



## ANAESTHESIOLOGIST'S ROLE AS PERCEIVED BY THE PATIENT

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**ABSTRACT**

Anaesthesiologists provide perioperative care throughout the surgical procedure. Patient satisfaction is one of the indicators of the quality of health care provided. The aim of this study was to determine the level of patient satisfaction with patient involvement in decision making. 200 patients, who were operated between May 1 to May 15 2017, were given a standardized questionnaire on postoperative day 1 by the anaesthetist involved in patient care. Data was entered and analysed and chi square test was used to assess the association between each factor and patient satisfaction. Results were presented as percentage of proportion of patients satisfied with our services. 200 patients were operated and 174 patients participated in the study and 96 % were satisfied with our services. The causes of dissatisfaction in the remaining 4 % were postoperative pain, nausea, vomiting, postoperative sore throat and shivering. This could be prevented by an appropriate perioperative plan.

**KEYWORDS** : Patient satisfaction, perioperative management, contributing factors.**INTRODUCTION**

Anaesthesiologists can make significant contributions to patient's safety and outcome by providing perioperative care throughout the surgical procedure. This includes medically evaluating the patient before surgery (pre op), consulting with the surgical team, providing pain control and supporting life functions during the surgery (intra op), and supervising care after surgery and discharge of the patient from post anaesthesia care unit.

Patient satisfaction is one of the indicators of the quality of health care provision. There is inconsistency regarding patient satisfaction report which may be attributed to differences in institutional structures, interpersonal relationships, competence of health professional, patient expectations and preferences and variations in tools that are used for data collection<sup>1</sup> Patient involvement in decision making increases satisfaction with anaesthesia services. The primary aim of this study was to determine the level of satisfaction with patient involvement in decision making. Secondary objective was to analyse patient's preoperative fears and concerns.

Preoperative visit enables the anaesthetist to know about the patient's general health status and the nature of the surgery allowing medical optimisation of the patients preoperatively<sup>2</sup>. It also helps to decide the type of anaesthesia and to discuss the perioperative complications and their management with the patient thus preventing operating room delays and cancellations due to inadequate assessment of the patient.

**MATERIALS AND METHODS**

A cross-sectional study was conducted in St John's medical college and research centre which is tertiary care hospital. Institutional ethical committee approval and patient consent was obtained. Over a period of 2 weeks all the patients who underwent either elective or emergency surgery were given a questionnaire on post operative day 1 of surgery. Patients experience during pre operative, Intraoperative and postoperative period were documented. All the patients who were operated during this period were included in the study, Children less than 16 years of age, patients who are unable to communicate, and those who were shifted to ICU on ventilator were excluded from the study

**RESULTS:**

A total of 200 patients were operated under anaesthesia during the study period. Of these 3 refused, 25 were less than 16 years and 8 patients were shifted to intensive care post operatively. A total of 174 patients were included in this study. 123 patients were operated under general anaesthesia, 51 under regional anaesthesia. 114 were

major surgeries and 60 were minor surgeries. Out of these 96 belonged to ASA grade 1, 51 ASA grade 2 and 27 belonged to ASA grade 3.

Out of 174 patients who participated in the study 96 % of the patients were happy with the anaesthesia care provided which is in par with the international standards

**Statistical Analysis**

The findings were presented as percentage, tables used to present descriptive statistics. Data was entered and analysed using SPSS 20 and chi square test was used to assess the association between each factor and patient satisfaction. Results were presented as percentage of proportion of patients satisfied with our services.

Preoperatively, (Table 1) out of 174 patients 165 were happy with the approach of the anaesthetist and 170 patients were satisfied with the introduction, 165 of them were provided with relevant information regarding anaesthesia and possible complications like nerve injury, headache and backache with regional anaesthesia and sore throat, airway trauma, nausea and vomiting with general anaesthesia. 155 patients were given the options of anaesthesia and were allowed to choose the type of anaesthetic. 169 of them were given the information regarding the scheduled time of surgery and fasting status. 171 patients were given premedication and 160 of them were given instructions regarding relevant investigations and medications to be taken prior to surgery. 167 patients' anxiety levels were significantly reduced before surgery.

Intraoperatively, (Table 2) 170 patients were satisfied with reception, 5 patients were unhappy because of long fasting hours as there was a delay in their surgery. But intravenous fluids were administered to these patients preoperatively. 7 patients were not satisfied as there was a delay in shifting due to various reasons (pending investigation, delayed payment, inadequate staff to shift, and non availability of attending personnel.) 164 of them did not have pain on induction and none of the patients had Intraoperative awareness under general anaesthesia. Patients who received regional anaesthesia were given sedation when requested. 2 patients had pain during surgery and 14 of them had pain immediately after surgery.

