

Patient Satisfaction on Peri-Anaesthetic Care in Indira Gandhi Government General Hospital and Post Graduate Institute, Puducherry- A Cross Sectional Study

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Abstract

Patients are the foundation of our medical practice. It is very obvious that they must be satisfied while in or out of the Hospital. Patient satisfaction is to provide patient-centered care creating a culture that accepts people for, who they are and where, they are in life cycle, by meeting their needs at that point, with the health system's mission to care for the body, mind and spirit of patients.

Objectives:

- To determine the level of Patient Satisfaction with Anaesthetic Care
- To correlate the post anaesthesia complication and outcome
- To associate the level of satisfaction with selected demographic variable

Research Methodology: Research approach chosen for this study is Quantitative approach. The research design used for this study is Cross-Sectional study design (Polit and Hungler 2003). The size of the sample is 129 patients admitted for surgery and present during the data collection. The sampling technique chosen for this study is Convenient sampling. Tool used for this study is modified Leiden Perioperative Care Patient Satisfaction questionnaire (LPPSq). LPPSq is a valid, Reliable Self-reported Multi-dimensional questionnaire that assess patient satisfaction and patient experience of care. LPPSq includes 30 statements which include 5 dimensions like Information, Discomfort and needs, Fear and concern, Staff patient relationship and Services provided in the OT.

Result and Findings: The result of the study in relation to the demographic variables highlights that the mean age of the patients were 40.13 + 8.18. 88 [68.2%] and 41 [31.78%] were male and female patients respectively. Majority of the patients belong to rural 70 (54.28%) and 59 (45.73%) belonged to urban areas. Patient Satisfaction in Peri- anaesthetic care in relation to Information depicts 114 (88.3%) highly satisfied, 11 (8.5%) moderately satisfied and 4 (3.1%) patients were least satisfied respectively. Regarding degree of discomfort and needs 2 (1.55%) felt least dis-comfort, 69 (53.4%) felt Moderate dis-comfort and 58 (44.96%) felt high dis-comfort respectively. In relation to fear and concern 24 (18.6%) had less fear, 75 (58.13%) had moderate fear and concern and 30 (23.2%) had high fear and anxiety respectively. Regarding staff patient relationship the value shows 116 (89.1%) highly satisfied, 10 (7.75%) moderately satisfied and 3 (23.2%) patients were least satisfied respectively. Overall satisfaction depicts 33 (25.58%) highly satisfied, 94 (72.8%) moderately satisfied and 2 (1.55%) patients were least satisfied respectively.

Conclusion: Patients are dissatisfied in the area of care and concern related to pain and discomfort, waiting time in theatre. these factors are well prevented by the health personnel to increase level of patient satisfaction.

Keywords: Patient Satisfaction; Peri-Anaesthetic Care; Leiden Perioperative Care Patient Satisfaction Questionnaire (LPPSq)

Introduction

“Patient Don’t Care What We Know, They Want To Know That We Care” [1].

Patients are the foundation of our medical practice. It is very obvious that they must be satisfied while in or out of the Hospital. Health Care Institutions are primarily Patient centric. Patient Satisfaction is the strongest determinant of hospital functioning. Ultimate goal of the hospital is satisfaction of its customers. Patient satisfaction is to provide patient-centered care creating a culture that accepts people for, who they are and where, they are in life cycle, by meeting their needs at that point, with the health system’s mission to care for the body, mind and spirit of patients. Patient satisfaction is not only to satisfy and cared-for patients and families, but also a positive outcome for staff, community and to the organization’s health. Patient Satisfaction depends on workers motivation, dedication and duty towards the patients [1-3].

The evaluation of patient satisfaction is a core aspect of the continuous quality improvement in anesthesia service that can be affected by the preoperative anaesthetist visit. This visit enables the anesthetist to know about the patient’s general health status and the nature of surgery, to choose the type of anesthesia, and to discuss perioperative complications and their management with the patient [3].

