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Research article

PATIENTS' ATTITUDES, EXPERIENCE AND SATISFACTION WITH ACUTE POSTOPERATIVE PAIN MANAGEMENT: A MULTICENTRE SURVEY OF 15 TERTIARY HOSPITALS IN MAHARASHTRA.

Dr.Khatib Samina K[1], Dr Syed ShamimRazvi[2], Dr. Kulkarni Sadhana S[3], .Dr Parab Swapnil[4]

[1]M.D(Anaesthesiology), Associate Professor, Anaesthesiology, Indian Institute of Medical Science and Research, Badnapur, Jalna, Ph.D student, Department of Anaesthesiology,Government Medical College,Aurangabad.
[2]M.B.B.S, D.Ortho, M.D(Physiology), Ph.Dstudent,Department of Orthopaedics,Mahatma Gandhi Institute of Health Sciences,Aurangabad
[3]M.D (Anaesthesiology), Professor ,Department of Anaesthesiology, Government Medical College Cancer Hospital, Aurangabad.
[4]M.D(Anaesthesiology),Fellowship in Onco-anaesthesia and Pain,Assistant Professor, Department of Anaesthesiology, Critical Care and Pain, Tata Memorial Hospital, Mumbai

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Corresponding Author:
Dr.Khatib Samina K,
M.D(Anaesthesiology),Ph.D student, Department of Anaesthesiology,Government Medical College,Aurangabad.
ssr.anesth@gmail.com

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ABSTRACT

Background and aims: Optimal postoperative pain management leads to improved patient related outcomes (PROs),and satisfactionin the patients. It is important to understand the patients' perspective as it helps in developing strategies for improvement. Attitudes and beliefs of patients are important because wrong attitudes and misconceptions can act as barriers in providing pain relief.Hence, a multicentre survey was carried out in the tertiary hospitals of Maharashtrato understand the attitudes,beliefs,experiences and satisfaction levels of patients with acute postoperative pain management. Also,comparison of responses was done to evaluate if Acutepain service (APS) leads to better patient outcomes and satisfaction.
Materials and methods: A 13-item questionnaire for patients, adapted from previous studies was used to collect data on patients' experience of postoperative pain management.The responses of 179 patients were included in the study.
Results:The incidence of postoperative pain was 91.6% with 75.5% having moderate to severe pain.Despite this, 91.06% of patients were satisfied. Patients in APS set up had lower incidence of moderate –severe pain (44.23%) and higher satisfaction rates (100%).Although, 35.2% of patients pronounced that postoperative pain management should be done in best possible way, they also had many misconceptions, which were possibly reinforced by counselling done by health providers.
Conclusions: The findings suggest that the postoperative pain management is far from adequate even with an APS in place. Patient and health provider education needs to be stressed for better pain management and improved outcomes.

INTRODUCTION

Postoperative pain is a complex phenomenon affected not only by surgical invasion but also by patient characteristics, perioperative anxiety, and patient –health provider relationship.[1]There is currently no consensus definition for high quality perioperative pain management.[2]]However, the quality of pain management can be assessed by evaluating the structure, processes and outcomes. [IASP] Evaluation of patient-related outcomes (PROs) such as pain intensity, interference with function, quality of life and satisfaction is important as it helps in developing strategies for improving patient care. Also, understanding the attitudes and beliefs of patients are important as wrong attitudes and misconceptions can act as barriers in providing optimal pain relief.

The concept of Acute Pain Service (APS) was introduced nearly three decades back in order to improve the acute postoperative pain management. It is said that an APS can provide better postoperative analgesia by individualised pain management, regular pain assessment, on-going health provider and patient education and thus improved patient satisfaction. But, this concept is still in a nascent stage in our country and very few centres are having this facility. Hence, a multicentre survey was carried out in the tertiary hospitals of Maharashtra to gain insight

intothe patients' attitudes, beliefs, experience and satisfaction with postoperative pain management and to compare the responses of patients from hospitals with and without an Acute Pain Service and to evaluate if the existing APS leads to better patient outcomes and satisfaction.

