

Post-operative pain control for patients with special reference to Indian hospitals

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ABSTRACT

Background-Pain is a predicted response to medical procedure, and it can affect the length of time spent in the hospital. In at least 50% of patients, the traditional (non-patient-controlled analgesia [PCA]) technique of postoperative pain management, which entails the administration of medicines "as and when needed," results in inadequate analgesia. PCA is a more contemporary technique for treating postoperative pain. It allows patients to self-regulate the administration of pre-programmed analgesic doses.**Goal-**The goal of this study is to assess the presence of post-surgery pain control methods in the Indian hospitals.**Methodology-**A mixed methodology approach was used to attain the best results. Data was gathered from both qualitative and quantitative sources. This has help in obtaining the best possible results. Secondary sources included books, journals, government websites, and other trustworthy sources. The basic data sources were gathered through distributing questionnaires to a variety of patients at various hospitals across India. A total of 60 participants were included in the study.**Results-**The results show that there is a significant relation between the post-operative pain care relief facilities in hospitals and the physical and mental recovery of patients. At the same time, it has been seen that these facilities are not much well developed in India and has to be developed so that they are able to help and assist a greater number of patients.**Conclusion-**This study concluded that post-operative pain treatment is of utmost need and has to be developed in all the Indian hospitals. The study is significant for all the doctors, hospital boards in India and the nurses so that they are able to develop better care treatment facilities for the growth and welfare of the company.

Keywords-post operative, anesthesia, pain, patient, acute pain relief

Introduction

Post-surgery pain treatment

As stated by Ellis et al., (2021) post-surgery pain treatment is needed in all the different hospitals so that patients are able to get better at a rapid rate without any complications. It is the responsibility of the hospital management board to train all their nurses in a proper way so that they can take up courses on better treatment of patients and give them a proper pain control system. Despite recent advancements in pain management, pain remains undertreated. Despite the creation of acute pain services (APSs) in several hospitals, proper care of postoperative pain remains a major concern on the Indian subcontinent, and patient satisfaction with pain care remains low. As a result, regular auditing and review of postoperative pain management outcomes and patient satisfaction with various pain control techniques is required in India. The results of the ASSIST postoperative patient satisfaction survey have been released (Patient Satisfaction Survey: Pain Management). The survey was done on the Indian subcontinent to evaluate the quality of adult postoperative pain management. The survey's primary goals were to evaluate pain scores at rest and during ambulation between different modalities of postoperative pain treatment, as well as to assess patient satisfaction with those modalities.

II. RESEARCH METHODOLOGY

2.1 Research Approach: Descriptive survey approach has been used for this study The ASSIST (Patient Satisfaction Survey: Pain Management) was a prospective, multicenter survey done among 60 postoperative patients from India at the request of the investigator.

2.2 Population and Sample: The population that was selected for this study was the patients from the different hospitals in India. The questionnaires were designed and distributed among 60 patients from different hospitals in India who had the experience of post-surgery pain symptoms or issues.

2.3 Research Tools: Socio demographic status of patients and the complications that they have faced in post-operative care system in relation to pain care relief facilities have been used.

2.4 Data Collection Method: Pain scores, patient's and caregiver's satisfaction toward postoperative pain treatment, and overall pain management at the hospital were captured at three different time points through a specially designed questionnaire. The survey assessed if the

presence of acute pain services (APSs) leads to better pain scores and patient satisfaction scores.

2.5 Statistical Analysis: One-way ANOVA was used to evaluate the statistical significance between different modalities of pain management, and paired *t*-test was used to compare pain and patient satisfaction scores between the APS and non-APS groups.

III. RESULTS AND DISCUSSION:

3.1 Comparison of characteristic of disease of patients to avail post-operative pain treatment.

Types of disease	Cardiovascular	Gastrointestinal	Orthopedics
Comparison of characteristic of disease of patients to avail post-operative pain treatment	5	40	15

Table 3.1- Comparison of characteristic of disease of patients to avail post-operative pain treatment

The first determinant chosen is the type of disease. This is one of the most essential parameters or determinants because the treatment method for different diseases is different. It is for this reason that all the patients must be allowed to avail all the needed treatments for this aspect. This will help all the patients to narrate about the issues that they are having and the pain relief treatment that they want. However it is for this reason that the doctors uses and the hospital authority as a whole has to take record and maintain the record of the different kinds of diseases and surgeries that the patients are going through. Keeping this record will help the doctors to work for getting better facilities.

