

## Anesthesiologist's Attitude Towards Preoperative Patients' Education Needs

Ravanbakhsh Esmaeeli and Ebrahim Nasiri  
Mazandaran Medical University, Sari, Mazandaran, Iran

**Abstract:** Lack of information about anaesthesia and fear of post operation consciousness, pain, nausea and vomiting increases patient's anxiety. There are various reports about patient's desire for preoperational information in Iran and other countries, but we don't find any study related to anesthesiologist's view about patient's needs before anaesthesia and operation. This descriptive (cross-sectional) study was done in 2005 on 110 anesthesiologists working in hospitals of Mazandaran province. Questionnaire containing 4 questions about demographic and 18 questions related to anaesthesia was prepared. Attitude of the anesthesiologists was studied by dividing in 4 categories based on Likert rating scale as follow: strongly agree, agree, particularly agree, disagree and strongly disagree. The obtained data were shown in table; chi-square test was used for the statistical analysis of the data. Results of this study showed that the most positive attitude of anesthesiologists about patient teaching was related to the proper explanation about duration of N.P.O before operation (97.3%) and 52.7% were against about giving explanation of the during and post operation possible problems. In this regard no significant difference was observed between educational and non educational hospitals ( $p < 0.018$ ). No significant view point difference was observed between anesthesiologists at different level of education ( $p < 0.07$ ). Considering the positive attitude of the anesthesiologists towards education to preoperational patients, it is recommended that such education be implemented and the patients be charged for preoperational consultation. In order to give explanation about anaesthesia at proper time, when needed.

**Key words:** Anesthesiologists, information about anaesthesia, anxiety, patients, education needs

### INTRODUCTION

Collaboration of patient in treatment and care and understanding about the treatment process has an important status. Special perspective about surgery and operating theatre and anaesthesia process creates a condition that getting information and consent from the patient in the pre surgery period (Asenoune *et al.*, 2000; Inglis and Franil, 1993).

Inessential counseling and pre surgical visit creates the required condition for conscious consent for Anaesthesia and surgery by the patient (Nasiri *et al.*, 2004).

Since lack of information about Anaesthesia and fear of the unknown, fear of losing control, fear of not waking up, pain, nausea, vomiting after the operation is an important cause of Anxiety and the presence of Anxiety before surgery would cause an enormous need in the patients to medicine and it may even cause more complications in the post surgical period (Nasiri and Geriban, 2002; Dugas, 1994; Kain *et al.*, 1997).

The important goal before the operation and Anaesthesia by the Anesthesiologists, familiarity with

the present disease and making appropriate contact with the patient, prediction and selection of an appropriate method for anaesthesia reminding of the dangers and advantages of these method and finally getting the patient approval for anaesthesia has a lot of importance in decreasing Anxiety in the patient. It seems that inspection and complete familiarity with the patient, conversation consultation and Corresponding to important questions has an important role in returning to consciousness from anaesthesia so that in referral treatment centers 90% of patients problems could be solved by Appropriate history, clinical inspection and good communication with the patient (Horford *et al.*, 2004; Bugge *et al.*, 1998; Lansdale and Hutchison, 1991). Today with the increase of out patient surgery in developed countries and impossibility of visit before the day or the night of the surgery, pre surgery consultation clinics has been created as an alternative for analysis and appropriate response to the needs of the patient and this action shows the essentiality of the patient and anesthesiologist communication before surgery (Schultz, 1998; Shimoda and Suzukim, 1994).

Regarding this point that the hospitals inside of Iran and usually surgeons do a series of assays and consultations before surgery, as a routine and also the status of out patient surgery comparing to inpatient admission is not very active and on the other hand, in common visits of the anesthesiologist and the patient in our hospital the patients file is analyzed very fast in maximum of three minutes even for inpatient cases (Nasiri *et al.*, 2004; Nasiri and Gariban, 2002).

