

A STUDY ON CLINICAL AUDIT OF PAIN MANAGEMENT AMONG POSTOPERATIVE PATIENTS, IN ONE OF THE PREMIER HOSPITAL IN BANGALORE

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Abstract - Pain management in post-operative patients is crucial for recovery, reducing complications, and enhancing overall patient comfort. Effective pain control improves mobility, reduces hospital stays, and enhances patient satisfaction. A clinical audit of pain management ensures adherence to standardized protocols, improving patient outcomes. This study evaluates pain assessment protocols, pain management interventions' effectiveness, and documentation accuracy in a premier hospital in Bangalore. By reviewing compliance with institutional and national guidelines, the study identifies gaps and areas for improvement. Data was collected from patient records, clinician assessments, and staff interviews. Findings highlight variations in adherence to pain assessment protocols, inconsistencies in documentation, and the need for standardized pain relief strategies. The study emphasizes the importance of regular audits to enhance pain management practices, ensuring evidence-based interventions. Addressing gaps in compliance through training and policy refinement can optimize patient care. Recommendations include improved protocol adherence, comprehensive staff education, and enhanced monitoring mechanisms.

Key Words: Pain Assessment, Analgesics, Pain Score, Post-Operative Patients, Pain Management.

1. INTRODUCTION

A. Definition

A comprehensive approach to pain diagnosis, treatment, and relief, pain management seeks to enhance a patient's comfort and quality of life. Depending on the demands of the individual, it uses a variety of techniques, such as medicine, physical therapy, psychological support, and interventional procedures. To encourage healing, lower complications, and improve patient well-being, effective pain management is crucial in post-operative care.

The Objectives of the study include:

- To study and adhere to pain assessment protocols.

- To evaluate the effectiveness of pain management interventions and review the accuracy of documentation practices.
- To identify gaps in compliance with the institutional and national guidelines.

2. LITERATURE REVIEW

Niraula HK, D.C. A, Maharjan M. (2023) have explained that related to post-operative pain, most of the patients experienced pain after surgery. Ineffective pain management has an impact on the patient's physical and mental health, interferes with everyday activities, lowers satisfaction with the care received, and lowers quality of life. The purpose of this study is to evaluate the level of pain treatment provided to postoperative patients who are admitted. 352 post-operative patients were analyzed as part of a descriptive cross-sectional study. The results showed that moderate, mild, and no pain intensity were 8.7 times more likely to be satisfied with the quality of pain management, 3.4 times more likely to be satisfied, and 7.1 times more likely to be satisfied than severe pain intensity. In conclusion, the majority of postoperative patients experienced moderate to severe pain, and the majority of patients were only somewhat satisfied with the degree of pain management they received. Consequently, greater effort is required to improve the standard of pain management. Therefore, more work is needed to increase the quality of pain management and lessen postoperative discomfort.

Chou, R., Gordon, D. B., de Leon-Casasola, O. A., et al.. (2016) have explained that most patients who undergo surgical procedures experience acute postoperative pain, but evidence suggests that less than half report adequate postoperative pain relief. With the help of the American Pain Society, develop clinical practice guidelines to promote evidence-based pain management. To lessen and control postoperative pain, a variety of preoperative, intraoperative, and postoperative treatments and management techniques are available. Following the implementation of these guidelines, the panel

concluded that while the precise elements of successful multimodal treatment would differ based on the patient, setting, and surgical procedure, evidence generally supports the use of multimodal regimens. The panel found many research gaps and, finally, based these suggestions on a systematic review of the evidence on the management of postoperative pain. Eleven of the 32 suggestions (in the areas of patient education and perioperative planning, patient assessment, organizational structures and policies, and transitioning to outpatient treatment) were based on low-quality research, while the remaining four were judged to be supported by high-quality evidence.

3. METHODOLOGY

Here, pain management refers to the use of drugs and other professional techniques to reduce a patient's discomfort from higher to lower ranges. Patients' pain is scored on a scale of 0 to 10, each of which reflects a distinct level of pain. Both at the first assessment and on an hourly basis, these pain scores were completed.

Standards / Criteria Based on NICE, ASA, and WHO Guidelines, which methods are used to analyse data.

1. Pain Assessment:

- Pain should be assessed using validated tools (e.g., Numeric Rating Scale [NRS], Visual Analog Scale [VAS]) every 4-6 hours postoperatively.
- Pain levels must be documented before and after every intervention.

2. Intervention Timeliness:

- Analgesia must be administered within 30 minutes of a reported pain score $>4/10$.
- Reassessment should occur within 1 hour of intervention.

3. Documentation:

- All pain assessments and interventions should be recorded in the patient's chart.
- Documentation should include adverse effects of analgesia and patient-reported outcomes.

4. Multimodal Analgesia:

- Use of a multimodal approach should be evident, with justification for deviations.