Postoperatively, (Table 3) all the patients were visited by the attending anaesthetists. 14 of them complained of severe pain, 6 of them had shivering and there was a delay in shifting 7 patients to the ward. 12 patients who received general anaesthesia had sore throat on the first postoperative day and 10 patients complained of nausea and vomiting

**DISCUSSION**

Patient satisfaction is an important outcome of the quality of care provided during the peri-operative period we found a high rate satisfaction with anaesthesia care in patients interviewed on the 1<sup>st</sup> day after surgery. The overall patient satisfaction was 96% during the preoperative period, 97 % during the Intraoperative period and 95 % during the postoperative period. These results were comparable with the results of other studies conducted in different countries. Post operative visit by the Anaesthetist involved, provides the continuity of care, where the immediate medical needs of the patient are addressed. Hence it is one of the important factors for patient satisfaction with anaesthesia care.<sup>3</sup>

Baruod et al<sup>4</sup> conducted a study which showed that the level of dissatisfaction was more among patients who could read or write but in our study educated people were more satisfied as they were able to understand the perioperative implications better as they had prior information about our services.

Patients who were operated under regional anaesthesia were more satisfied than the ones operated under general anaesthesia. Patients under regional anaesthesia had better postoperative pain relief and less nausea and vomiting. Patients operated under general anaesthesia had an increased incidence of post operative pain, sorethroat nausea and vomiting. But in a study by Nakahashi et al<sup>5</sup> Patients who were operated under regional anaesthesia were more dissatisfied probably due to a smaller number Out of 174 patients 2 of them had pain during surgery. These patients were operated under brachial plexus block and the pain could have been due to sparing of certain nerve fibres. These patients were given general anaesthesia when they complained of pain. 14 of them complained of immediate postoperative pain.(p=0.0001) This problem could have been avoided by having an appropriate pain management protocol during the Intraoperative period and also planning an ultrasound guided nerve block under anaesthesia for better postoperative pain relief

The reported incidence of nausea and vomiting following surgery is 30%<sup>6</sup>. It was 6% in our study. 10 patients complained of nausea and vomiting out of which 5 had vomiting. This could have been avoided by identifying the patients at risk and prescribing rescue antiemetics 8(6.3%) of our patients suffered from shivering during the immediate post operative period (p=0.01) which was far less compared to other studies This could be attributed to adequate warming and Intraoperative temperature monitoring in our patients. Both neuraxial (epidural and spinal anesthesia) and general anesthesia are associated with a significant incidence of shivering, and the incidence is 40%-60% in regional anesthetic patients and up to 60% in general anesthetic ones<sup>7</sup>

13 patients operated under general anaesthesia complained of sorethroat. The remaining 110 patients did not complained of sore throat. Incidentally all the 13 patients had undergone major surgical procedure. Incidence of post operative sore throat varies between 20 74 % in post operative patients population which was significantly higher as compared to our patients.<sup>8</sup>

None of the patients who were operated under general anaesthesia had Intraoperative awareness. The incidence of Intraoperative awareness is 0.1-0.2%<sup>9</sup>. 100 % patient satisfaction with regards to Intraoperative awareness could be due to benzodiazepine premedication and better patient monitoring facilities like entropy. Patient's dissatisfaction in our study was due to poor postoperative pain control. nausea and vomiting, sore throat and postoperative shivering. These results were similar to the results of a study conducted by Adel Ali Alshehri et al<sup>10</sup>Type of anaesthesia, informative visit preoperatively, control of postoperative symptoms are the important predictors of patient satisfaction. Good communication involving the patient in decision making ,an appropriate plan for post operative pain relief ,identifying the patients at risk of post operative nausea and vomiting during the pre operative visit and prophylactic antiemetic therapy, using appropriate warming devices can improve the level of patient satisfaction and thereby a better quality of care.

Knowledge deficit regarding Anaesthesiologist's role, in their perioperative care, may contribute to anxiety among surgical patients. As the interaction between the patient and Anaesthesiologist is limited, there is a need for other methods of communication to provide information regarding anaesthesia which includes handouts and internet. Patient education handout during the preoperative visit and a feedback from the patients before discharge from the hospital in the form of predesigned questionnaire will greatly improve the quality of care provided

**CONCLUSION:**

The incidence of patient satisfaction during the perioperative period was 96%. For a better outcome, a post anaesthesia visit should be made mandatory to address the problems of the patients during the immediate post operative period. Type of anaesthesia, informative visit preoperatively, control of postoperative symptoms are the important predictors of patient satisfaction.