Therefore in a short period of time not only there is not enough analysis but also the needs of patients are not corresponded. Regarding conscious consent about anaesthesia and its legal importance and regarding the interest of the patients to get some information about anaesthesia and the doctor's attitude in order to give some explanation about anaesthesia process and the needs of the patient to learn something about anesthesiology, the aim of present study was analyzed the attitude of the anesthesiologists teaching and non teaching hospitals in Mazandaran about teaching the needs of the patient about anesthesiology before surgery.

## MATERIALS AND METHODS

In a cross sectional study that all the anesthesiologists of teaching hospitals and non teaching hospitals in Mazandaran province that placed the north of Iran, including anaesthesiology doctors, experts and masters went under study and regarding limitation of the group under study, the interested anesthesiologists under went study as a sample. The instrument of research was a questionnaire form that included three sections. In section one there were four demographic questions and section two eighteen technical questions and section three included one retrospective question that its reliability was determined by getting expert opinion. Eighteen attitudinal questions based on Likert system were evaluated. The questionnaire after admission to sample units and after completion was gathered. One hundred and ten of the anesthesiologists of Mazandaran province completed in 2005 year and the forms and returned them. The results were analyzed with the use of the tables and descriptive statistic exam.

## RESULTS

The results showed 68 (61.8%) of anesthesiologists were male and 42 (38.2%) were female. Most of the anesthesiologists were anesthesiologists specialist and the fewest of them were anesthesiology masters.

Table 1 shows the demographic characteristics. The average work experience of our samples was 8.15±5.4 years that the maximum was 25 and minimum was one year.

Table 1: Frequency distribution of variables based on sex, Level of education and the educational and non educational hospitals Located in Mazandaran Province-2005

Variables		Number		Total
		Number	(%)	
Gender	Male	68	61.8	110
	Female	42	38.2	
Hospital	Educational	62	56.4	110
	Non educational	48	43.6	
Level of education	Post diploma	29	26.4	110
	Bachelor	34	30.9	
	Master degree	5	4.5	
	Specialist	42	38.2	

The results of the research showed that the most positive attitude on the 18 technical item of survey was related to the length of the patients NPO at the day of surgery and 9.73% of anesthesiologists consider it essential to be explained to the patient before surgery and only 0.09% of them were against explanation about this matter.

Only 30.9% of the anesthesiologists had positive attitude about explaining the lethal and dangerous side effects that may pursue during anaesthesia and this percentage of positive attitude had the lowest rate among the 18 technical aspects that must be explained to the patient before surgery.

Table 2 shows the condition of anesthesiologist's attitude about the required information among the patient and explanation.

The result of the survey showed there is not a significant difference between the attitude of the anesthesiologists at the teaching hospital and non teaching hospital about the required information for the patients ( $p>0.05$ ), but in some cases like explaining about the length of time that the patient can eat and drink in the next stage of anaesthesia and explaining about the kind of anaesthesia and teaching the patient before anaesthesia in order to reduce anxiety ( $p<0.18$ ) and the kind of dress that the patient wears during anaesthesia and the characteristics of the presence of the surgery and anesthesiology team ( $p<0.030$ ), the attitude difference was significant between the two different kind of hospital.

This research showed that there is no relation between the level of education and the 18 technical item of this research and there is no difference in attitude between the participants whom were at different level of education.

This research showed that there is no difference in attitude between male and female anesthesiologists regarding the 18 technical items about teaching the 18 requirement to the patient before surgery. About open question and the point that what kind of information must be rendered to patients before surgery, 36 items were proposed that the most important of all was pre surgery visit that five cases suggested it the night before surgery

Table 2: Frequency distribution of variables related to the attitudes of anesthesiologist towards the anaesthesia needs in patients prior to the operation at Mazandaran hospital in 2005