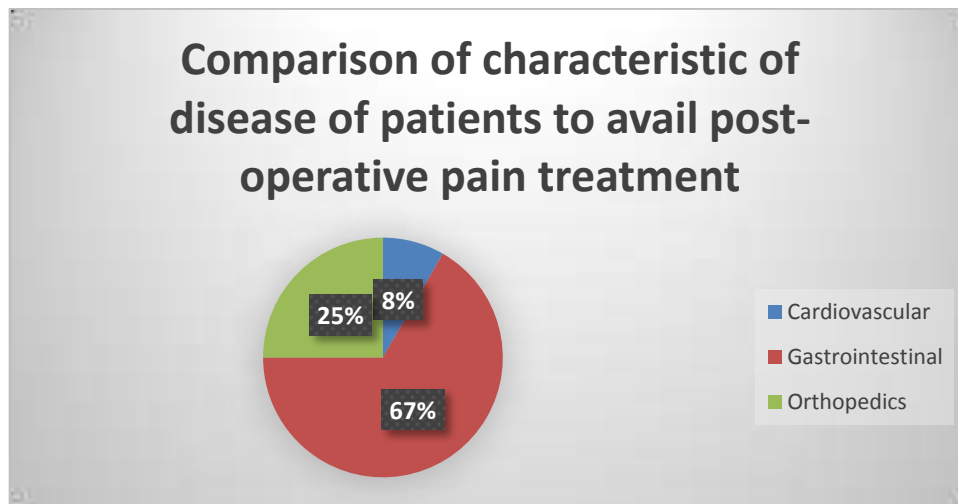


Figure 3.1- Comparison of characteristic of disease of patients to avail post-operative pain treatment

It is evident from the given chart that different patients who were admitted due to different parts of the country. However, patients who have been suffering from the gastrointestinal diseases have been suffering much more. They often undergo many surgeries and have to undergo many different tough complicated treatment procedures as well. It is for this reason that the patients must be given the right treatment and a thorough psychological training must be carried on so that all the people are able to work in a sound and effective manner.

Availability of pain relief treatment along with care and empathetic behavior from the nurses

	Agree	Strongly agree	Disagree	Strongly disagree
Availability of pain relief treatment along with care and empathetic behavior from the nurses in Indian hospitals	5	5	20	30

Table 3.2- Availability of pain relief treatment along with care and empathetic behavior from the nurses in Indian hospitals

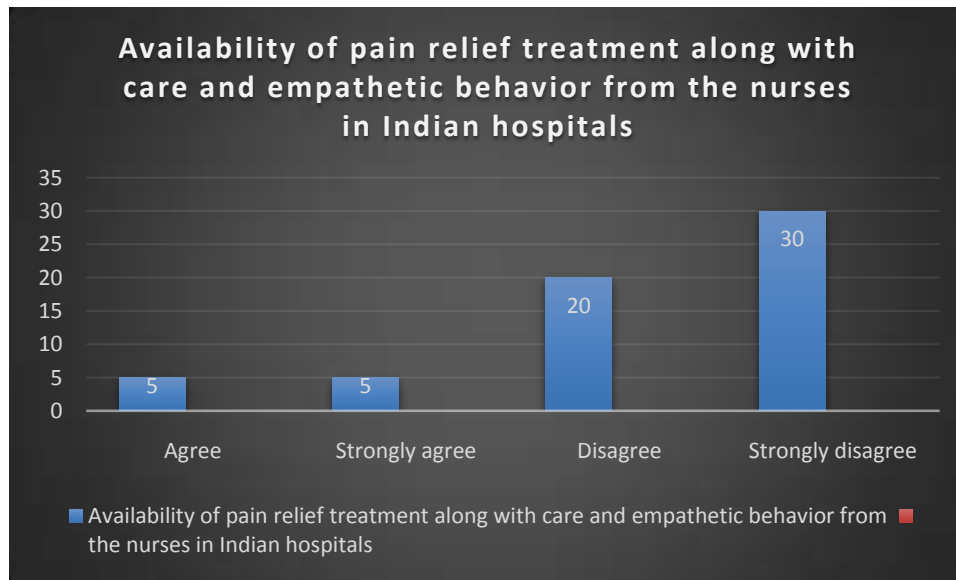


Figure 3.2- Availability of pain relief treatment along with care and empathetic behavior from the nurses in Indian hospitals

It is evident from the chart that the presence of the post operation care surgeries is not evenly present in different hospitals in different parts of the country. This is an alarming fact because it can create a huge discrepancy among all the patients. It is for this reason that all the hospitals must start taking sufficient efforts in order to open some post-surgery or post-operative care facilities so that they are able to work and treat their patients in a sound and effective manner.

