basis was considered to gain an initial snapshot, despite the recommended half hourly reassessments as set out literature (Barr et al, 2013).

Table one:

| Bed space | Current sedation and analgesia | Was pain assessed within 2 hours of admission? | Pain assessed within 6 hours of previous assessment? | Was pain actioned within 1 hour? | Was pain reassessed following analgesia within 1 hour? | Comments |
|--------------------------|---|---|---|---|--|----------|
| | | | | | | |
| Target (100%) | | | | | | |

Date of audit:

Shift:

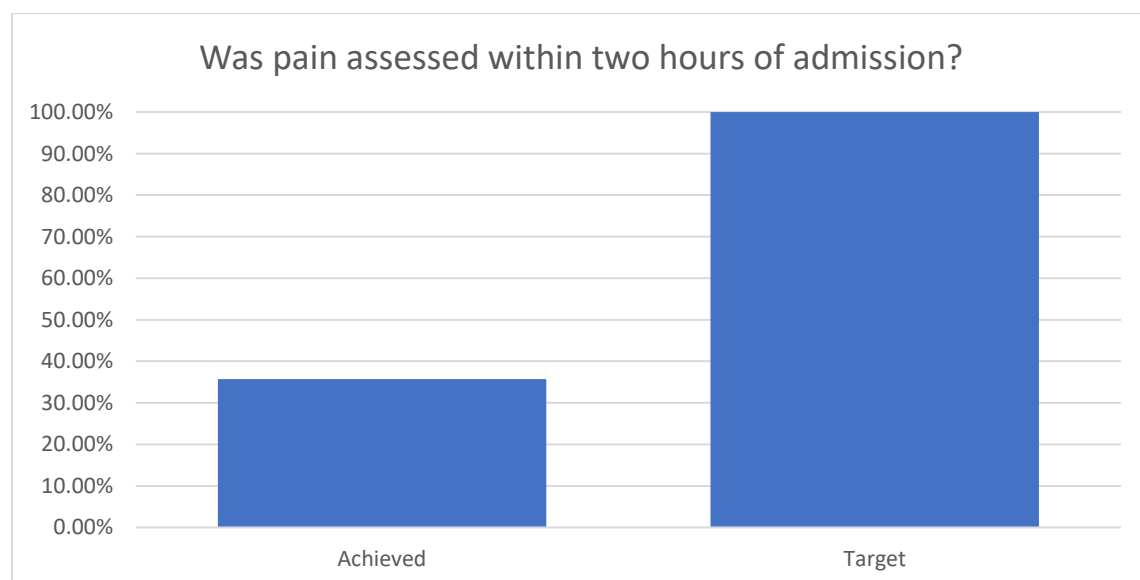
Auditor name:

Findings and analysis

It was apparent that documentation of pain assessment was poor. The audit occurred without difficulty or obstruction and colleagues were supportive and openly provided the data needed. Data was collected from the previous twenty-four hours to include early, late and night shifts as well as identifying if an admission assessment had been completed.

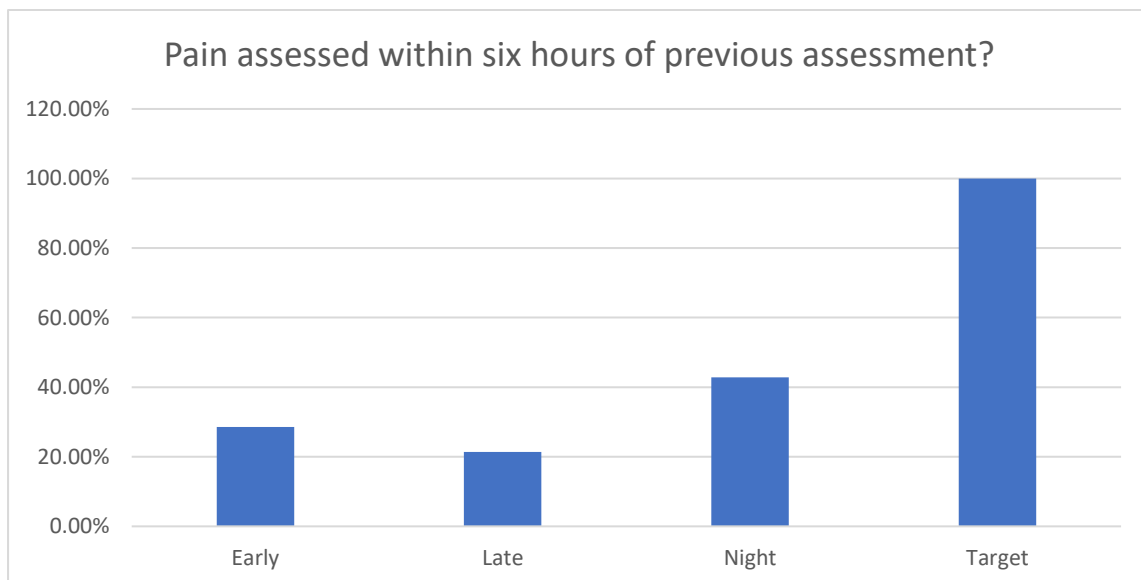
The audit identified that only 35.71% of patients documentation had a pain assessment documented within two hours of admission (Figure one). This could suggest that documentation of pain is poor or that pain assessments did not occur either due to poor practice or unfamiliarity with gold standard pain assessment tools. Rose et al (2012) identified that nurses may be unfamiliar with guidelines regarding pain assessment and this could support why such low numbers of patients received an initial assessment. This has an impact on patient care as there is no baseline pain score to refer to when titrating and reviewing the effects of analgesia.