Variables	Attitudes					Total
	Strongly agree	Agree	Partially agree	Disagree	Strongly disagree	
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	
1- Visiting the patients the day before the operation	81(73.6)	16(14.5)	9(8.2)	2(1.8)	2(1.8)	110(100)
2- Explanation about N.P.O and its duration	91 (82.7)	16(14.5)	2(1.8)	1(0.9)	-	110(100)
3- Explanation about eating and drinking of patient after operation and its duration.	66(60)	30(33)	8(7.3)	3(2.7)	-	110(100)
4- Explanation about type of anaesthesia given.	69(62.7)	26(23.6)	13(11.8)	2(1.8)	-	110(100)
5- Explanation about pain after anaesthesia and its controlling.	66(60)	31(28.2)	10(9.1)	3(2.7)	-	110(100)
6- Explanation about the readiness of patient for operation.	69(62.7)	29(26.4)	11(10)	-	1(0.9)	110(100)
7- Educating patients prior to anaesthesia in order to decrease patient's tension.	80(89)	14(12.7)	5(4.5)	2(1.8)	-	110(100)
8- Explanation about vomiting and nausea after operation and how to control it.	59(50.9)	32(29.1)	16(14.5)	6(5.5)	-	110(100)
9- Explanation about the general features of anaesthesia procedures, the detail and selection of the type of anaesthesia.	32(29.1)	22(20)	41(37.3)	15(13.6)	-	110(100)
10- Explanation and definition to the parents of the children to be under anaesthesia.	51(46.4)	35(31.8)	23(20.9)	1(0.9)	-	110(100)
11- Explanation about infusion fluids, tubes and catheters which are attached to the patients after surgery.	28(25.5)	34(30.9)	30(27.3)	18(16.4)	-	110(100)
12- Explanation about recovery and improvement of respiration particularly on the abdominal and cardiac surgeries.	58(52.7)	38(34.5)	12(10.9)	2(1.8)	-	110(100)
13- Explanation to the patient about duration of anaesthesia	26(23.6)	39(35.5)	26(23.6)	18(16.4)	1(0.9)	110(100)
14- Explanation on the operation room and the instrument available there.	64(58.2)	26(23.6)	23(20.9)	34(30.9)	5(4.5)	110(100)
15- Explanation on how to walk after operation and regional senselessness.	22(20)	30(27.3)	10(9.1)	6(5.5)	-	110(100)
16- Explanation about the complications which may arise during operation and anaesthesia.	24(21.8)	27(24.5)	31(28.2)	26(23.6)	2(1.8)	110(100)
17- Explanation about the possible and dangerous complications which may arise.	25(22.7)	9(8.2)	18(16.4)	48 (43.6)	10(9.1)	110(100)
18- Explanation about the patient's covering during anaesthesia and features of the attending operation team.	36(32.7)	27(24.5)	29(26.4)	17(15.5)	1(0.9)	110(100)

and seven cases suggested the day before the surgery and three cases suggested at the time of admission at special clinic of anesthesiology and also four cases gave us some information regarding the waking up of the patient from anaesthesia.

## DISCUSSION

The main result showed that most of the anesthesiologists have positive attitude about the NPO and its length of time before surgery (97.2%) and the least of them had positive attitude about informing the patient about dangerous consequences of anaesthesia (31.9%), on the other hand 52.7% had a negative attitude in this aspect. In general regarding all items related to anaesthesia, the attitude of the participants was significantly positive and high percentage of them agreed that the information relating anaesthesia must be explained to the patient.

Nasiri and his colleagues in a research have analyzed the attitude of the patient and in that study it was revealed that a high percentage of patients were interested to gather information about anaesthesia before surgery (Nasiri *et al.*, 2004; Nasiri and Gariban, 2002).

Although, in these two studies there is positive attitude about rendering information but there is a difference in the rate of interest for related detail in a way that in that study the desire of patients was to learn about the walking after surgery and anaesthesia (83.1%) and the least of interest was about the place where they receive anaesthesia (45.2%) but in this study most of the anesthesiologists had a desire to explain about the NPO and its length before surgery and the least desire of anesthesiologists was to explain about the consequences of anaesthesia (31.9%). The difference of these results is due to the difference of knowledge among the anesthesiologists and patients and the potential danger that exist because of the possibility of a full stomach at the beginning of anaesthesia and after the surgery and concerning the pre operative nursing care in our hospitals and regarding the condition of culture and attitude of patients, there is always a concern among anesthesiologists about this matter and there is a special interest among them to explain the length of NPO to the patients. A high percentage of anesthesiologists were against giving information about the dangerous consequences of anaesthesia and this might be because of increased anxiety among patients.

