

**A STUDY ON COMPLIANCE OF PAIN MANAGEMENT IN PATIENTS BASED ON THE STANDARD PROTOCOL****Sethu Sugathan<sup>\*1</sup>, Sophiya T. Varghese<sup>1</sup>, Deepa Poulose<sup>1</sup>, Annamol Joseph<sup>1</sup>, Jenimol Joseph<sup>1</sup>, Chinnu K. Antony<sup>1</sup>, K. Menaka<sup>2</sup> and T. Sivakumar<sup>3</sup>**<sup>1</sup>Pharm D Interns, Department of Pharmacy Practice, Nandha College of Pharmacy, Erode, Tamil Nadu.<sup>2</sup>Asst. Professor, Department of Pharmacy Practice, Nandha College of Pharmacy, Erode, Tamil Nadu.<sup>3</sup>Principal, Nandha College of Pharmacy, Erode, Tamil Nadu.**\*Corresponding Author: Sethu Sugathan**

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**ABSTRACT**

Pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Assessment of cause of pain is essential, as false assessment can lead to treatment failure. This study analyse the compliance of pain management in patients with standard protocol of the hospital and also evaluate the effectiveness of pain management in patients. A total of 100 cases were assessed over duration of 3 months. Postoperative patients were included and LSCS cases were excluded. The compliance of pain management was assessed based on National Accreditation Board for Hospital and Healthcare providers (NABH) standards. The study results shows that many factors that contribute to the non-compliance of pain management in that inappropriate use of analgesics was the major one. An overall Compliance of pain management was observed in 68 cases and non-compliance in 32 cases. This study concludes that the accurate assessment of pain score to the relevant patients and the rational use of analgesics according to the standard Analgesic ladder may contribute to a maximum compliance to the pain management.

**KEYWORDS:** Post - operative pain, Compliance, Pain score, Analgesics.**INTRODUCTION**

Pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is always subjective.

Even though the experience of pain varies from one person to the another, it is possible to categorize the different types of pain.<sup>[1]</sup> There are several ways to categorize pain. One is to separate it into acute pain and chronic pain. Acute pain typically comes on suddenly and has a limited duration. It's frequently caused by damage to tissue such as bone, muscle, or organs and the onset is often accompanied by anxiety or emotional distress. Chronic pain lasts longer than acute pain and is generally somewhat resistant to medical treatment. It's usually associated with a long-term illness, such as osteoarthritis. Chronic pain can be the result of damaged tissue, but very often is attributable to nerve damage.<sup>[2]</sup>

Most of the patients who undergo surgical procedures experience acute post-operative pain; evidence suggests that less than half report adequate post-operative pain relief.<sup>[3]</sup> Effective postoperative pain control is an essential component of the care of the surgical patient. Inadequate pain control, apart from being inhumane, may

result in increased morbidity or mortality. Evidence suggests that surgery suppresses the immune system and that this suppression is proportionate to the invasiveness of the surgery. Good analgesia can reduce this deleterious effect.<sup>[4]</sup>

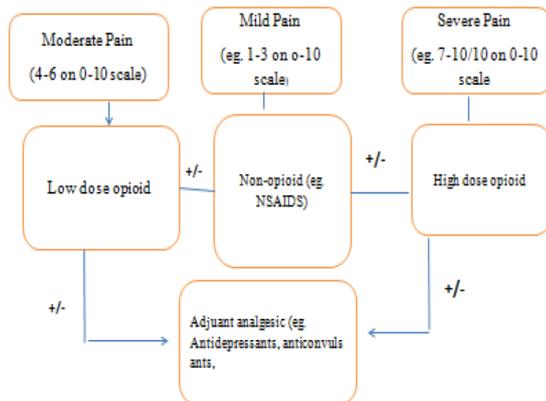
To more precisely measure pain management after surgery, pain must be assessed frequently immediately after surgery and continue for at least the time when the patient report complete resolution. These assessments can be quite burdensome given that many patients report high levels of pain immediately after surgery.<sup>[5]</sup> The recognition and assessment of pain is essential to manage pain appropriately. There are number of pain assessment tools are available for assess pain score.<sup>[6]</sup>

A multimodal approach (balanced analgesia), which includes opioids, non-opioids such as non-steroidal anti-inflammatory drugs (NSAIDs), and adjuvant medications such as anticonvulsants, is recommended. Opioid analgesics are often the first line of treatment for many painful conditions and may offer advantages over non-steroidal anti-inflammatory drugs (NSAIDs).<sup>[7]</sup>

Following the WHO's analgesic ladder for control of pain, the Clinical Practice Guideline Committee

recommended the use of NSAIDs for mild to moderate pain with the addition of opioids for moderate to severe pain.<sup>[8]</sup> Various non-pharmacologic interventions such as patient positioning, massage and patient education have been used for post-operative pain relief also an effective in management of post - operative pain. Studies proved that when integrated with pharmacologic treatment, massage may be useful in the management of acute postoperative pain.<sup>[9]</sup>

#### ALGORITHM FOR PAIN MANAGEMENT BASED ON PAIN SCORE



Inadequately managed pain can lead to adverse physical and psychological patient outcomes for individual patients and their families. Postsurgical complications related to inadequate pain management negatively affect the patient's welfare and the hospital performance because of extended lengths of stay and readmissions, both of which increase the cost of care.<sup>[10]</sup>

#### AIM AND OBJECTIVE

To analyze the compliance of pain management in patients with the standard protocol of the hospital and to evaluate the appropriateness of the analgesics usage.

