



**ORIGINAL RESEARCH PAPER**

**Anaesthesiology**

**“A QUESTIONNAIRE STUDY ON PATIENT SATISFACTION AND EXPERIENCE WITH ANAESTHESIA CARE AND SERVICES IN YENEPLOYA MEDICAL COLLEGE AND HOSPITAL, MANGALORE”**

**KEY WORDS:** Patient satisfaction, Anaesthesia care and service, Associated factors

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**ABSTRACT**  
 Patient satisfaction is considered to be an integral part of service quality and is indicator of quality of anaesthesia services. The aim of the study was to assess patient satisfaction with anaesthesia services and associated factors using a questionnaire. A cross sectional study was conducted from December 2016 to February 2017 at the Yenepoya Medical college and Hospital, Mangalore. 144 patients who were operated upon both under general and regional anaesthesia were included. Standardized questionnaire used for postoperative patient interview. Data was entered and analysed using Statistical Package for Social Sciences (SPSS) window. Chi Square test used to assess the association between each factor and the overall satisfaction of patients. Overall proportion of patients who said they were satisfied with anaesthesia services was 84.7% . Factors that affected patient satisfaction negatively were general anaesthesia, inadequate information, no preoperative anaesthetist visit, intraoperative pain, patients who had no postoperative anaesthetist visit . Patient satisfaction with anaesthesia services was low in our setup compared with many previous studies. Factors that affected patient satisfaction negatively may be preventable or better treated. Awareness creation about the current problem and training need to be improved.

**INTRODUCTION**

Patient satisfaction is the degree of fulfilling patients anticipation and is an important component and quality indicator of the health care provision<sup>1</sup>. Pascoe defined patient satisfaction as the patient's reaction consisting of a "cognitive evaluation" and "emotional response" to the care they receive. The clinician's perspective of a good outcome and the patient's experience of a satisfactory service are often two different end-points. Patient satisfaction is multidimensional<sup>2</sup> approach which includes clinical aspects of care, safety, and patients' perception of a satisfactory outcome. Patient satisfaction can be affected by physician patient interaction, perioperative management and postoperative follow up, patients expectations and preferences.

Patient satisfaction can be measured by various methods or tools such as postoperative visits, questionnaires, etc. We conducted a questionnaire study with an aim to know patient satisfaction with our anaesthesia services and care in our hospital.

**METHODOLOGY**

A cross sectional study was conducted between the time period of December 2016 to February 2017. Those patients undergoing various surgical procedures under anaesthesia who gave consent for participating in study were included. Study was started after Ethical committee clearance was taken. Exclusion criteria's were Patients who were too ill preoperatively (ASA> 3,4), Patients who are too illiterate to cooperate for study, Age < 18yrs were in exclusion criteria. Sample size calculated was 134.

A questionnaire was prepared which underwent pilot study and expert opinion. It included 22 questions focused over preoperative, intraoperative and postoperative period. All questions were asked to patients in postoperative area. Help of nursing staff in postoperative area was taken. Total sample size collected was 144. Results were used for statistical analysis. SPSS window was used for data entry and analysis for association between factors was done using chi square test.

**RESULTS**

**SOEIODEMOGRAPHIC DATA :** A total of 144 patients were included in the study majority of the subjects were males (92) with 63.9% and the rest (52) were females with 36.1%. The mean age of the study subjects was 42.34 yrs (SD = 14.2), with minimum and maximum value 18 and 75years respectively. 61(42.3%) patients

were below age group of 40yrs, 66 (45.8%) were 40yrs to 60yrs and 17 (11.8%) patients were above 60yrs. Of the participants, 16 (11%) were unable to read and write, 53 (36.8%) were below 9<sup>th</sup> grades, 54(37.5 %) were 9–12 grades and 21(14.6 %) were above grade 12 or graduates.

Among 78(54.2%) patients who underwent regional anaesthesia 5 were operated under brachial plexus block, 52 under spinal anaesthesia, 21 under combined epidural spinal anaesthesia. 66 patients (45.8 %) were operated under general anaesthesia. 87(60.4%) were ASA1, 57(39.6%) were ASA 2.