Methods: Data were collected from 15 tertiary academic centres after obtainingthe Ethics Committee approval from the parent institution and the requisite permissions from the authorities of participating centres and their Research Committees.(October 2014-October 2016).Thirty centres which had participated in a survey of postoperative pain management practices were approached, out of which 15 participated in the survey.

Patients included were adults of 18 years and above, of both genders, which had spent a minimum of 48 hours in the wards after major elective surgery in which moderate to severe pain was expected. [3]Patientsadmitted in intensive careunit, those with cognitive impairment, psychiatric disorders or who could not understand the language/content of questionnaire or were unwillingwere excluded. All patients were explained the purpose of the study and assured anonymity.

The requisite sample size [N] for patients was 138and was calculated using the EpiInfo sample calculator.[4]The expected prevalence of acute postoperative pain was taken as 91 %. [5]Thus, 10 forms were sentto each of the 30 institutes by post along with self-addressed envelopes or by email (as per the preference of the institutes). If questionnaire was sent by email, the replies were retrieved by sending Excel templates. A nodal officer (who was not directly involved in patient management)was appointed by the departmental headin each institute for collecting the patients' responses.

The 13-item questionnaire for patients was a contextually modified tool based on 1995 American Pain Society (APSOQ) patient outcome questionnaire and previous studies.[,6-8]The APSOQ 1995 version was used because it has been widely used and validated.[,6-12]It was translated into Marathi and Hindi languages. The content validity of the questionnaire was checked by an expert anaesthesiologist, not involved in the study. The translated versions were checked by the language experts. After a pilot study, the questionnairewas modified and again subjected to checking by experts as above.

Initially, 148 patient forms were received from 15 centres out of which only ten forms were from an institute with an APS.So, 100 more forms were sent to the same institute.Forty two morepatient responses were submitted from the APS set up, making it a total of 190.

The data were analysed using Statistical Package for the Social Sciences (IBM Corp. Released 2015, IBM SPSS Statistics for Windows, Version 23.0, Armonk, N.Y., and U.S.A). The percentages, mean and standard deviation, median and interquartile range (IQR) were calculated as applicable. For comparison of factors associated with pain, Mann Whitney U test and Kruskall Wallis test were applied. Spearman's correlation coefficient was calculated to assess if there was correlation between satisfaction and pain intensity and waiting periods for analgesics. A p-value of less than 0.05 was considered as statistically significant at 95% confidence interval.

Results

A total of 190 questionnaires were submitted from 8 government hospitals, 6 private and one corporate hospital. Of the 15 participating institutes, only one had an APS and in the rest of the 14 centres the anaesthesiologists managed pain only till recovery room and the major role of pain management was played by the surgeons.The long period of 2 years was required for the study due to multiple permissions of administrative heads in each centre and also permissions of IRB /research Committees of each Centre. Onecenter took a period of one and a half year for approval due to administrative problems. IRB meetings are conducted only 2-4 times a year in most of the institutes causing delay. . Eleven patient forms were excluded because they were from patients who had undergone minor surgeries. The baseline characteristics and postoperative pain management plan are summarised in Table 1.

Anxiety related to the outcome of surgery and recovery was substantiated by 120 (67%) patients, followed by fear of post-operative pain in 75 patients (41.9%). However, a significantly less number of patients in hospital with APS had anxiety related to postoperative pain (P=0.027)

It was observed there was no statistical difference in worst pain intensities in different age categories, gender and type of surgery and anaesthesia, however patients in hospitalwith an APS had significantly low pain intensities (median 4, IQR=1-7) (P=0.000, at 95% CI) as compared to those without APS.(median 7,IQR=(6-8).(Table 2)It was also observed that the incidence of moderate to severe pain (no pain =0, mild pain=1-3, moderate pain=4-6 and severe pain =7-10) was significantly higher in the patients from hospitals without APS.(Table 3).The patients from hospitals with and without APS have rated the pain as most troublesome symptom in the postoperative period on a 0-5 scale. .(median =3, on a 0-5 scale).

