ORIGINAL ARTICLE

Patients' Desire for Information About Anaesthesia: A Survey in a Teaching Hospital

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Summary

The aim of this study was to investigate the attitudes and desire of Malaysian patients for information about anaesthesia and compare the result to that of other similar studies in other countries namely Scotland, Canada, Australia and Denmark. Two hundred and forty patients undergoing elective surgery were asked to complete a preoperative questionnaire examining their desire for information relating to anaesthesia. As in all countries compared, most Malaysian patients were interested to know the time they could start to mobilize from the bed and the time to commence normal oral intake postoperatively. Information related to postoperative pain and pain relief was also highly desired. However, patients showed less interest towards information about perioperative anaesthetic or surgical procedures and drugs used. Unlike Australian patients, the Malaysian patients showed less interest about perioperative complications. As in other countries, patients under the age of 50 years had a greater desire for information than those who were older. However there was no difference in desire for information between male and female patients. Patients who have had previous anaesthesia would ask for more information compared to those who had none.

Key Words: Information about anaesthesia, Perioperative care, Postoperative pain, Pain relief, Postoperative complications

Introduction

The preoperative visit by the anaesthesiologist is not only a way of obtaining information about the patients' medical condition, but also a good opportunity to educate the patients about the impending anaesthesia in order to alleviate fear, doubts and misinformation[1]. The principles of informed consent dictate that patients have a right to adequate explanation of medical procedures including the complications that might ensue[2]. The patient should not be allowed to worry unnecessarily but has on the other hand a right to know.

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Individual doctors vary in their practices regarding the amount and details of information they would give to patients about their medical care. Information provided by a doctor may have wide-ranging effects on the patients' psychological state and their perioperative outcomes[3-5]. Giving too much or too little information may not serve all our patients well.

Previous investigations suggested that full information might not always be beneficial [6,7]. Giving too much information might hinder rather than assist the patient to make a rational choice about his anaesthesia and surgery. Miller and Mangan[6], studying a group of American gynaecological patients, showed that detailed information could cause increased tension, discomfort and depression in some situations. In another study by Svevde and Panagopoulos[7], it was found that inadequate information caused their patients to raise concern about the possibility of not recovering from anaesthesia, feeling pain during surgery or being paralysed during anaesthesia. Adequate information could possibly reduce these fears. In disagreement to these studies, Egbert and Battit[3] showed that adequate preoperative information might actually reduce anxiety and even morbidity. They found that adequate preoperative information about expected intensity and duration of postoperative pain and what could be done by the patients themselves to relieve the pain, reduced the amount of morphine used postoperatively by 50%. Furthermore the patients could be discharged almost three days earlier than a control group.

What should an anaesthesiologist tell the patient during the preoperative visit? What patient characteristics, if any, determine whether to give or to withhold information? In the hope of resolving this dilemma concerning what information to be given and what to be withheld, several studies had been carried out in several countries including Scotland[8], Canada[8], Australia[2] and Denmark[9] to provide empirical data on the amount and types of information desired by patients. All these studies used the same set of questionnaire in order to compare their results.

However, previous studies on preoperative desire for information were done in developed countries, with more homogenous population. Information from developing countries like Malaysia is scarce. Malaysia is a unique country because it has a multiracial population. In addition, awareness about medical care and practice and the level of education are generally lower than that in developed countries. Therefore it is important for us to conduct a similar study in Malaysia to find out about the local attitudes and desires for information about anaesthesia and at the same time compare the results to that of other countries.

Objective

The aim of this study was to investigate the desire of Malaysian patients on information about their perioperative anaesthetic and surgical care. The results were then compared to similar studies on other nationals namely the Scottish, Canadian, Australian and Danish populations.

Materials and Methods

Subjects

Two hundred and forty patients with ASA (American Society of Anesthesiologists) physical status I-III, aged above 18 years old and scheduled for elective surgery at Hospital Universiti Kebangsaan Malaysia, participated in the study. The recruitment was based on convenience sampling. The study was approved by the Departmental Dissertation Committee and verbal consent was obtained from each patient.

Methods

A survey during the preoperative visit was conducted by the authors based on a modified questionnaire in English constructed by Lonsdale

and Hutchison[8] (refer Table I). Sampling was arbitrary or incidental in nature based on the authors' own premedication visits a day prior to the scheduled surgery. In view of the multiracial components of the Malaysian population, this same standard questionnaire was translated into the Malay and Chinese language. Each questionnaire contains 14 pieces of information relating to the experience of undergoing anaesthesia of any kind. All the questions were close-ended and patients were allowed to choose only one out of the three answers provided for each question.

A pilot study, involving twenty randomly selected adults, had been carried out to validate the translated version (Malay and Chinese language) of the original questionnaire in a 'forward' and 'backward' manner to eliminate ambiguity and loss of accuracy. The questionnaire was presented to the patients during the authors' preoperative visit. The purpose of the study was explained to the patients. They were then requested to complete the questionnaire. The authors were present throughout the survey to explain questions, but he was careful not to bias the answers. Patient characteristics concerning age, gender, educational level, ASA group, type of anaesthesia planned and number of previous anaesthetics were recorded.