This will be helping the hospitals to work over their total quality services and give better outcome to patients. About 30 (50%) of the respondents have said that they did not get a smooth availability of the post-surgery care facilities at the hospitals. This is an alarming fact as this calls for a huge effort that must be taken by the hospitals in India They have to work on the TQM or the total quality management services and ensure that the acute pain relief or the post-surgery (or post-operative) nurse led care facilities are made available.

DISCUSSION

This was a prospective, multicenter survey conducted by an investigator on the Indian subcontinent to determine the amount of postoperative pain reduction and patient and caregiver satisfaction with postoperative pain management. The Revised American Pain Society Patient Outcome Questionnaire (APS-POQ-R) was proven to be a viable instrument for assessing pain severity and patient satisfaction with postoperative pain management in this survey. The reliability of the APS-POQ-R for assessing postoperative pain experience in Danish and Australian patients was recently reported, and the findings revealed cross-cultural disparities in treatment satisfaction ratings. This is evident that the concept of post-surgery treatment is already developing in many of the foreign or western countries. However, India must also try its level best to ensure that they are working on developing the acute pain relief in the post-surgery period. This will be helping the patients to get a better overall quality management from the hospitals. This in turn will help the hospitals to work on their future development and betterment. This will be helping them to make the patients

As per the opinion of Ellis et al (2021) there are many different types of diseases or surgeries that needs post-operative treatments, doctors have to be much careful. Approximately one out of every seven postoperative urology patients receive a narcotics refill; yet, over two-thirds of these patients receive refills entirely from non-urologic doctors. In order to avoid overprescribing postoperative narcotics, both surgeon and nonsurgeon sources of opioid refills must be considered. As suggested by Goh et al. (2021) it is evident from this aspect that the doctors and nurses have to maintain a constant monitoring system so that they are able to regularize the dosage and the narcotics are not given or prescribed in an excess amount. Approximately 88.4 percent of participants in this study reported postoperative discomfort within the first 24 hours after surgery. More than 65 percent of individuals experienced pain after 72 hours. Similar findings were also observed in a prospective hospital-based survey: During the 24-hour period, 85 percent of the total patients reported varied degrees of pain. Even after minor surgery, considerable pain was recorded at 7 days postoperatively in a sample of 288 individuals who had general or orthopaedic surgery. Furthermore, the intensity of pain was shown to be substantially correlated with the health-related quality of life parameter, suggesting a clear evidence of the impact of postoperative pain on patient function and well-being. Pain was consistently reduced at

rest compared to pain on movement in bed after 24, 48, and 72 hours after surgery in our study. This is in contrast to a research that found that postoperative pain during ambulation was higher than pain at rest after 48 hours. According to the survey data, the most common POPT regimens were IV non-PCA (38%) and Epi non-PCA (28%) respectively. At 24, 48, and 72 hours after surgery, GI patients had more pain than CV patients, and orthopaedic patients had greater pain than CV patients. At all time points, mean pain scores were lower at rest than during ambulation, but they both declined over 24 hours. This could be explained by the patient's gradual recovery from operational stress, which leads to a decrease in the need for analgesics. This research also found that the IV PCA, IV non-PCA, and Epi PCA groups had significantly lower mean postoperative pain rating when moving in bed at 24 and 48 hours than the Epi non-PCA group. Similarly, after 72 hours after treatment, the IV (PCA and non-PCA) groups reported significantly lower pain scores than the Epi (PCA and non-PCA) groups. In a study comparing postoperative analgesia following major abdominal surgery, the Epi PCA group reported considerably less pain than the IV PCA group after 2, 8, and 12 hours after surgery. In the current study, there was no significant difference in pain scores while completing activities in bed between the IV PCA, IV non-PCA, and Epi PCA groups in terms of patient satisfaction. At 24 and 48 hours, however, the Epi PCA group reported considerably lower pain rating (P 0.0001) than the Epi non-PCA group.