Paincaused interference in daily activities. Majority of the patients (54.7%) had difficulty in moving followed by sleep disturbances in 45.8% patients.Sleepand mood disturbances were less common in patient in the hospitalwith APS but the differences were not statistically significant. (p=0.057)

Of the study sample, a total 150(83.8%) patients had requested for analgesia when they were in pain. Of the 83.8% patients, 99 (66%) requested for analgesia 1-2 times in a day, 37 (24.6%) patients requested it 3-4 times in a day and 14(9.3%) patients requested more than 5 times in a day. There were significantly more number of requests for analgesia in hospitals without APS (P=0.010) Out of the 150 patients who had requested for analgesics, 125 (83.33%) of patients got the analgesics within 30 minutes of request and there was no statistical difference (p=0.170) in the waiting period in the hospitals with and without an APS.

A majority of the patients 43(24. %) agreed that the health care providers told them that treating pain was a priority and encouraged them to report if they had pain. However, if there was no adequate analgesia, 39(19.6%) of the patients were told that pain was inevitableand 38(21.2%) of them were told to bear some amount of pain as complete relief may not be feasible. Besides, 13(7.3%) patients were told that analgesics can cause side effects and 23(12.8%) of patients were asked to talk to the staff nurse for their complaints about pain. No information about postoperative pain was given to 19(10.6%) of the patients and 4(2.2%) of the patients did not receive attention when they reported the pain. Significantly, more number of patients were told to talk to staff nurse regarding their pain related

complaints (P=0.000). (Table 4).Also the statements - that pain was inevitable, analgesics had adverse effects, etc. were significantly more common in hospitals without APS (P values <0.05 as depicted in the table-4).

A majority of the patients, 73 (40.8%) believed that "postoperative pain is a minor condition"and that "it is inevitable" (33.7%). However, at the same time 63(35.2%) patients believed that "doctors shouldtreat pain effectively as it causes suffering". The observations are summarised in Table 5. The belief that 'pain is an inevitable consequence of surgery' was significantly more common in patients from hospitals without APS. (P=0.017). There were no statistical differences in other beliefs in patients from hospital with APS and without it.

Despite high pain scores,163(91.1%) of patients were satisfied with pain management and satisfaction rate was significantly higher in APS hospitals (100%) (p=0.009)(Table 6).There was no significant difference in the levels of satisfaction (good, moderate, excellent) of patients from non-APS and APS hospitals (p=0.065) and in patients from different age groupsand genders (Table 6).There was no significant correlation between satisfaction and pain intensity (value of correlation coefficient R=0.084 and p=0.264) and between waiting period for analgesics and satisfaction. (R=0.074 and p=0.34)

Table 1 Demographic data ,surgical procedures and anaesthesia plan of patients

Characteristics	**Number of patients(n=179)**
Age(years)	
18-44years	107(59.77%)
≥45 years	72(40.22%)
Average age	41.1 ±14.46years
Gender	
Male	102(57%)
Female	77(43%)
Education level of patients	
Literate	158
Illiterate	21
Surgical procedures and type of anaesthesia	
Surgery	**Total no.of patients (n=179)**
Head,Neck& ENT	19(10.62%)
Thoracic Surgeries	09(5.02%)
Orthopaedic Procedures	48(26.82%)
Intra-abdominal procedures	78(43.57%)
Obstetrics and Gyneacology	25(13.97%)
Anaesthesia administered	
General anaesthesia	122(68.16%)
Spinal anaesthesia	48(26.8%)
Combined spinal-epidural	06(3.36%)
Peripheral nerve block	03(1.68%)
Postoperative pain management	**No.of patients(n=179)**
Intermittent(im/iv)NSAID	08 (4.46%)
Intermittent(im/iv) opioids	05(2.79%)
Intermittent (im/iv)NSAIDs/opioids	102(56.98%)
Epidural LA+opioids/ intrathecal opioids	59(32.96%)
Peripheral nerve blocks	05(2.79%)
Patient controlled analgesia(IV/Epidural)	00(0%)

Table 2 Factors affecting pain intensity

Factors affecting pain intensity	**p-value**
Age (<45 years) and age ≥45 years	0.224#
Gender(male/female)	0.696#
Type of anaesthesia(General/regional)	0.164*
Type of surgery(different categories)	0.499*
APS availability(available/not available)	**0.000**# (p<0.05)

#Independent samples Mann Whitney U test,*Independent samples Kruskall Wallis test

