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Original Article

Nursing Section

Perception of Pain, Attitude and Satisfaction of Pain Management among Postoperative Patients

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ABSTRACT

Introduction: Pain is considered as a fifth vital sign. Pain management and patients satisfaction with the treatment decreases early postoperative recovery.

Aim: The study aim was to assess the satisfaction of pain management among postoperative patients.

Materials and Methods: A cross-sectional study was used to conduct a study among 180 postoperative patients' undergone surgeries (General surgery patients, ortho-paedic surgery and urological surgery patients) at selected hospitals, Puducherry. The purpose of the study was to associate the pain level with satisfaction. The patients were selected based on purposive sampling technique. After obtaining consent, the researcher used numerical pain scale to assess the pain perception of the patient, closed ended questionnaire to assess attitude level and modified short assessment questionnaire for patient satisfaction towards pain management. The study was analysed using Statistical Package for the Social Science (SPSS) software version 20.0. The descriptive statistics was used to assess the level of pain and attitude and inferential statistics like Pearson correlation coefficient were carried out to find the correlation between pain and satisfaction.

Results: Severe pain was felt by nearly all (70%) among general surgery patients, 60% in orthopaedic surgery patients and 50% had moderate pain in urological surgery patients respectively. Regarding attitude, majority (78%, 88% and 83%) of the patients had positive attitude towards pain management in General surgery, Orthopaedic and Urology surgery patients. Most (74%) of them were satisfied with their pain management in general surgery patients, whereas in orthopaedic and urological patients, nearly all 90%, 96% of the clients were very satisfied towards pain management.

Conclusion: The study concluded, optimal satisfaction toward pain management will increase quality of early postoperative recovery.

Keywords: Discomfort, Level of satisfaction, Surgical pain

INTRODUCTION

Pain is a stressful feeling triggered by intense stimuli. According to International Association for the study of pain describes pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage [1]. Beliefs in relation to pain, pain perception and coping mechanisms are an essential factors in predicting the outcome of pain management. Unrealistic or negative thought about pain may contribute to increased intensity of pain, emotional distress, reduce daily activity, functional outcome, reduce length of stay, and greater dependence on medication. Ineffective pain perception can occur at any pace along the signaling pathway [2].

Worldwide, surgical care has been an essential component of health care. Every year, millions of people undergo surgical management and surgical interventions account 13% of the world's total Disability-Adjusted Life Years (DALYs) and surgical procedures are intended to save lives of million people [3]. Surgery is an instrumental technique on a patient to investigate and treat a pathological condition. In the world, approximately 234 million of surgeries are performed every year and in United Arab Emirates (UAE), approximately 51.4 million/year, respectively [4]. In India, estimated the prevalence of postoperative pain and patient's satisfactory level versus pain management among 120 inpatient undergone abdominal surgery at tertiary care Government Centre, Assam. The study result revealed that the prevalence of postoperative pain on 5th postoperative hour was 84.17%, 92.5% on the second and 96.66% on the third postoperative day, respectively [5].

Postoperative pain is an unpleasant sensation. Pain is caused by tissue damage caused by incision or through wound closing and through procedural pressure [6]. Some pain is an unavoidable companion after surgery. Effective pain medications control postsurgical pain. Good pain control increases greater comfort, speed recovery and prevent postoperative complications [7]. In hospital, pain management remains suboptimal. Patient felt difficult in communicating the intensity pain, thus, the postoperative nurses may not able to provide effective pain management due to inappropriate communication [8].

The American Pain Society reviewed 6556 abstracts from multiple electronic databases and included 107 systematic reviews. Despite a large body of critical research gaps were found and recommendations formulated. The evidence gaps revealed, suggested methods and timing of patient education perioperatively, non-pharmacological management, combinations of analgesic, monitoring patient reaction to treatment, etc., [9]. Most patients who undergo surgical procedures experience acute postoperative pain, but evidence suggests that, only 50% of patients have relieved from pain. Many interventions, management strategies are available for reducing preoperative, intraoperative, and postoperative pain [10].