**Table 1 Type of anesthesia, surgery and disease status**

FACTOR	FREQUENCY	PERCENTAGE
<b>TYPE OF ANAESTHESIA</b>	66	45.8
General		
Regional	52	36.1
- spinal	21	14.6
- epidural+spinal	5	3.5
- brachial block		
<b>TYPE OF SURGERY</b>	48	33.3
MINOR	96	66.7
MAJOR		
<b>ASA - 1</b>	87	60.4
2	57	39.6

**Preoperative anaesthetic evaluation**

From 144 patients, 139 patients had preoperative visit. Total of 129 (92.1%) participants told that their anaesthetists approach was good. 133 (92.4%) patients told that anaesthetist explained to them about the type of anaesthesia given, risks and complications associated with it.

Among the responders, 131 (91%) of them explained that information given to them by the anaesthesiologists was satisfiable & understandable. Among 144 patients 123 patients explained that anaesthetist encouraged/allowed them to ask questions. 133 patients told that anaesthetist answered their questions clearly. Talking with anaesthesiologist during the preoperative visit made 125 patients (86.8%) feel more calm and relaxed.

**Table 2. PREOPERATIVE ANAESTHETIC EVALUATION**

FACTOR	FREQUENCY	PERCENTAGE
<b>PREOPERATIVE VISIT</b>		
YES	139	96.5
NO	5	3.5
<b>ANAESTHETIST INTRODUCTION TO PATIENT</b>		
YES	140	
NO	-	100
<b>ANAESTHETISTS APPROACH</b>		
GOOD	129	92.2
BAD	11	7.8
<b>ANAESTHETISTS EXPLAINED ABOUT PROCEDURE</b>		
YES	132	91.7
NO	12	8.3
<b>ADEQUATE ANAESTHESIA INFORMATION</b>		
YES	130	92.8
NO	10	7.2
<b>CHANCE TO CHOOSE TYPE OF ANAESTHESIA</b>		
YES	144	100
NO	0	0
<b>CHANCE TO ASK QUESTIONS</b>		
YES	119	85
NO	6	4.2
SOMEWHAT	15	10.8
<b>PHYSICAL EXAMINATION</b>		
YES	124	86.1
NO	20	13.9
<b>ANAESTHETIST ANSWERED QUESTIONS CLEARLY</b>		
YES	133	92.4
NO	11	7.6

**Intraoperative and Postoperative**

Out of 144 patients 138 patients(95.8%) told that anaesthetist and Operation theatre personnel introduced themselves before procedure. 133 patients(92.4%) told that staff of the operating room and recovery area take into account of patients privacy, but 11 patients(7.6%) were unhappy with their concerns about their privacy in operating room and recovery area. 11 patients (7.6%) explained that they experienced pain during surgery.

Out of 66 patients underwent general anaesthesia none of them remembered anything during intraoperative period. 129 patients told they would recommend the anaesthesia team to their family. 126 (87.5%) patients told their anaesthetist visited them after surgery in postoperative ward. All patients who were visited postoperatively were treated for their complaints.

**TABLE 3. INTRAOPERATIVE EVENTS**

FACTOR	FREQUENCY	PERCENTAGE
<b>RECEPTION AND INTRODUCTION OF OT STAFF</b>		
YES	138	95.8
NO	6	4.2
<b>PRIVACY</b>		
SATISFIED	134	93.1
SLIGHTLY DISSATISFIED	10	6.9
DISSATISFIED	0	0
<b>PAIN INTRAOPERATIVELY</b>		
YES	11	92.3
NO	133	7.7
<b>AWARENESS</b>		
YES	0	0
NO	144	100

<b>ATTENTION TO COMPLAINTS (regional)</b>		
SATISFIED	71	91
SLIGHTLY DISSATISFIED	7	9
DISSATISFIED	0	0
<b>RECOMMEND SAME ANAESTHESIA TEAM TO YOUR FAMILY</b>		
YES	129	91.4
NO	12	8.6

**TABLE 4. POSTOPERATIVE ANAESTHETIST REVISIT**

FACTOR	FREQUENCY	PERCENT
<b>ANAESTHETIST VISIT AFTER OPERATION</b>		
YES	111	77.1
NO	33	22.9
<b>TREATMENT OF COMPLAINTS</b>		
SATISFIED		
SLIGHTLY DISSATISFIED	120	83.3
DISSATISFIED	24	16.7
	0	0
<b>ATTENTION TO COMPLAINTS</b>		
SATISFIED	128	88.9
SLIGHTLY DISSATISFIED	16	11.1
DISSATISFIED	0	0
<b>POSTOPERATIVE PAIN THERAPY</b>		
SATISFIED	116	80.6
SLIGHTLY DISSATISFIED	25	17.4
DISSATISFIED	3	2.1
<b>OVERALL SATISFACTION RATE WITH ANAESTHESIA CARE AND SERVICES</b>		
SATISFIED	122	84.7
SLIGHTLY DISSATISFIED	19	13.2
DISSATISFIED	3	2.1