**PRE-OPERATIVE (Table 1)**

QUESTION	YES	NO	PERCENTAGE	P VALUE
Did the anaesthesiologist introduce himself/herself during preoperative visit?	170	4	97%	0.521
Was relevant information regarding anaesthesia and possible complications given to the patient?	165	9	95%	0.423
the patient given a chance to choose the type of anaesthesia	155	19	89%	0.561
Were the patient given a chance to ask questions about anaesthesia?	166	8	95%	0.021
Were the patient given a chance to ask questions about anaesthesia?	168	6	98%	0.432
Was the time of scheduled surgery mentioned?	169	5	98%	0.441
Was information regarding fasting status mentioned?	166	8	97%	0.354
Was premedication advised?	171	3	98%	0.033
Was the doctor cordial and reassuring during the visit?	163	11	93%	0.132
Did the anxiety level come down after preoperative visit by anaesthetist?	167	7	95%	0.242

**INTRA-OPERATIVE (Table-2)**

QUESTION	YES	NO	PERCENTAGE	P VALUE
Was reception by the OT personnel satisfactory ?	170	4	97%	0.433
Did the patient sleep comfortably at night?	162	12	93%	0.001
Was the duration of fasting more than necessary?	5	169	98%	0.232
Was intravenous fluids commenced during fasting period?	169	5	98%	0.012
Was there delay in shifting patient?(pending investigations, pending payments, inadequate staff to shift or non availability of attending personnel)?	166	8	95%	0.233
Was privacy maintained?	174	0	100%	0
Was there pain during induction?	12	164	94%	0.132
Was there intra operative awareness?	0	174	100%	0
Was there pain during surgery?	2	172	98%	0.142
Was there pain immediately after surgery?	14	160	92%	0.01

**POST-OPERATIVE (Table-3)**

QUESTION	YES	NO	PERCENTAGE	P VALUE
Did anaesthetist visit you during the postoperative period?	174	0	100%	0.021
Was there pain in the postoperative period?	14	160	92%	0.001
Was there nausea and vomiting?	10	164	94%	0.001
Was there shivering?	11	163	94%	0.001
Was there a delay in shifting patient back to the ward? YES NO If yes what we're the reasons	7	167	96%	0.012
Was there sore throat?	12	162	93%	0.001

**REFERENCES**

- Endale Gebreegziabher Gebremedhn, Wubie Birle Chekol, Wubet Dessie Amberbir and Teresa Dereje Flatie. Patient satisfaction with anaesthetic services and associated factors at the University of Gondar Hospital, 2013: a cross-sectional study.
- Lau L1, Jan G, Chan TF. Preparation of patients for anaesthesia - achieving quality care. Hong Kong Med J 2002 Apr;8(2):99-105.
- Saal D, Heidgger T, Nuebling M, Germann R. Does post operative visit increase patient satisfaction with anesthesia care? Br J. Anesth. 2011; 107(5):703-709.
- Baroud ND, Nofal HW, Ahmad AN. Patient satisfaction in anesthesia. A modified Iowa satisfaction in anesthesia Scale. Anesth Essays Res. 2010; 4:85-90.
- Furuya H, Nakahashi K, Hirai K, et al. Assessment of patient satisfaction using direct interviews at pot anaesthetic clinic. Masui. 2001; 50(3):240-245.
- Sébastien Pierre, MD Rachel Whelan Nausea and vomiting after surgery Continuing Education in Anaesthesia Critical Care & Pain, Volume 13, Issue 1, 1 February 2013, Pages 28-32
- Hong-Tao Tie, #1 Guang-Zhu Su, #2 Kun He, 2 Shao-Rong Liang, 2 Hao-Wei Yuan, 1 and Jun-Huan Mou 1 Efficacy and safety of ondansetron in preventing postanesthesia shivering: a meta-analysis of randomized controlled trials BMC anaesthesiology 2014;14:12
- Lehmann M, Monte K, Barach P, et al. Postoperative patient complaints: a prospective interview study of 12,276 patients. J Clin Anesth 2010; 22: 13-21.
- Xu L1, Wu AS, Yue Y. The incidence of intra-operative awareness during general anesthesia in China: a multi-center observational study. Acta Anaesthesiology Scand. 2009 Aug; 53(7):873-82.
- Adel Ali Alshehri1, Yasser Mohammed Alomar1, Ghali Abdulrahman Mohammed1, Mazen Saud Al-Fozan1, Mohammed Saleh Al-Harbi1, Khalid Abduraziz Alrobai1, Haroon Zahoor2 A survey on postanesthetic patient satisfaction in a university hospital Saudi journal of anaesthesia Year 2015 Volume: 9 Issue: 3