Pain management refers to actions to reduce postoperative pain before the patient is discharged. Acute postoperative pain can lead to persistent postoperative pain in 10%-50% of patients. Effective pain management before, during, and immediately after surgery can prevent this development [10]. Patients' perception of pain is a vital measure and a relevant outcome for healthcare institutions. Inadequate or delay pain management may lead to increased suffering, frustration, aggression, fear, anxiety, and theoretically aggravate severe pain. In addition, inadequate or suboptimal pain management may result in the release of stress hormones. Acute pain lead to circulatory and respiratory complications [11].

United State conducted a national survey among adult patient's who undergone surgical procedures in the inpatient settings. Most of the patients (80%) experiences acute surgical pain following

surgeries and specified that, pain continues to be undermanaged in the postoperative period. Among ambulatory, surgery patients revealed that 24% of patients shown delayed recovery due to postoperative pain [12].

Nursing is the highest health care profession in the world and possess substantial role in the health care sector. The major responsibilities of nursing include proper assessment of patient, effective communicating, caring for patients, administering medicine, and implementation of care [12]. Level of knowledge and attitude on pain management among healthcare professionals remains insufficient. Anxiety, fear, and a sense of loss of control contribute to patient suffering. Treating pain, creating positive attitude and providing psychological support has been shown to improve pain and reduce analgesic use. Therefore, it is importance to assess the level of surgical pain, patients attitude and satisfaction towards pain management are the essential factor needed for quality of patients recovery [13].

The aim of the study was to assess the satisfactory level of pain management among postoperative patients and the main objectives were to assess the existing level of pain, attitude, satisfaction toward pain management and to correlate the attitude level with satisfaction among postoperative patients.

MATERIALS AND METHODS

A cross-sectional study design with purposive sampling technique was used to conduct the present study from September 2018 to August 2019. Among 180 postoperative patients who fulfill the criteria were included in the study. The data was collected from postoperative patients who underwent general surgery or orthopaedic or urological surgery, admitted at selected hospitals at Puducherry. The research variables included in the study was the pain perception of the patients, attitude level and satisfaction towards pain management.

Inclusion criteria patient who understand and speak Tamil and English, who are willing to participate in the study, available at the time of data collection and age above 20 and below 70 years.

Ethical permission for conducting the study was obtained from Institutional Ethics Committee (no: GHIEC/2018). All participants were informed about the study. Informed consent was received from the participants. Data collection was carried out within the given period of 10 months at selected hospitals, Puducherry. Self-introduction and information about the study was explained to the participants, so as to get co-operation towards the procedure of data collection. Date was collected in three phases, First phase included collection of demographic data from the client, Second phase was to assess perception of postoperative pain by numerical pain scale, attitude and satisfaction was assessed by modified short assessment of patient satisfaction questionnaire, it comprises of six components which includes treatment satisfaction, results, clinician care, decision making, respect by the health workers, and satisfaction of care by 5-point scales on 1, 3, 5 postoperative days.

STATISTICAL ANALYSIS

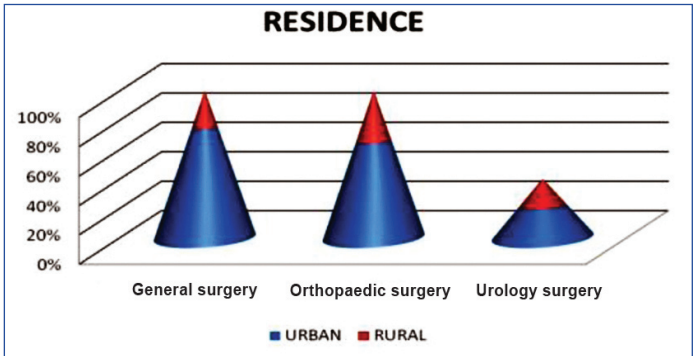
The data were analysed using SPSS software version 20.0. The descriptive statistics like frequency, percentage was calculated through Chi-square to assess the level of pain and attitude. Inferential statistics like Pearson correlation coefficient were carried out to find the correlation between pain and satisfaction. The p-value less than 0.05 were considered as statistically significant.