Figure one:



Pain assessment within the previous six hours ranged from 21.4% to 42.8%, of which double the amount of compliance was achieved on a night shift compared to a late shift (Figure two). The reasons behind this are unclear but could suggest more time of a night shift to ensure accurate and timely documentation as well as more time to accurately complete a pain assessment. Despite higher compliance of a night these assessments still do not meet the guidelines or documentation requirements as published by Barr et al (2013) and the NMC (2015).

Figure two:



No patient had their pain actioned and no patient had their pain reassessed during this initial audit. This was either due to a previous pain score of zero or pain not being assessed. This lack of assessment meant staff were unable to identify if analgesia was required and therefore unable to reassess to identify if this analgesia was effective. Therefore, providing a lack of information to guide colleagues who wish to take over the care of a patient. Staff are

therefore unaware of appropriate analgesia for a patient and unable to complete an accurate, complete pain assessment themselves which could prove beneficial to the patient.

The findings of this audit showed that pain assessment was poor, correlating with the literature (Barr et al, 2014; Malchow and Black, 2008; Rose et al, 2011). The reasons behind this could include a lack of nurses' knowledge and understanding regarding pain guidelines or gold standard pain assessment tools as identified by Rose et al (2012). Both the literature and the results from the audit identify that intensive care has significant areas for improvement to improve patient experiences and outcomes. By identifying this lack in compliance with assessments, changes can be implemented to promote the education of nurses and the use of appropriate pain assessment tools. In turn, this aims to improve experiences of patients by identifying the effectiveness of analgesia. The purpose of this is to identify whether the patient is receiving too much or too little analgesia which may impair their recovery. Guidelines from Barr et al (2013) recommend pain be treated and reassessed at half hourly intervals. It is not possible to identify whether this standard is met due to format of the documentation and is therefore a limitation to this audit. It is not to say that the patient was not assessed by nursing staff, yet, this has highlighted that compliance with documentation could be improved. The findings of this audit are consistent with national trends.

Recommendations:

Following completion of this audit, some recommendations have been made, which may assist in improving compliance with pain documentation and potentially enhancing patient care. I will discuss these in further detail and include:

- Re education
- Pain team link nurse
- Daily huddles, newsletter and communication meetings
- Implementation of guidelines

Due to a lack of documented assessments across numerous intensive care units, it has been noted that other units have focused on re-education and introduction of pain champions to promote the use of pain assessment tools (Rose et al, 2011). This has consequently aimed to provide effective management of pain with the aims to improve physical and psychological health (Rose et al, 2011). It may be the case that updates from the pain team within the trust to reinforce and re-educate regarding pain assessment and management. Equally, the involvement of the practice educators are pivotal to support staff in practice through applying information from the pain team in the context of critical care patients. Practice educators can answer questions that may arise through practice and can encourage staff to complete assessments.

It may also be appropriate to implement a pain team link nurse who could provide support and guidance on the unit without always needing to seek support from the pain team or practice educators. This member of staff could create a team who could be educated by the pain team therefore reducing their work load and involvement within the critical care environment. It is clear from the audit that re-education is required regarding pain assessment. However, it could be proposed that there is more of a need to focus on professional responsibilities with regards to the documentation of these assessments, than there is a need for educating staff on the use of pain assessment tools. This would not only aim to improve experiences for patients within intensive care but creates roles for staff

which could improve morale (Quality and Patient Safety Directorate, 2013). Equally, it should be noted that these findings are largely indicative of a national trend for pain assessments within intensive care.

To conclude, it has been well documented the need for appropriate analgesia with benefits to physical and psychological health within intensive care. It is essential to not only ensure adequate analgesia is provided but to identify when a patient may be receiving too much analgesia. Appropriate analgesia will provide a better experience for patients, reduce ventilator times, encourage weaning and aid sleep (Sacco and LaRicca, 2016; Malchow and Black, 2008). Barr et al (2013) have produced guidelines to guide staff on the assessment of pain with recommendations for pain assessment tools. Despite this pain assessment within intensive care units is poor and nurses knowledge regarding pain assessment is inadequate (Malchow and Black, 2008; Rose et al, 2011).

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