**SATISFACTION RATES**

The overall proportion of patients who said they were satisfied with anaesthesia services in this study was 84.7 % and 13.2% were slightly dissatisfied. Out of 92 male patients, 78(84.8 %) were satisfied and 11(12 %) were slightly dissatisfied and 3(3.3%) were dissatisfied. Whereas from 52 female patients, 44(84.6 %) were satisfied and 8(15.4 %) slightly dissatisfied and none were dissatisfied. (male vs. female, P = 0.361). Among 61 patients who are <40yrs, 53(86.9%) were satisfied, 7(11.5%) were slightly dissatisfied and 1(1.6%) was dissatisfied, among 66 patients aged btw 40 to 60yrs 54(81.8%) were satisfied, 11(16.7%) were slightly dissatisfied and 1 was dissatisfied.

From 16 illiterate patients, 14 (87.5 %) were satisfied, none are dissatisfied and 2 (12.5 %) slightly dissatisfied. Of 25 patients who have studied below 8<sup>th</sup> class,22 (88 %) were satisfied, 1(4%) are dissatisfied and 2(8%) slightly dissatisfied. Out of 82 patient with grades 8–12, 69 (84.1 %) were satisfied, 1(1.2%) dissatisfied and 12(14.6%) were slightly dissatisfied. Whereas among 21 patients with qualification of >grade 12, 17(81 %) were satisfied, 1(4.8 %) dissatisfied, 3 (14.3%)slightly dissatisfied.

Of 66 patients who managed under general anaesthesia, 50 (75.8 %) were satisfied, 14(21.2%) patient was slightly dissatisfied and 2(3%) dissatisfied. Whereas of 52 spinal anaesthesia cases, 50 (96.2 %) were satisfied, 1 was slightly dissatisfied and 1 (1.9 %) dissatisfied. Among 21 patients who underwent combined spinal epidural 17(81%) were satisfied with remaining patients slightly dissatisfied and among 5 patients who underwent brachial plexus block all were satisfied.(GA vs. RA, P = 0.022).

From 96 patients who had major operation, 82 (85.4 %) were satisfied.12(12.5%) were slightly dissatisfied and 2(2.1 %) dissatisfied. Out of 48 minor operations, 40 (83.3 %) were satisfied,7(14.6%) were slightly dissatisfied and 1 (2.1 %) was dissatisfied (major vs. minor, P = 0.119). Out of 131 patients who had adequate information about anaesthesia, 114 (87 %) were satisfied,17(13%) were slightly dissatisfied and none were

dissatisfied. Whereas among 13 patients who did not get information, 8 (61.5 %) were satisfied and 2 (15.4%) were slightly dissatisfied and 3 (23.1%) were dissatisfied. (Adequate information vs. inadequate information, P=0.001).

Among 139 patients who had preoperative anaesthetist visit 119(85.6%) were satisfied, 18 were slightly dissatisfied and 2 (1.4%) were dissatisfied. 5 did not have preoperative visit. Among those who did not have preoperative visit 60% were satisfied, 20% were slightly dissatisfied, 20% were dissatisfied. (p value 0.753). Among 122 who said they are satisfied with anaesthesia services, 111(90.9%) were satisfied by the explanation given by anaesthetist preoperatively about procedure.

Among 11 patients who had pain intraoperatively, 2 (18.2%) of the patients were dissatisfied and 9(81.8%) were slightly dissatisfied by perioperative anaesthesia care and services(p value <0.001). patients who had postoperative visit (111) , 105 (94.6%) were satisfied. (P value 0.000)

Out of 78 patients operated under regional anaesthesia, 71 patients(91.02%) were satisfied about anaesthesia practitioners attention to complaints like pain and nausea. 116(80.6%) of patients were satisfied with pain therapy postoperatively, 25 patients were slightly dissatisfied, 3 (2.1%) patients were completely dissatisfied.