Patient satisfaction, defined as the degree of fulfilling patient anticipation, is an important component and quality indicator in health-care. Measuring patient satisfaction is nowadays a necessity. The measurement of satisfaction in anesthesia practice is quite difficult as subjective indicators depend on different civilizations, cultures, and backgrounds. Patient satisfaction is an important component and indicator in anaesthesia services. It can be affected by anaesthetist and patient interaction and post-operative follow-up [4].

The American Productivity Quality center reports that satisfied customer tell another 5 people about their positive experiences, whereas those who received poor service tell another 9 to 20 people and now with the advanced communication like email, internet and whatsapp the message spreads in a fraction of a second [4].

Although many anesthesiologists question whether assessment of patient satisfaction with anesthesia services is meaningful or can improve quality, the assessment of patient satisfaction is a reality of practice today. In addition to the widespread use of patient satisfaction measures by payers and facilities that provide surgical services, monitoring of patient satisfaction has already been incorporated into payments for performance plans. It is highly likely that this trend will continue and that assessment of patient satisfaction will affect payment for anesthesiologists in the near future. Many anesthesia practices are already actively monitoring patient satisfaction [5].

The researcher has come across different complaints from patients regarding types of anaesthesia, concern towards the patients during the regular duty in the hospital. Hence it created an interest in the mind of the researcher to take the study to “assess the patient satisfaction on peri- anaesthetic care” to identify the factors influencing for patient dissatisfaction in order to concentrate more towards the factors which in turn will improve the quality of services and ultimately the patient satisfaction.

Objectives

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Research Methodology

Research approach chosen for this study is Quantitative approach. The research design used for this study is Cross-Sectional study design [6-11]. The size of the sample is 129 patients admitted for surgery and present during the data collection. The sampling technique chosen for this study is Convenient sampling.

Criteria for the sample selection

Inclusion criteria for the study were:

Patients who are

- American Society of Anesthesiologists (ASA) physical status classification I, II, III;
- Age \geq 18;
- Elective surgery under general or regional anesthesia;
- A Stay of >24 hrs in the surgical ward;
- Understanding the local language;
- Ability to complete a questionnaire within 2 days of the operation;
- Willing to participate in the research activity.

Exclusion criteria for the study:

- Patients unable to read and write in Tamil/English,
- Patients undergoing emergency surgeries,
- Sedated after operation,
- Expected to go to the intensive care unit,
- Not able to complete the questionnaire by themselves,
- Transferred to the ward in the first 24 hours,
- Patients unconscious 24 hours after opera.

Tool to be used for this study is modified Leiden Perioperative Care Patient Satisfaction questionnaire (LPPSq). LPPSq is a valid, Reliable Self-reported Multi-dimensional questionnaire that assess patient satisfaction and patient experience of care [12].

LPPSq includes 30 statements which include 5 dimensions:

- **Information:** It has 4 items. Information regarding anesthesia, choose the type of anesthesia, chance for the patient to ask questions, about side effects and complications etc.
- **Discomfort and needs:** This area has 8 items like post-operative pain, back pain, sore throat, vomiting, shivering, hunger, thirst, memory of extubation etc.
- **Fear and concern:** It has 4 items like procedure fear, seeing the room, awake during operation and not awake after operation etc.
- **Staff patient relationship:** This area has 10 items like degree of privacy, confidence in OT staffs, were staffs respectful, concerned towards patients, politeness, attentive to the needs of patients, attentive towards the complaints like pain and nausea, personal preferences and treated kindly by staffs etc.
- **Services provided in the OT:** This area has 4 items like operation done in the given date and time, post op visit by anesthesiologist and no. of visits, waiting time in the way bay OT room and Holding time in the recovery room etc.

Scoring Process

Researcher will use the 5-point psychometric Likert scale to evaluate the degree of patient satisfaction to a given statement as 1, completely dissatisfied to 5, completely satisfied.