As stated by Singh et al., (2021) In the Indian subcontinent, the notion of APS is still in its early stages, with only a few hospitals offering it. As per the study revealed by Mont et al., (2018) According to data obtained from a recently published prospective audit conducted from 2008 to 2011, which analyses the efficacy of approaches on pain scores, muscle power, and adverse effects, the use of APS resulted in lower pain scores in surgical patients. Furthermore, the audit data revealed that the number of patients receiving APS in IV PCA, Epi analgesia, and continuous peripheral nerve block settings has been steadily increasing. The results of a three-year study that evaluated the impact of acute pain management services in the United States recently revealed that such services may aid in enhancing the quality of patient recovery following surgery, illness, or trauma. The purpose of acute pain management services would be to avoid or reduce the progression of acute pain into chronic pain that is disabling.

A comparison of pain scores and patient satisfaction between the APS and non-APS groups was undertaken in this survey; the comparison revealed no significant difference between the groups in pain scores at rest after 24 hours. This survey may indicate that APS in India has not yet realised its full potential in terms of improved pain outcomes. Overall patient satisfaction with pain care in the hospital was 7.9/10 in this poll. In the same way, the average caregiver satisfaction score for the patient's pain management and recovery in the hospital was 7.9/10. When patients got drugs through IV PCA rather than Epi PCA, patients and caregivers reported higher levels of pain alleviation and recovery satisfaction. This conclusion contrasts with the findings of a randomised research, which found that the PCA modality, regardless of Epi or IV route of analgesia, had a higher rate of patient satisfaction. In contrast to the pain scores utilised in our investigation, the study used a visual analogue scale to assess pain perception. This could also be an indicator that enough dosage is not being given to PCA users and those on epidural pain control, maybe due to nursing staff fear of adverse outcomes. Another factor to consider is the patients' unwillingness to self-administer the drug and their discomfort with the Epi catheter. According to the findings of this survey, those who underwent operations for CV reasons and had Epi non-PCA had a shorter POPT period. At all-time points, patients who received POPT by IV PCA required the highest percentage of rescue medicine. This is most likely due to either insufficient dosage or the patient's unwillingness to self-medicate. To answer these problems, a more concentrated study comparing the amount delivered by nursing staff to patients on PCA with those on traditional "as and when" needed regimens may be required. The finding of this study is similar to the earlier literature because it talks about the gap or the lack that is still present within the hospitals of India that are unable to provide the post-surgery or the pos care facilities to their patients for the betterment. Even if the post care surgery system is developed in some places it is still in the stage of infancy and proper efforts have to be taken in order to ensure that the patients are getting a better and sound treatment.

IV. CONCLUSION

This survey, which is the largest from the Indian subcontinent, shows that postoperative pain continues to be reported by the majority of patients in some of India's most prestigious institutions. Wherever it exists, the APS service has yet to fulfill its full potential. Furthermore, caregivers have struggled to fully adopt emerging standards of care, such as PCA. The study is

highly significant because of the fact that the result of the present research has been similar to the results of the earlier published researches. This is evident of the fact that the hospitals in India still suffer from the lack of sufficient post-operative care and acute pain relief care. It is for this reason that the hospitals have to work hard in order to arrange for some training and care facilities so that the nurses are equipped with the skills that they need to treat their patients in a sound and effective manner.

V. LIMITATION

The survey's shortcoming is that the tertiary hospitals studied may not be representative of general hospitals throughout the Indian subcontinent, resulting in disparities in hospital practices.

VI. IMPLICATIONS OF THE STUDY:

NURSING PRACTICE: - Nursing professionals will be able to identify ways to teach their students about the skills of helping patients in the post-surgery periods with response to pain relief.

NURSING EDUCATION: - As a nurse educator, there are several possibilities to teach nursing students about life skills that enable them to adopt positive behavior and adjust to their circumstances.

NURSING RESEARCH: - The findings of the study add to the scientific body of knowledge in the medical field, which can be used to conduct further research in terms of post-surgery pain relief treatment and care facilities for all the patients.

VII. RECOMMENDATIONS:

To develop awareness program for the nurses- It is recommended that more campaigns and training sessions must be developed on the post-surgery pain relief system so that the patients can be given better treatment.

To develop special post-surgery pain relief departments or units so that all the patients after elective surgeries or after any other such operations are able to stay in this unit and get some additional treatments for this disease. This will help them to understand them

Developing APU- It is highly recommended that the hospitals in India must start taking sufficient measures in order to provide acute pain relief services to patients in the pre and post-operative period.

VIII. DISCLOSURES

There is no conflict of interest among authors.

IX. PERMISSIONS

All procedures were followed in accordance with the ethical standards of the responsible committee on human experimentation and informed consent was taken from all patients included in the study.

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