Table 3 Pain intensity in patients in hospitals with and without APS

	Total no. of patients (n=179)	No.of patients in Non-APS hospitals(n=127)	No.of patients in APS hospitals(n=52)
No pain(NRS=0)	15(8.4%)	9(7.08%)	6(11.53%)
Mild pain(NRS*=1-3)	28(15.6%)	5(3.93%)	23(44.23%)
Moderate pain(NRS=4-6)	47(26.3%)	37(29.13%)	10(19.23%)
Severe pain(NRS=7-10)	89(49.2%)	76(59.84%)	13(25%)

*NRS=numerical rating scale; (χ^2=49.65%,**p=0.000)**

Table 4 Counselling received by patients about postoperative pain

Counseling received	**Total number of patients(n=179) n(%)****	**Patients from non-APS Hospitals(n=127) n(%)**	**Patients from APS hospital(n=52) n(%)**	**P-Value**
No information	19(10.6%)	14(11.02%)	5(9.61%)	0.781
Asked to talk to nurse for pain related complaints	23(12.8%)	09(7.08%)	14(26.92%)	0.000*
Pain treatment-a priority, hence asked to report pain	43(24%)	24(18.89%)	18(34.61%)	0.034
Pain -an inevitable consequence	35(19.6%)	27(21.26%)	8(15.38%)	0.368
Asked to bear the pain if there was no response	38(21.2%)	34(26.77%)	4(7.69%)	0.005*
Adverse effects of analgesics, hence inability to give more	13(7.3%)	13(10.23%)	0(0)	0.017*
No attention	04(2.2%)	1(0.78%)	3(5.76%)	0.041

** mutilple responses were given by the respondents. *p<0.05 indicates significant differences.

Table 5Patients' beliefs about postoperative pain:

Patients' beliefs	**Total number of patients(n=179) (%) ****	**Patients from non APS hospital(n=127) n(%)**	**Patients from APS Hospitals(n=52) n(%)**	**P-value**
Postoperative pain - inevitable	059 (33%)	48(37.79)	11(21.15)	**0.017***
Postoperative pain - a minor condition	073 (40.8%)	47(37.01)	26(50)	0.128
Analgesics cause adverse effects so better to tolerate pain	12 (6.7%)	09(7.08)	03(5.76)	0.324
Doctors should concentrate on treatment of disease rather than pain	18 (10.1%)	12(9.44)	06(11.53)	0.329
Postoperative pain causes suffering. So doctors should treat it in best possible way	63 (35.2%)	42(33.07)	21(40.38)	0.262
Any other	2 (1.1%)			

** mutilple responses were given by the respondents.
*p<0.05 indicates significant differences.

Table 6 Satisfaction with pain management:

	Non-APS hospitals(n=127)	**APS hospitals(n=52)**	**All hospitals (n=179)**	**p-value**
Satisfied	111(87.40%)	52(100%)	163(91.1%)	χ^2=6.760, **p=0.009 *** (<0.05)
Not satisfied	015(11.81%)	00	15(8.4%)	

Not rated/responded	01(0.78%)		1(0.5%)	
Satisfaction ratings				
Average	21(16.53%)	09(17.30%)	30(16.75%)	χ^2=7.213, p=0.065
Good	51(40.15%)	31(59.61%)	82(45.81%)	
Excellent	38(29.92%)	09(17.30%)	47(26.25%)	
Not satisfied/not responded	17(13.38%)	3(5.76%)(satisfied but ratings not given)	20(11.17%)	

DISCUSSION:

The survey reveals a high incidence of pain and severity in the study sample. The data was gathered from 14 hospitals without APS where surgeons played a major role in pain management and from one hospital with APS where anaesthesiologist- supervised and nurse and resident- based pain services were available.The incidence of moderate and severe pain was significantly less in hospital (p=0.000) with APS due to better postoperative pain management practices, use of modalities like epidurals, regular assessment of pain by health providers and counselling leading to lesser anxiety related to pain.