122 (84.7%) were satisfied with Overall anaesthesia services and care provided to them. 19 (13.2%) were slightly dissatisfied and 3 of patients (2.1%) were completely dissatisfied with overall anaesthesia care provided to them (TABLE 5)

**DISCUSSION**

Measuring the degree of patient satisfaction can be achieved with a variety of tools such as post operative visits and questionnaires. Many factors contribute to patient satisfaction including accessibility and convenience of services that depend upon institutional structures, interpersonal relationships, competence of health professionals and patient expectations and preferences'. This study showed that the overall proportion of patients who said they were satisfied with anaesthesia services was 84.7% in Yenepoya medical college and hospital which is less compared to study done by in Gondor university which had satisfaction rate of 90.4%. This could be due to few factors in perioperative anaesthetic management like anaesthetic introduction, clearing the patients doubts about the procedure, pain, maintaining patient privacy, etc. And also we have used graded responses to questions which was not used by Gordon University. In our study, the level of satisfaction of males was 84.8 % and of females was 84.6 %. But a study done in India showed that females were less satisfied<sup>6</sup>.

In our study, those who were unable to read and write had 87.5 % satisfaction but those who have studied more than 12<sup>th</sup> grade had only 81% of satisfaction rate. This is in accordance to the study conducted in Saudi Arabia showed that the educated were less satisfied<sup>13</sup>. But the study conducted in University of Gondar shows uneducated was less satisfied. This discrepancy might be due to a difference in knowledge about patients to assess pain and discomfort or pain tolerance of patients.

Dissatisfaction rate appears to be mildly higher in patients above 60yrs of age, this is in accordance with study conducted in Gondor university. but in the study conducted in Japan patient dissatisfaction rate was high at the age of 20-39 years old. This difference might be due to small number of aged patients were included in our study. On the contrary, in Japan they included large number of aged patients. All the patients had a chance to choose anaesthesia, from these 122 (84.7%) were satisfied and only 3(2.1 %) were dissatisfied with 19 patients being slightly dissatisfied showing that involvement of patient in decision making had higher satisfaction rates.

In our study patients who underwent regional anaesthesia are

more satisfied (92.3%) compared to general anaesthesia(75.8%). In the study by Gondar university more patients operated upon under regional anaesthesia were satisfied than those operated upon under general anaesthesia, but in the study conducted in Japan patients who operated with regional anaesthesia were dissatisfied. This discrepancy might be due postoperative pain, nauseating sensation or sore throat in general anaesthesia while regional anaesthesia like spinal or brachial block or epidural takes care of postoperative pain. But in a study conducted in Japan, regional anaesthesia had more dissatisfaction.

Patients who had post operative visit were more satisfied (94.6%) than those who did not get visit (51.5%) (visit vs. no visit, P = <0.001). This finding was similar with a study conducted in Gondar University. This could be because of reassurance of patients and patients might get treatment for their complaint at the right time.

Perioperative pain relief is the one of the key reflection of the level of patient satisfaction with anaesthesia service in hospitals. 11 among 144 patients had pain during operation. From these, 9(81.8%) were slightly dissatisfied and 2 (18.2%) patients were dissatisfied (pain vs. no pain, P = <0.001). Out of 144 participants, 118(81.9 %) were encouraged to ask question. of these 2(1.7 %) were dissatisfied, 107 (90.7%) were satisfied and remaining were slightly dissatisfied. (chance vs. no chance, P = 0.102). These findings showed that patient involvement in decision making seems to have a positive impact on patient satisfaction with anaesthesia service which is in accordance with study conducted in university of Gondar.

**CONCLUSION**

Overall proportion of patients who said they were satisfied with our perioperative anaesthesia services yielded a good results even though not satisfactory. but there are few fields where anaesthesia services have to be improved like postoperative pain treatment, awareness during general anaesthesia in our set up. These factors can be prevented or treated. Patient involvement in decision making increases satisfaction with anaesthesia services. Satisfaction appears to be high in patients who had underwent surgeries in regional anaesthesia, preoperative adequate information, preoperative visit, chance to choose type of anaesthesia, physical examination by anaesthetist, clearing patients doubts preoperatively, intraoperative anaesthetists attention for patients complaints, postoperative visit, etc.