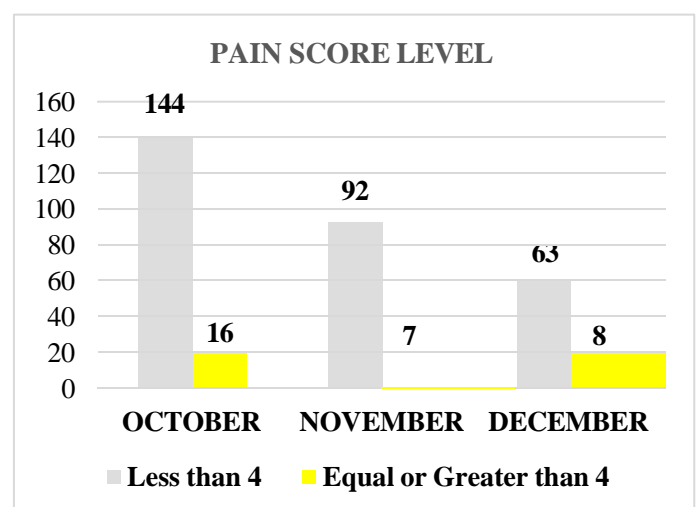
5. Education and Communication:

- Evidence of patient education about pain management and discharge instructions should be documented.

This is descriptive and quantitative research that focuses on pain management among post-operative patients in their hospital. The Simple Random Sampling used to collect data. The Data was collected from a manual review of closed files of post-operative patients from October to December 2024 with a random sample size of 10% of the total admission of the month for our study. For the process of data collection, a checklist has been designed, ensuring that the research questions accurately reflect the findings of the study and that they give the research direction and structure. Accordingly, the survey tool is a checklist that contains the pain score before the intervention, intervention of pain analgesics, reassessment within one hour, documentation done, and adverse drug reactions. For analysis, percentage and comparative analysis tools are used.

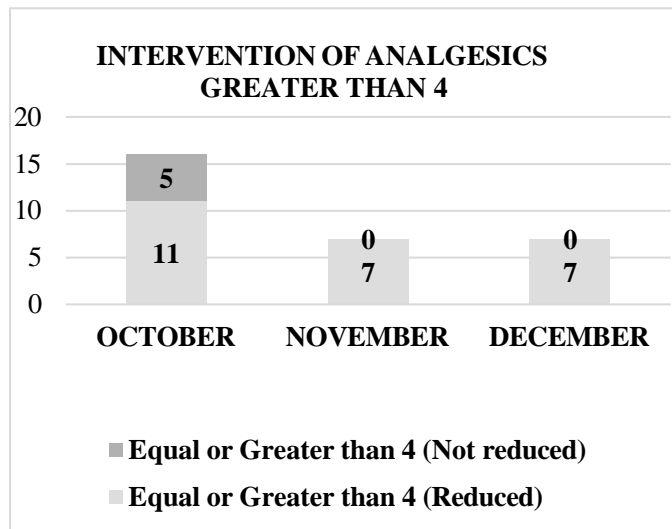
4. ANALYSIS

Chart - I show the pain score levels of October, November, and December 2024 compared data



The above chart I shows that the three-month samples of post-operative patients with pain scores greater than 4 in October is 16, November 7, and December 8 from the total samples of 330 patients.

Chart – II shows the reduction level of pain score in the intervention of analgesics for the sampling where the pain score is greater than 4.



The above chart – II shows that the pain is not reduced for 5 post-operative patients in October after the intervention of analgesics whose pain score is greater than 4 before the intervention of analgesics.

Table -1: showing the pain score assessment of all three months.

Pain Score Assessment	October	November	December
Less than 4	144	92	63
Greater than 4	16	7	8

The above table shows that from a total of 330 samples, the pain score of postoperative patients was greater than 4 on October 16, November 7, and December 8.

Table 2: Showing the pain score after intervention of analgesics for all three months.

Interven tion of pain analgesic s is >4	Octo ber	Novem ber	Decem ber
Equal or greater	11	7	7

than 4 (reduced)			
Equal or greater than 4 (not reduced)	5	0	0

The above table shows that for around 330 post-operative patients of post Operative, the pain assessment is greater than 4 in October, November, and December, is 16, 7, and 8. After the intervention of analgesics, the pain has not reduced for 5 patients in October.

5. FINDINGS AND RECOMMENDATIONS

- Whenever the pain score is above 4, intervention is done.
- After the intervention of analgesics, the pain was not reduced for 5 patients in October.
- Pain management is carried out according to the clinical audit standards.
- Pain management has been carried out with 100% documentation.

The recommendations include:

- Assess the effectiveness of current analgesic interventions, especially for cases where pain persists despite treatment.
- Conduct regular re-evaluations of pain levels after administering analgesics to ensure adequate relief.
- Conduct a root cause analysis for the five patients who did not experience pain relief to determine if factors such as medication resistance, improper dosage, or delayed administration contributed to inadequate pain control.
- Educate nurses and doctors on alternative pain relief methods such as physiotherapy, cognitive behavioural therapy, and nerve blocks where appropriate.
- Implement digital pain tracking systems to improve efficiency and reduce errors in documentation.

6. CONCLUSION

The clinical audit of pain management among postoperative patients highlights the importance of systematic pain assessment, timely intervention, and adherence to established protocols to ensure optimal patient outcomes. The findings indicate that while interventions are performed when pain scores exceed the threshold, some patients continue to experience inadequate pain relief, underscoring the need for individualized pain management strategies. The study also emphasizes the significance of maintaining 100% documentation to enhance continuity of care and facilitate quality improvement initiatives. Moving forward, regular audits, staff training, and the integration of multimodal analgesic approaches will be essential in optimizing pain management practices and improving overall patient satisfaction.

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