Most of the patients hadundergone majororthopaedic (26.82%) abdominal (43.57%) and oncologic surgeries (65.82%) which are known to have high levels of postoperative pain. [2] Intermittent intravenous and intramuscular analgesics and weak opioids were used widely for postoperative pain management which could have contributed to suboptimal analgesia in hospitals without APS. Also, preoperative anxiety related to recovery (67%) and postoperative pain (41.9%) was present. Anxiety isan important predictor of postoperative pain.[13]

A number of studies showed high incidence of pain similar to our study. [5,11,12,14-22] Pain management is hampered by lack of modern technology especially in settings without an APS where surgeons played key role in pain management.Technologies like patient controlled analgesia and continuous epidural analgesia were not used frequently because of high cost of equipment and shortage of trained personnel required for monitoring the patients. Even if the analgesics are prescribed on 'a schedule' and 'on demand' as well, the patients might not bereceiving them frequently. [24]Fear of respiratory depression and addiction could have prevented the nursing staff from frequent drug administration. Other reasons could be lack of workforce, reliance on patient initiative, reluctance of patients due to dislike or fear of injections, lack of regular pain assessment, etc. The IASP has recommended that the selection of analgesics be individualized as per the needs of each patient. [25]. The important strategies for acute postoperative pain are multimodal, procedure-specific analgesia and acute rehabilitation after surgery. [25]

In our patient cohort, pain caused interference with activity (54.7%) and sleep(45.8%) in highest number of patients and interfered with bonding with family members in 11.7% patients.Similar findings were reported by McNeill et al. [6]There were no significant differences in patients from hospitals with and without an APS. Adecrease in the pain interference in daily activities was reported after implementation of pain improvement strategies in some studies. [6, 25]

Frequent requests for analgesics were observed which could mean that pain evaluation was inadequate or that they had severe pain,[26]or could be due to use of drugs with shorter half-life or infrequent administrations. Prompt delivery of analgesics reflects a helpful attitude of health providers and their reliance on patient initiative rather than regular assessment of pain.There were higher number of requests in APS hospitals (p=0.010) although the pain severity was lower. This probably could be due to counselling regarding priority to pain management and to report it promptly to nursing staff. (p=0.000, p=0.034) (Table-4)

The patients in our study have rated for postoperative pain as most troublesome symptom. The lesser scores to nausea, vomiting, pruritus and urinary retention could be due to use of opioids in suboptimal doses or use of weak opioids.

Patients' anxiety related to postoperative pain before surgery has been highlighted in many studies. [8, 28, 29] Preoperative anxiety is a predictor of postoperative pain. [13]Lesser number of patients from APS hospitals had fear for postoperative pain (P=0.009). A major reason could be due to nature of their illness. As the hospital with APS was a tertiary cancer hospital, patient here were more concerned with recovery from illness and surgical outcome. Also lesser concern for postoperative pain couldprobably be due to counsellingreceived that pain management would be given priority. (p=0.034) (Table 4).Previous good experience of patients in the same hospital and positive reports by family and friends could also lead to lesser anxiety related to pain.Thus, proper counselling may reduce patients' fear and anxiety and result in lower pain scores and greatersatisfaction [30]Patients from hospital with APS reported a small but significant proportion of "no attention" from staff as compared to patients without APS.This probably reflects an attitude of overconfidence in health staff regarding pain management in set up with an established pain service. There were no significant differences in beliefs in patients in hospitals with APS and without it. This stresses the need for improved counselling even where there is APS. The results may also be skewed as only one hospital with APS was included. Further studies involving larger samples, institutes and observations are needed before definitive conclusions can be made.

Despite high pain scores, a majority of patients (91.1%) were satisfied with the overall postoperative pain management. There was no statistical difference in satisfaction ratings across the gender and age groups. Similar findings were reported by Ward and Gordon. [9]Other authors have reported differences in levels of satisfaction in different age groups [10] and genders [11, 31]

In our study, there was very weak (R<0.3) and non – significant correlation between satisfaction and pain intensity.(R=0.84 and p=0.264).Similar findings were reported by Singh et al [15]and Phillips et al.[16]An inverse and negative correlation between pain intensity and satisfaction has also been reported.[1,6] These variations point to complexity of patient satisfaction as an outcome measure of pain management.