Scoring Key

The First dimension information key has four statements scored 1, 2, 3, 4 and 5 and interpreted as Completely Dissatisfied to Completely Satisfied. Total score in this area is 20.

| Level of satisfaction | Score | Percentage |
|-----------------------|--------|------------|
| Least | < 6 | < 33 |
| Moderate | 6 - 12 | 33 - 66 |
| High | > 12 | > 66 |

The second dimension on degree of discomfort and needs has 8 statements scored 1 - 5 as Not at all, Felt little bit discomfort, Moderately discomfort, Quite a bit discomfort, Extremely discomfort. The total score in this area is 40.

| Scoring Key | | |
|---------------------|-------------|------------|
| Level of discomfort | Score | Percentage |
| Least discomfort | < 13.3 | < 33 |
| Moderate discomfort | 13.3 - 26.6 | 33 - 66 |
| Highly discomfort | > 26.6 | > 66 |

The Third dimension on fear and concern has 4 statements scored as 1 - 5 as no fear to extreme fear. Total score is 20.

| Scoring key | | |
|---------------|--------|------------|
| Level of fear | Score | Percentage |
| No fear | < 6 | 33 |
| Moderate | 6 - 12 | 33 - 66 |
| High | > 12 | > 66 |

The Fourth dimension on a staff patient relationship has 10 statements, scored as 1-5 with Completely Dissatisfied to Completely satisfied. The total score is 50 for this area.

| Scoring key | | |
|-----------------------|---------|------------|
| Level of satisfaction | Score | Percentage |
| Least satisfied | < 17.6 | < 34 |
| Moderate Satisfied | 17 - 34 | 34 - 68 |
| Highly Satisfied | > 34 | > 68 |

The Fifth dimension of the LPPSq Questionnaire is on the services provided in the operation theatre before operation and after surgery. Concerns to service, the statement is patient operated in the given date and time and the post-operative anaesthetist visit. The correct answer of the patient were given score 1 and the other aspect of the service regarding the waiting time before operation in the OT room and staying time in the recovery room was given score as 1 - 4 with interpretation Too Long waiting time to Too Short.

Procedure for data collection: After getting ethical clearance the researcher will obtain written consent from all patients. The questionnaire and the reply envelope will be given to the patients by the postoperative ward staff after the operation and completed questionnaire will be collected during their stay in the ward within 2 days of surgery by the staff. Average one hour was taken by each patient for returning the questionnaire.

Plan for data analysis: Collected data will be analyzed by Descriptive and Inferential statistics. Demographic data like Age, Gender, Residence will be analyzed by Descriptive statistics like Frequency, Percentage, Mean, Standard deviation. Level of satisfaction, association with demographic variable correlation will be analyzed by using inferential statistics like Mean Standard Deviation, Correlation, Chi-square, etc.

Result and Findings

The result of the study in relation to the demographic variables highlights that the mean age of the patients were 40.13 + 8.18 with age range varies from minimum 18 years to 82 years as maximum. 88 [68.2%] and 41 [31.78%] were male and female patients respectively. 109 (84.49%), 13 (10.07) and 7 (5.42%) patients in the study were Hindus, Muslims and Christians respectively. Majority of the patients belong to rural 70 (54.28%) and 59 (45.73%) belonged to urban areas.

Table 1 highlights that Patient Satisfaction in Peri-anaesthetic care in relation to Information depicts 114 (88.3%) highly satisfied, 11 (8.5%) moderately satisfied and 4 (3.1%) patients were least satisfied respectively. Regarding degree of discomfort and needs 2 (1.55%) felt least dis-comfort, 69 (53.4%) felt Moderate dis-comfort and 58 (44.96%) felt high dis-comfort respectively. In relation to fear and concern 24 (18.6%) had less fear, 75 (58.13%) had moderate fear and concern and 30 (23.2%) had high fear and anxiety respectively. Regarding staff patient relationship the value shows 116 (89.1%) highly satisfied, 10 (7.75%) moderately satisfied and 3 (23.2%) patients were least satisfied respectively. Overall satisfaction depicts 33 (25.58%) highly satisfied, 94 (72.8%) moderately satisfied and 2 (1.55%) patients were least satisfied respectively.