**Table 5. THE EFFECT OF FACTORS ON THE OVERALL SATISFACTION OF PATIENTS AND CHI-SQUARE TEST,**

FACTOR	FREQUENCY	Number of PATIENTS Satisfied n(%)	SLIGHTLY DISSATISFIED n(%)	DISSATISFIED n(%)	P VALUE
<b>AGE</b>					
< 40YRS	61	53(86.9)	7 (11.5)	1(1.6)	
40-60YRS	66	54(81.8)	11(16.7)	1 (1.5)	0.26
>60YRS	17	15(88.2)	1(5.9)	1(5.9)	6
<b>SEX</b>					
MALE	92	78(84.8)	11(12)	3(3.3)	0.36
FEMALE	52	44 (84.6)	8(15.4)	0	9
<b>TYPE OF ANAESTHESIA</b>					
GA	66	50 (75.8)	14(21.2)	2(3)	0.02
RA	78	72(92.3)	5(6.4)	1(1.3)	2
<b>TYPE OF SURGERY</b>					
MINOR	48	40(83.3)	7(14.6)	1(2.1)	0.11
MAJOR	96	82(85.4)	12(12.5)	2(2.1)	9
<b>PREOP VISIT</b>					
YES	139	119 (85.6)	18 (12.9)	2 (1.4)	0.75
NO	5	3(60)	1 (20)	1 (20)	6
<b>ANAESTHETISTS EXPLANATION ABOUT ANAESTHESIA</b>					
YES	132	114 (86.4)	17 (12.9)	1(0.8)	0.00
NO	12	8 (66.7)	2(16.7)	2(16.7)	1

<b>ANAESTHETIST ANSWERED QUESTIONS CLEARLY</b>					
YES	133	113 (85)	17(12.8)	3(2.3)	0.24
NO	11	9 (81.8)	2(18.2)	0	4
<b>CHANCE TO CHOOSE TYPE OF ANAESTHESIA</b>					
YES	144	122(84.7)	19(13.2)	3(2.1)	0.00
NO	0	0	0	0	03
<b>CHANCE FOR ASKING QUESTIONS</b>					
YES	119	108(90.8)	09(7.6)	2(1.7)	
NO	6	0	5 (83)	1 (17)	0.04
SOMEWHAT	15	11(73)	4(27)	0	4
<b>PATIENT PRIVACY IN THEATRE</b>					
SATISFIED	134	114 (85)	17 (12.7)	3(2.2)	0.00
SLIGHTLY DISSATISFIED	10	8 (80)	2(20)	0	1
DISSATIFDIED	0				
<b>PAIN INTRAOPERATIVELY</b>					
YES	11	0	9(81.8)	2(18.2)	< 0.
NO	133	122(91.7)	10(7.5)	1(0.8)	001
<b>AWARENESS</b>					
YES	0	-	-	-	-
NO	66	48 (72)	18 (26.2)	1(1.8)	-
<b>POSTOP VISIT</b>					
YES	111	105(94.6)	5(4.5)	1(0.9)	< 0.
NO	33	17(51.5)	14(42.4)	2(6.1)	001
<b>TREATMENT OF COMPLAINTS</b>					
SATISFIED	120	120 (100)	0	0	0.08
SLIG. DISSATISFIED	24	2(8)	19 (79)	3(13)	22
DISSATISFIED	0				

**QUESTIONNAIRE**

**STUDY TOPIC: A QUESTIONNAIRE STUDY ON PATIENT SATISFACTION AND EXPERIENCE WITH ANAESTHESIA CARE AND SERVICES IN YENEPOYA MEDICAL COLLEGE AND HOSPITAL, MANGALORE**

Name(optional): .....

Sex : .....

Age : ..... years

Educational status : .....

Occupation(optional) : .....

Type of anesthesia : General/Regional

Type of surgery : Minor/Major

American Society of Anesthesiologists (ASA) status : 1/2

**PREOP**

- 1) Did anaesthesiologist visit you before your surgery ? Yes/No
- 2) Did Anaesthetist introduced himself/herself Yes/No
- 3) How did you get the anaesthetist's approach to u? Good/ Bad
- 4) Did you get a chance to choose (if choices are available) the type of anaesthesia? Yes/No
- 5) Did anaesthetist explained you about type of anaesthesia, procedure, complications & risks associated, modes of postoperative pain treatment before surgery? Yes/No
- 6) Did anaesthetist do any physical examination? Yes/No
- 7). The Anesthesia practitioners explained to me how I would feel during induction & after anaesthesia? Yes/No
- 8). The information given to me by the anaesthesia practitioners was satisfiable & understandable? Yes/No
- 9). Did this anaesthesiologist encourage you to ask questions? Yes, somewhat, No
- 10). Did the anaesthesiologist answer your questions clearly? Yes, somewhat, No
- 11). Did talking with anaesthesiologist during the visit make you feel more calm and relaxed? Yes, somewhat, No