In our study,all patients (100%) from APS hospital were satisfied with pain management while 87.4% of patients from non-APS hospitals were satisfied. The increase in satisfaction levels after implementation of APS/quality improvement was noted bymany authors. [26, 32, 33]

The paradox of high patient satisfaction in spite of high pain intensity has been documented in many studies.[9, 10, 14-16, 23, 30, 31, 34]Thissignifies a multifaceted relation between

satisfaction and pain management. Although, severe painmay interfere with activity, this is not of concern to the inpatientsand may account for patients' satisfaction. [6]Most of the patients in our study sample had undergone major surgeries and were satisfied as probablythey got better attention,care and many received better modes of analgesia like epidural. In our study, 24% of patients agreed being told that pain management was a priority for health care staff.This could contribute to satisfaction as is corroborated fromsimilar observation in other studies. [9, 34-37] The promptness of health care providers in our study could also contribute to satisfaction. [12] The beliefs that postoperative pain is inevitable (33%) and that excess use of analgesics cause adverse effects(6.7%)lead to the attitude of tolerating pain and being satisfied with suboptimal pain management.Gan et al [38] showed that patients were willing to tolerate some amount of pain, rather than adverse effects of analgesics. Warfield and Kahn [8] reported that 77% of patients believed that it is necessary to experience pain after surgery.

The intermittent analgesics cause a "peak and trough" pattern of pain and this may be responsible for patient satisfaction as shown in previous studies. [9, 35] Patients are largely unaware of advanced techniques and the advantages of round-the-clock scheduling of analgesics, which can produce more effective and consistent pain relief.

The response bias [9] and "the staff pleasing factor" [39] are other reasons for skewed responses about satisfaction. Patients'satisfaction may also be related to communication and satisfaction with health care providers. [6, 10, 35] However, the question on satisfaction with health providerswere not included in our study

The multicentre approach and inclusion of mixed surgical cases has the advantage of wider applicability of the observations. However, due to organizational, resource and time constraints and multicentre nature of the study we could assess only single ratings of pain like worst or average pain in limited number of patients. The patients' anxiety and factors affecting it should ideally be evaluated preoperatively. However since we collected data 48 hour after surgery, the data obtained from patients could have been biased. In spite of this the information obtained from our study gives invaluable insights into important factors affecting preoperative anxiety. The sample size of the study was small and there was only one institute with APS, also only one corporate hospital participated in the survey. Hence, this can be viewed as a preliminary data and based on this a larger scale studies are needed involving more number of patients from each hospital and more number of hospitals with APS and those from corporate sectors.Another limitation was that predictive validity, concurrent validity & construct validity and reliability of our questionnaire were not tested.The dynamic nature of pain necessitates repeated measurements of pain like 'pain trajectory' which may yield new insights for quality improvement and research. [2, 40]

The findings of the study suggest that patients from hospital with APS had lesser pain and anxiety, were better informed, and had greater satisfaction rate as compared to those from hospitals without APS. Patient satisfaction is complex, multifaceted phenomenonand it should not be taken as a sole indicator of adequacy of pain management.The high incidence of moderate to severe pain shows that pain management was suboptimal. This stresses the need for patient as well as health provider education and involvement of patients in pain management related decisions. Pain management can be improved with implementation of evidence based and procedure –specific analgesia with greater stress on pain assessment which may be feasible in a set up withan Acute Pain Service.

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Annexure I

Questionnaire for patients

(Part 1 to be filled by the nodal officer)

Dear doctor,

Kindly go through the following instructions before you hand over the questionnaire to the patient.

Who should fill up the questionnaire?

1. Patients who have undergone elective surgery and who have spent at least 48 hours in the postoperative ward after the procedure.
2. Patients who are oriented to time, place and person.
3. Patients who are able to understand the language in which the questionnaire is typed.
4 .If the patient is illiterate, the doctor may fill up the questionnaire on his/her behalf after interviewing the patient.
5. The patient should be willing to participate in the study
6. Patients should sign the consent form before they fill up the questionnaire.

Which patients are to be excluded?

1. The post-surgical patients admitted in intensive care units or having unstable haemodynamics, etc.
2. Those who were having cognitive impairment, psychiatric disorders, etc.
3.Those who could not understand any of the above said languages or could not understand the questions and pain scales.