| Dimensions | Least Satisfied | | Moderately Satisfied | | Highly Satisfied | |
|-------------------------------|-----------------|-------|----------------------|-------|------------------|-------|
| | N | % | N | % | N | % |
| Information | 4 | 3.1 | 11 | 8.5 | 114 | 88.3 |
| Degree of Discomfort In Needs | 58 | 44.96 | 69 | 53.4 | 2 | 1.55 |
| Degree of Fear and Concern | 30 | 23.2 | 75 | 58.13 | 24 | 18.6 |
| Staff Patient Relationship | 3 | 2.32 | 10 | 7.75 | 116 | 89.1 |
| Overall | 2 | 1.55 | 94 | 72.8 | 33 | 25.58 |

Table 1: Percentage Distribution of the Patient Satisfaction on Peri-anaesthetic care.

Table 2 shows that the mean Patient satisfaction level on Peri-anesthetic care was 15.6 ± 1.73 with mean percentage 78.5% related to information, provided during peri-anesthetic care.

| Dimensions | No of items | Mean | SD | Percentage |
|--------------------------|-------------|-------|------|------------|
| Information | 4 | 15.6 | 1.73 | 78.02 |
| Discomfort and needs | 8 | 15.12 | 1.76 | 37.8 |
| Fears and concern | 4 | 9.52 | 4.78 | 47.6 |
| Staff patients relations | 10 | 40.9 | 3.77 | 81.8 |
| Overall | 26 | 81.19 | 7.89 | 62.45 |

Table 2: Mean and SD of patient satisfaction on peri- anaesthetic care.

With regards to discomfort and needs the mean value was 15.08 ± 4.78 , with the mean percentage of 37.8 during peri-anesthetic care. In relation to fear and concern the mean value 9.53 ± 4.78 with 47.6 as percentage. With regards to staff patient relationship the mean value is 40.63 ± 3.77 with the mean percentage of 81.86.

The overall mean patient satisfaction towards peri-anesthetic care shows mean value 80.84 ± 7.89 with mean percentage value of 62.45 which represents that the patients were moderately satisfied.

There is a positive correlation between age and level of patient satisfaction ($r = 0.14$) that as age increases the level of satisfaction increases, when the discomfort and needs of the patients were taken care there increases patient satisfaction ($r = 0.57$), for Information and decision making ($r = 0.50$) and Waiting time in the operating room ($r = 0.12$) shows positive correlation.

There is significant association between the age, sex and residence of the patient with their level of patients satisfaction ($p < 0.05$). Older patients shows higher level of satisfaction may be due to level tolerance and understanding, Males are more satisfied than the female patients and the rural peoples are highly satisfied than the urban people. It may be due to as urban people are more aware of health the demand may be more.

Discussion

The present study result related to the Information and decision making dimension revealed 114 (88.3%) patients are highly satisfied, 11 (8.5%) patients were moderately satisfied and 4 (3.5%) patients were least satisfied. With reference to the degree of fear and concern depicts 24 (18.6%) were highly satisfied, 75 (58.13%) patients were moderately satisfied and 30 (23.2%) were least satisfied. In relation to staff patient relationship depicts 116 (89.9%) patients were highly satisfied, 10 (7.75%) were moderately satisfied and 3 (2.32%) patients were least satisfied. In response to the waiting time in the holding bay of the operating room depicts 22 (17.05%) patients waited too long, 91 (70.54%) patients waited long, 13 (10.07%) patients were just right and 3 (2.32%) patients had short stay in the holding bay.

This result supported by the study conducted by Heidegger T., *et al.*, revealed in their study, that patient satisfaction is primarily determined by Information and communication, so decisions should be shared between the anesthesiologist and the patient.