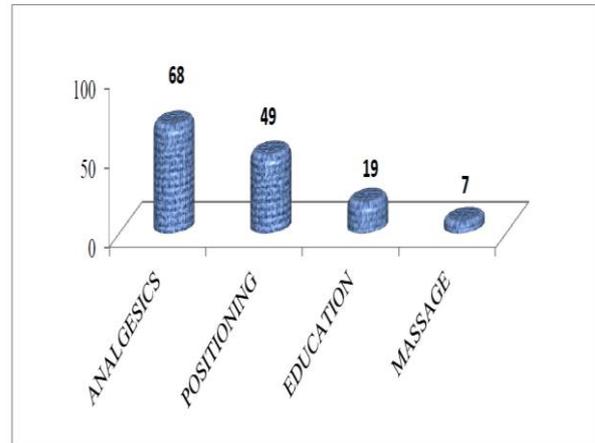
#### METHODOLOGY

A Prospective observational study was conducted in Quaternary care Hospital. A total of 100 patients were assessed over a period of 3 months. Postoperative patients except lower segment caesarean section (LSCS) cases were included in the study. The data's were collected from patient case file and the compliance of pain management was assessed based on National Accreditation Board for Hospital and Healthcare providers (NABH) standards: [Chapter; Care of patients (COP), Standard; 18 b.] The patient pain score was assessed by using Face, Legs, Activity, Cry, Consolability scale (FLACC). The appropriateness of analgesics used was analysed on the basis of standard WHO analgesic ladder.

#### RESULTS AND DISCUSSION

Out of the total patients enrolled 56% were male and 49% were female. As per NABH standards pain score should be assessed in every patient at the time of admission. Based on this the no. of patients whose pain

score was assessed the time of admission was noted and it was seen that 97% of patients pain score measured.



**Figure. 1: Comfort Measures Used for Pain Management.**

According to the hospital policy there are 4 comfort measures was used for managing pain namely analgesics (68%), positioning (49%), education (19%) and massage.

Once a patient is a found to have the pain, patient pain score should be reassessed after 30 minutes followed by a comfort measure, also the reassessment should be continued till the patient pain score achieve zero. 76% of patients pain score was done and in the rest 24% it was not.

As per WHO analgesic ladder different analgesics must be used for different for different pain scores that is, for mild pain( score 1-3) non Opioids must be used, for moderate pain (score 4-6) low dose opioids with or without adjuvant analgesics and for severe pain (score 6-10) high dose opioids with or without other analgesics can be used. Based on this the appropriateness of analgesics used were assessed and it was evident that the analgesics were prescribed appropriately in 75% of patients and in rest (25%) there were not.

**Table. 1: Reasons for Inappropriateness of Analgesics.**

Inappropriateness	No of Cases
Patient having pain but analgesics was not prescribed	3
Analgesics prescribed were under-required for the patient's pain score	5
Analgesics prescribed were over required for the patient's pain score	3
Analgesics were prescribed without assessing pain score	14

In most of the cases the inappropriateness were found due to the analgesics were prescribed without assess the

pain score (14 cases) Followed by analgesics were under required for the patient pain score (5 cases), analgesics were over required for the patient pain score and patient having pain but analgesics was not prescribed (3 cases each).

**Table 2: Compliance of Pain Management.**

Reason for Non Compliance	No of cases
Pain score was not assessed for post-surgery patient	9
Inappropriate use of analgesics	25
Pain management sheet was not maintained	4
Pain score were not assessed after 30 minutes	24
Patient had pain at admission but further pain assessment not done	4



**Table 3 Factors that Contributed to Non Compliance of Pain Management.**

The overall compliance came out to be 68%. The factors that contributed to the non compliance are found to be irrational use of analgesics (n=25), not assessing the pain score after 30 minutes (n=24), failure to assess the pain score for post surgery patients (n=9), inappropriate maintenance of pain management sheet in case file (n=4) and not assessing the pain score at the time of admission (n=4).

## CONCLUSION

Pain has physiological psychological, sociological, behavioural and affective components. The decision about pain management requires careful assessment of patient condition. Assessment of pain score is a critical step in providing pain management. This study shows that the failure to measure the pain score in patients and prescribing appropriate analgesics based on the pain score were the main factors that lead to the non compliance of pain management. The accurate assessment of pain score to the relevant patients and the use of analgesics according to the WHO Analgesic ladder may contribute to a maximum compliance to the pain management.

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