RESULTS

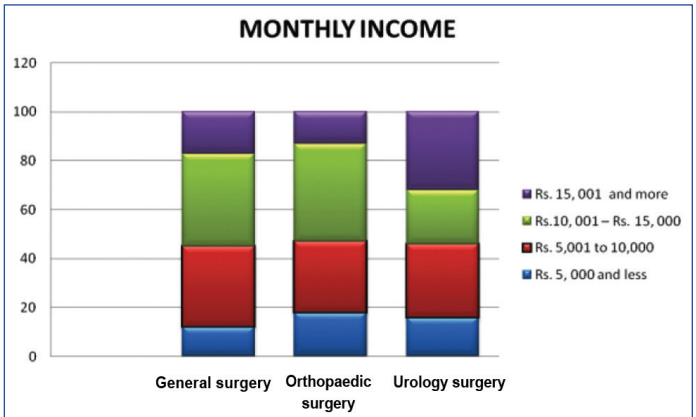
Findings related to demographic variables: It shows the distribution of the client to their age, gender and educational status by department wise operation. It depicts that majority of the clients were clients belonged to the age group of 46-58 years, among that most of them male and graduates in all groups [Table/Fig-1]. Most (75%, 66% and 22%) of the clients were residing in urban in general, orthopaedic and urological patients [Table/Fig-2]. According to the monthly income by groupwise, it depicts that majority of the client earns between Rs.10,001-Rs.15,000 among general surgical and orthopaedic surgery patients, whereas, in uro surgery patients, most of them earns more than Rs. 15,000 and above [Table/Fig-3]. According to previous experience of pain, majority (55%, 70% and 65%) of the clients had previous experience of pain in Gerenal, ortho and uro surgery groups, respectively [Table/Fig-4].

Demographic variables (N=180)	General surgery (n=100)	Orthopaedic surgery (n=50)	Urology surgery (n=30)
	Frequency (%)	Frequency (%)	Frequency (%)
Age (Years)			
21-32	17 (17)	9 (18)	9 (30)
33-45	23 (23)	15 (30)	6 (20)
46-58	41 (41)	20 (40)	13 (43)
59-70	19 (19)	6 (12)	2 (7)
Gender			
Male	66 (66)	30 (60)	18 (60)
Female	34 (34)	20 (40)	12 (40)
Educational status			
Primary	18 (18)	14 (28)	6 (20)
Secondary	22 (22)	19 (38)	11 (37)
Graduates	40 (40)	16 (32)	9 (30)
Postgraduates	20 (20)	1 (2)	4

[Table/Fig-1]: Distribution of the client to their age, gender and educational status by groupwise.



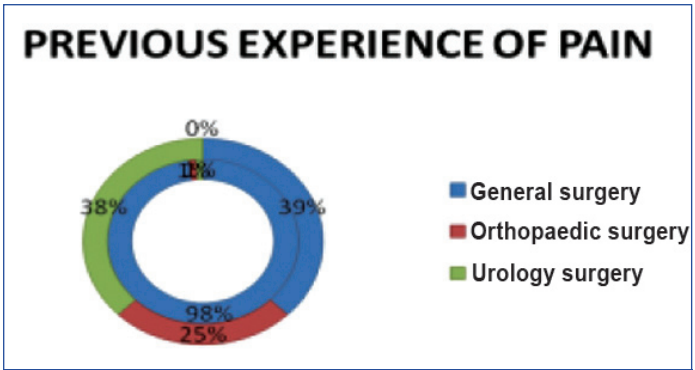
[Table/Fig-2]: Distribution of clients according to the residence areas by groupwise.



[Table/Fig-3]: Distribution of the clients according to the monthly income by groupwise.

Findings related to pain perception: Pain intensity is based on type of surgery, in general surgery, 70% of patients showed severe pain and 20% moderate pain whereas, in orthopaedic and urology surgical patients, majority (60%) of them shows severe pain and 50% had moderate pain [Table/Fig-5].

Findings related to attitude level towards pain management: [Table/Fig-6] shows, majority (78%, 88% and 83%) of the patients



[Table/Fig-4]: Distribution of the clients based on the previous experience of pain by groupwise.