Pratamaporn Chanthong., *et al.* [13] reviewed 379 abstracts about patient satisfaction and ambulatory surgery. Only 131 were analyzed. 13 articles reported satisfaction with pre-operative assessment, 27 articles reported satisfaction with pain and discomfort.

Baroudi ND., *et al.* [4] conducted a study involving 1000 patients out of which 803 patients were included in the study with response value of 80.37%. Information and decision making was 84.47% satisfaction, Pain controlled in the Postoperative ward delivered a higher patient-satisfaction. Recovery room satisfaction dimension 77.17%. Fear and anxiety was very obvious 57.4%. The overall patient satisfaction was around 85%.

Moura AC., *et al.* [14] conducted a study in a sample of 107 patients, who underwent elective surgery as inpatients at hospital de Sao Joao. The values of satisfaction for discomfort was 66.68%, Fear 65.91% and staff 83.4%. Dissatisfaction was mainly seen in fear and discomfort dimensions, and high satisfaction levels were found regarding the staff patient relationship.

Jain., *et al.* [15] has revealed in their study of 400 patients, admitted to Gandhi memorial college about patient satisfaction; The study implied that 70% patients were satisfied with the good doctor patient relationship, and 78.3% were satisfied with nurse patient relationship.

Dr. Amarjeet singh., *et al.* conducted a prospective study of 120 surgical patients who underwent laparoscopic surgery pertaining to demographic parameter (age, gender, education, duration of stay-pre operative room, recovery room, various patient problems and patient satisfaction. In this study, pre-operation assessment 24%, pre-operative holding area (4%), recovery room (5%), post-operative symptoms 75% (pain, vomiting and memory of extubation [13-16].

The result of the present study in relation to post anaesthesia complication and outcome in the level of patient satisfaction shows that 2 (1.55%) of the patients were highly satisfied, 69 (53.4%) patients were moderately satisfied and 58 (44.96%) of the patients were least satisfied. This is supported by Kazuyoshi Nakahashi, *et al.* 2004 conducted a retrospective study of 9974 patients who received anaesthesia for elective surgery between 1999 - 2002. Pre-anaesthetic, intraoperative and post-operative variable were recorded. Patient satisfaction was assessed using direct interview at the post anaesthetic clinic 3.9% had dissatisfaction with anaesthetist. Rates of dissatisfaction were higher in women than in men [17].

Limitation

- Sample size was small so the result cannot be generalized.
- As this tool for data collection was used is standardized tool so this was not validated.
- All the types of operations are included so there might be some bias in responses as it depend on types of operation too.

Conclusion

This study demonstrates that the three essential dimensions of high satisfaction with anaesthetic care are:

1. Adequate pre-operative patient information
2. Good staff patient relationship and
3. Efficient post-operative visits: The discomfort, needs, fear and concern, memory of extubation and long waiting time are the determinant factors for patient dissatisfaction.

These factors are preventable and should be emphasized to manage efficiently and effectively in timely manner.

Based on this study the overall proportion of the patients were moderately satisfied on the peri-anaesthetic care.

To conclude

1. Effective communication with the patient, keeping the patient well informed about anaesthesia, complications of anaesthesia, post-operative symptoms and involving the patients in decision making increases the level of patient satisfaction.
2. Effective interaction between the patient and the anaesthetist reduces the fear and anxiety which in turn builds trust and confidence thereby enhances the patient satisfaction.
3. Managing the post-operative pain, discomfort, vomiting, shivering etc. efficiently and effectively enhances the level of patient satisfaction.
4. Reducing the waiting time in the holding bay of the operating room reduces anxiety thereby reflecting higher levels of patient satisfaction
5. A good staff patient relationship, the post-operative visit by the anaesthetist and interacting with them and timely management of the post-operative symptoms greatly enhances the level of satisfaction.

Being in an era of consumerism, in future, anaesthesiologist should get more and more intricate with the patient care during the pre-operative visit, patient preparation and subsequent postoperative care. This study strengthens this view point and these endeavours may result in greater satisfaction among the patients towards perioperative care.

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