4. Those who were unwilling to participate in the study.

Kindly fill up the basic information below under the respective headings:

1.Name of the patient: 2.Sex-M/F.
3.Occupation 4.Education:
5.Diagnosis 7.Surgery done-
7Date of surgery 8.Date of filling up the questionnaire
9.**Type of anaesthesia**-General anaesthesia/Spinal anaesthesia/Epidural anaesthesia/Combined Spinal and epidural anaesthesia /Regional block /Any other-……
10.**Postoperative pain management**-
1)Intramuscular/intravenous NSAIDs 2)Epidural analgesia
3.Intrathecal opioid 4)Regional block with or without catheter 5)opioid patch 6)rectal suppositories
7)Woundinfilteration with local anaesthetics 8).any other –specify……..

Questionnaire for patients:
(Part II-to be filled by patients)

You may choose one or more options given below each question, which you feel is/are most appropriate. Also blank spaces have been provided where you can express your opinion.

1.**Which of the following was/were the matter(s) of greatest concern for you when your doctor advised you to undergo surgery?**
□ Will I recover completely from my illness?
□Will I regain consciousness after surgery and anaesthesia?
□Will I be able to tolerate pain after surgery
□Will I be able to tolerate nausea and vomiting after surgery
□I was concerned with responsibilities related to home,family and job.

2. **Kindly encircle the number which corresponds most to the severity of pain you have experienced.The number "0" correspond to no pain,while the number 10 corresponds to the most severe pain.**
i)How much pain do you have at present?
0……1……2…….3……4…..5…..6……7……8……9…….10
ii)Which of the following numbers corresponds to the most severe pain you have experienced from the time you underwent surgery?
0……1……2…….3……4…..5…..6……7……8……9…….10

3.**What information regarding postoperative pain was given to you by your doctors prior to surgery?**
□No information was given
□The doctors said that postoperative pain relief was a priority and told that it should be reported immediately and that they would do their best to relieve it.
□They said that postoperative pain was an inevitable consequence of surgery .
□They said that after giving pain medication if the pain is not completely relieved ,we had to bear it.
□They gave information about side effects of pain medication and hence it was better to use them in as small doses as possible to avoid side effects.
□They asked me to talk to staff nurse to for pain related complaints.
□They paid no attention when I complained about pain.
□Any other……

4.Did you demand for pain medications for unrelieved pain?
□Yes
□No, I had no pain ,hence it was not needed
□No I did not demand for medicines even if there was pain

5.How many times in a day did you demand for pain relief medicine?
□1-2 times /day
□3-4 times /day
□>5 times/day

6.**How long did you wait after demanding pain medications?**
□Got the medication immediately(within 10 minutes)
□Had to wait for 11-20 minutes
□Had to wait for 20-30 minutes
□Waited for more than 1 hour
□Did not get medication in spite of demanding one.

7.**How did the pain affect your day to day activities?**
□difficulty in moving/walking
□Difficulty in breathing and coughing
□Felt low and depressed
□Could not sleep because of pain
□Got angry with relatives/family members
□Any other**……**

8.Pleaseselect the appropriate number in order to rate the severity of problems you had in the postop period .The number "0" indicates no problem and the number 5 indicates most severe problem
Pain
0……1……2……3……4……5
Fever
0……1……2……3……4……5
Nausea vomiting
0……1……2……3……4……5
Difficulty inbreathing
0……1……2……3……4……5
Itching
0……1……2……3……4……5
Retention of urine/difficulty in urination
0……1……2……3……4……5

9. **What is your opinion regarding postoperative pain?**
□Pain after surgery is inevitable and one has no alternative but to suffer the agony
□ Pain after surgery is a minor condition and one should not worry about it
□It is better to suffer from pain rather than having side effect of pain relief medicines
□Doctors should concentrate more on treatment of the disease rather than bothering about pain
□Post surgical pain causes intense suffering ,hence doctors should use their knowledge and best possible drugs and equipments to relieve the suffering of patients.

10.Are you satisfied with pain management?
Yes No
11.If SATISFIED ,give reasons……..
12.Ifyes,how do you rate your satisfaction?
1.Average 2.good 3.excellent
13If not satisfied ,give reasons……..