Level of pain	General surgery (n=100) Frequency (%)	Orthopaedic surgery (n=50) Frequency (%)	Urology surgery (n=30) Frequency (%)	Chi-square test value	Degree of freedom	p-value
No pain	0	0 (0)	0 (0)	58.57	2	<0.001**
Mild pain	10	7 (14)	5 (17)			
Moderate pain	20	13 (26)	15 (50)			
Severe pain	70	30 (60)	10 (33)			
Very severe	0	0 (0)	0 (0)			

[Table/Fig-5]: Perception level of Postoperative pain by the patient (Average of day 1,3,5).
p<0.05 Significant; **Highly significant

Physiological responses	General surgery (n=100) Frequency (%)	Orthopaedic surgery (n=50) Frequency (%)	Urology surgery (n=30) Frequency (%)
Positive attitude	78 (78)	44 (88)	25 (83)
Negative attitude	22 (22)	6 (12)	5 (17)

[Table/Fig-6]: Distribution of attitude level towards pain management.

had positive attitude towards pain management in general surgery, orthopaedic and urology surgery patients respectively.

Findings related to patients satisfaction on pain management: [Table/Fig-7] shows, among general surgery patients, most (74%) of them were satisfied, lest of 10% were dissatisfied on pain management whereas, in orthopaedic and urology surgical patients nearly all 90% and 96% of the clients respectively, were satisfied towards pain management.

Level of satisfaction	General surgery (n=100) Frequency (%)	Orthopaedic surgery (n=50) Frequency (%)	Urology surgery (n=30) Frequency (%)
Very satisfied	74 (74)	45 (90)	29 (96)
Satisfied	16 (16)	5 (9)	1 (4)
Dissatisfied	10 (10)	0 (0)	0 (0)

[Table/Fig-7]: Patients satisfaction on pain management.

Findings related to patients attitude and satisfaction on pain management: Among general surgery patients, it shows, negative (r=-0.892) relationship exists between the attitude level with satisfaction, which infers that, whenever the patient had negative attitude, their satisfaction towards pain management has been reduced. The positive relationship exists between orthopaedic (r=0.480) and urology surgery (r=0.480) patients, which increases positive attitude and satisfactory level towards pain management among postoperative patients [Table/Fig-8].

Correlation coefficient for attitude	General surgery	Orthopaedic surgery	Urological
r-value	-0.892**	0.480**	0.480**
p-value	<0.001	<0.001	<0.001

[Table/Fig-8]: Correlation between the levels of attitude with satisfaction among the surgical patients (combined data).
(p<0.05 Significant, **Highly significant)

DISCUSSION

The study showed severe pain was experienced by the general surgery patients (70%), orthopaedic patients by 60% and 50% of the urological patient's experienced moderate pain, respectively. Positive attitude towards pain management was shown by general surgery patients (78%), 88% in orthopaedic surgery and 83% in urological patient. Hence, it concluded that most of the clients had severe pain irrespective of the type of the surgery.

Present study findings were consistent with Ramia E et al., who conducted a cross-sectional study on patient perception of acute pain management among 177 postoperative patients, Lebanon. The result showed, nearly 50% of obstetric and 37% of orthopaedic patients had experienced severe pain. It concluded postoperative pain to be rectified for better postoperative improvement [14].

The finding from the present study shows that a negative (r=-0.892) relationship exists between the attitude level and level of satisfaction in general surgery patients. Present study findings were supported with, Leila NM et al., stated 28% of the patients were satisfied with pain management during first postoperative day and 39.3% during the first postoperative night. It revealed, significant correlation with received preoperative information (p<0.01) and well-being (p<0.01). They concluded that preoperative interview is an important tool to receive and give information concerning postoperative pain management [15].

Another study conducted by Gebremedhn EG and Lemma GF showed that the level of patient satisfaction was 98.1% with perioperative surgical services. They also analysed that there was a significant association with patient information about the disease and attention of operation theatre staff to the patients complains (p=0.008). They concluded that the healthcare personnel are needed to provide adequate information about care process and health progress [16]. The study was supported with Gan TJ et al., who conducted a survey among 300 patients on pain perceptions and satisfaction with pain management. Their result suggested most of the patients experienced moderate/extreme pain (75%) during the immediate postsurgical period. Around 88% of the patients will manage the pain through analgesic medications and shows satisfactory level [17].

Limitation(s)

Since, it is a cross-sectional study conducted from multiple centers with different infrastructure, possible selection bias is the most important limitation of the present study.

CONCLUSION(S)

This study showed that the patient's attitude and satisfaction regarding pain management was inadequate. Optimal satisfaction toward pain management can increase quality of recovery. Thus, preoperative knowledge needs to be imparted regarding the postoperative management which facilitates early postoperative recovery.

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