**INTRAOP**

- 12). Did anaesthetist and Operation theatre personnel introduced themselves before procedure? Yes/No
- 13). To what degree did the staff of the operating room and recovery area take into account your privacy? Dissatisfied, slightly dissatisfied, satisfied
- 14) Did you feel pain during surgery? Yes/No
- 15). To what degree did your anaesthesia practitioners pay attention to your complaints like pain and nausea (if regional) ? Dissatisfied, slightly dissatisfied, satisfied
- 16). Did you remember anything during the intraoperative period (for general anaesthesia)? Yes/No
- 17). I would recommend the anaesthesia team to yourself/ others in my family? Yes/No

**POSTOP**

- 18). Did anaesthetist visit you after surgery in postoperative ward? Yes/no
- 19). To what degree did your anaesthesia practitioners pay attention to your complaints like pain and nausea? Dissatisfied, slightly dissatisfied, satisfied
- 20) How satisfied were you with pain therapy after surgery ? Dissatisfied, slightly dissatisfied, satisfied
- 21 ) How satisfied were you with treatment of your complaints ?? (if any present like Nausea and vomiting, Shivering. Depression, Sore throat) Dissatisfied, slightly dissatisfied, satisfied
- 22) Were you satisfied with overall anaesthesia services provided to u? Dissatisfied, slightly dissatisfied, satisfied

**REFERENCES**

- 1) Gebremedhn E G, Chekol W B, Amberbir W D, Flatie T D. Patient satisfaction with anaesthesia services and associated factors at the University of Gondar Hospital, 2013: a cross-sectional study. BMC Res Notes (2015) 8:377
- 2) C Lapere, J Roelofse, Y Omar, A du Plessis, A von Backstrom, W Botha et al Patient satisfaction during and following procedural sedation for ambulatory surgery. SADJ November 2015, Vol 70 no 10 p442 - p447
- 3) P. M. Whitty, I. H. Shaw and D. R. Goodwin, Patient satisfaction with general anaesthesia Too difficult to measure? Anaesthesia, 1996, Volume 5 1, pages 327-332
- 4) Myles P S, Williams D.L, Hendrata M.H, Anderson, A.M. Weeks, Patient satisfaction after anaesthesia & surgery; Results of a prospective survey of 10811 patients, Br J Anaesth 2000; 84(1): 6-10
- 5) Philip J. Keep, and Jennifer R Jenkins, From the other end of the needle. The patient's experience of routine anaesthesia, Anaesthesia, 1978, Volume 33, pages 830-832
- 6) Singh A, Dutta A, Sood J. Influence of multi level anesthesia care. Indian J Anesth. 2007;51(2):106-10.
- 7) Heidegger T, Nuebling M, Germann R, et al. Patient satisfaction with anesthesia care; information alone does not lead to improvement. Can J Anaesth. 2004;51:801-5.
- 8) Thidke C.C. What do we really know about patient satisfaction? Fam Pract Manag. 2007;14(1):33-6.
- 9) Capuzo M, Alvisi R. Is it possible to measure and improve patient satisfaction with anesthesia? Anesthesiol Clin. 2008;26:613-26.
- 10) Gubta A, Gubta N. Patient's experiences and satisfaction with prean-esthesia services: a prospective audit. J Anaesthesiol Clin pharmacol. 2011;27(4):511-5.
- 11) Caljouw AAM, Van Beuzekom M, Boer F. Patient's satisfaction with periop-erative care. Development, validation and application of questionnaire. Br J Anaesth. 2008;100(5):637-44.
- 12) Nakahashi K, Motozu Y, Sasaoka N, Hirai K, Kitaguchi K, Furuya H. Patient satisfaction with anesthesia care. Masui. 2004;53(10):1136-42.
- 13) Baroud ND, Nofal HW, Ahmad AN. Patient satisfaction in anesthesia. A modified Iowa satisfaction in anesthesia Scale. Anesth Essays Res. 2010;4:85-90.