Similar studies about the attitude of patients for obtaining information about anaesthesia were conducted in Scotland, Italy and Canada. That revealed most of the patients had strong desires about being informed about anaesthesia before surgery (Asenoune *et al.*, 2000; Schultz, 1998; Kain *et al.*, 1997; Bugge *et al.*, 1998; Lansdale and Hutchison, 1991 ).

### CONCLUSION

Regarding the findings of these studies and the present study that showed both the patients and anesthesiologists like to get and give information about related aspects of anaesthesia and also considering ethical and legal matters about the conscious consent of the patients there seems to be despite the close relations between the surgeon and patient it is essential that there be a close relationship between patients and anesthesiologists and there is great importance placed on pre surgery visits or anaesthesia consultation clinics. In the present study explanation about anaesthesia clothing regarding the cultural aspects of our society, there seems to be a high tendency among anesthesiologists to teach the patients and about the presence of the surgical team, there seems to be great difference that between teaching and non teaching. This matter reveals the fact that in teaching hospital the presence of students must be explained to patients. Regarding the results of this study and similar studies on the essentiality of informing patients about the anesthetic process and not only this would reduce anxiety among patients but also this is the rights of the patients if we consider the rules of patients rights and since the attitude of both anesthesiologists and patients are positive therefore we suggest that a period of time be proposed for anaesthesia consultation.

Therefore, it seems the optimal condition regarding the value of pre surgical visits be created so that the

needs of the patients be over come and the required information regarding some aspects of anaesthesia is given to patients, a problem that there is not much attention paid to it at the prevent time.

### REFERENCES

- Asenoune, K., P. Albaladdejo and N. Smail *et al.*, 2000. Information and anesthesia: What does the patient desire? *Ann. Fr. Anesth. Reanim.*, 18: 575-576.
- Bugge, K., F. Bertelsen and N. Ben *et al.*, 1998. Patients' desire for information about anaesthesia. *Danish attitudes. Acta Anaesth. Scand.*, 42: 91-96.
- Dugas, B.W., 1994. Introduction to patient care a comprehensive approach to nursing.
- Forotan, B., 1996. Study on the needs of having diagnostic tests for the patients, 4: 19-24.
- Horford, W. *et al.*, 2004. Clinical anaesthesia evaluation of the patient prior to anaesthesia.
- Inglis, S. and L. Franil, 1993. The effects of providing preoperative statistical anaesthetic risk information. *Anaesth. Intensive Care*, 21: 799-805.
- Kain, Z.N., B. Kosarussavadi, C.A. Hernandez, M.B. Hofstadter and L. Majes, 1997. Desire for perioperative information in adult patients: A cross-sectional study. *J. Clin. Anesth.*, 9 (6): 467-472.
- Lansdale, M. and G. Hutchison, 1991. Patient's desire for information about anesthesia, 46 (5): 410-412.
- Nasiri, E. *et al.*, 2004. Study on the desire of the patients towards acquiring information about anaesthesia, *shakiba. Med. J.*, 5 (4): 21-25.
- Nasiri, E. and M.H. Geriban, 2002. Informed consent about anaesthesia yes/no? And patient's attitudes, first congress on anaesthesia and critical care, pp: 47.
- Schultz, E.A., 1998. Informed consent; an overview: CRNA certified-registered nurse. *Anesthesia*, pp (4): 2-9.
- Shimoda, Y. and M.Y. Suzukim, 1994. Informed consent in Anesthesia. *Masui.*, 43 (4): 594-599.