Statistics

Non-parametric statistics were used for all tests to avoid assumptions about normal distribution in the population[10]. Statistical analysis was done with the aid of SPSS version 10.0 software. A 'P value of less than 0.05 ($P < 0.05$) was considered statistically significant.

Firstly, the patients' desire for each of the 14 pieces of information was assessed. In order to analyze and quantify the overall desire for information among the Malaysian patients for each question, it was deemed necessary to divide the responses to each of the question into two subgroups as follow:

Table I: The Questionnaire Used in the Present Study

Do you want information about:	Prefer not to know	Would like to know	Yes, I have a right to know
1 Alternative methods of anaesthesia and their advantages and disadvantages.			
2 Any drugs you will be given before your anaesthesia.			
3 Where will you be anaesthetised.			
4 Any needles, drips etc used to give you your anaesthetic.			
5 How long will you be anaesthetised.			
6 Where you will recover from your anaesthetic.			
7 Whether you have a drip, bladder catheter etc., when you wake up and for how long.			
8 What sort of pain you will have, for how long and what sort of painkillers, you can have.			
9 When you will be allowed to eat and drink.			
10 When you will be allowed to get up.			
11a All possible complications to surgery.			
11b All possible complications to anaesthesia.			
12 Only dangerous complications to anaesthesia .			
13 Only common complications to anaesthesia.			
14 Who will be the anaesthetist and to meet him/her before anaesthesia.			

1) Patients who responded positively to each question with one of both of the options 'Have a right to know' and 'Would like to know" were grouped together. The total number of positive responses was calculated for each question. These responses were used to demonstrate a positive attitude towards receiving the particular piece of information concerned. The questions for the Malaysian population were then ranked in order of the proportion of patients who give such a positive response.

2) Patients who responded with the option 'Prefer not to know' to each question were also grouped together and the total number of negative responses were calculated for each question. This represented their negative attitudes towards a particular piece of information.

Secondly, the Malaysian's samples were divided into four age/gender subgroups: male < 50 years old, male > 50 years old, female < 50 years old and female > 50 years old. The total number of positive responses was calculated for each subgroup, as a measure of that group's overall desire for information. The groups were then compared to detect differences related to gender or age using the Mantel-Haenszel Chi-square test. This test is an extended form of the Chi-square test, and is used when two separate factors, such as age and gender, may both influence an outcome simultaneously. For example, it can be used to compare the two male and female age groups with each other, while ignoring any gender effects. *(Previous studies in developed countries[2,8,9] had shown that both age or gender had influence over the desire for information among patients studied. They used the above mentioned age division in their studies and in order to enable comparison of results with these studies, the same age division of < or > 50 years old was used in this analysis.)* The data was also examined for the effect of the number of previous operations on the patient's overall desire for information using the Mantel-Haenszel Chi-square test.Results

Results

Patient Characteristics

Two hundred and forty patients scheduled for surgery requiring anaesthesia were analyzed in this study. Their ages ranged between 18 and 92 with a mean of 43.5 years. Table II presents the demographic data of the respondents.

Table II: Demographic Data of the Respondents.

		Number of patients (n = 240)	%
Ethnicity	- Malay	137	57
	- Chinese	72	30
	- Indian	26	11
	- Others	5	2
Age	- < 50 years old	163	68
	- > 50 years old	77	32
Gender	- Male	82	34
	- Female	158	66
ASA classification	- I	163	75
	- II	75	31
	- III	2	1
Previous anaesthetic experience	- Yes	103	42
	- No	137	57

Desire for information about anaesthesia among Malaysians

The percentages of positive answers (i.e. those who answered 'Would like to know' or 'Have a right to know') were used to indicate the overall desire for information about anaesthesia. Table III summarizes the response received from patients in this study and at the same time compares it to that of similar studies from other countries namely Scotland, Canada, Australia and Denmark.

Table III: Percentage of Positive Answers in Different Countries

Question	Would like to know + Have a right to know				
	Malaysia [%]	Denmark [%]	Scotland [%]	Canada [%]	Australia [%]
1 Alternative methods of anaesthesia	85	59	61	85	87
2 Drugs given before operation	53	67	61	90	84
3 Where to be anaesthetised	62	44	49	87	82
4 Needles and drips used	58	42	45	80	82
5 How long to be anaesthetised	67	83	63	92	90
6 Where to recover from anaesthetic	65	58	57	86	90
7 Drip and bladder catheter installed	60	72	65	84	89
8 Pain and pain relief	82	84	77	88	92
9 When allowed to eat and drink	93	83	75	93	97
10 When allowed to get up	92	83	75	90	97
11 All possible complications	68	56	43	72	92
12 Only of dangerous complications	64	19	40	66	82
13 Only of common complications	65	31	59	85	92
14 Meeting the anaesthetist	80	63	77	93	100

Each question received at least 50% of positive answers from the patients. Questions were ranked in order of positive response in Table IV. Data from other countries were also included. Information related to the postoperative recovery, namely the ability to ambulate (92%) and to resume oral intake (93%) were highly sought after. Most respondents were also interested in knowing the various methods of anaesthesia suitable for their surgery (85%). Information about pain and its methods of relief were deemed important by the majority of Malaysians (82%). At the same time, 80% of them would like to meet and get to know their anaesthesiologists before their scheduled surgery.

Table IV: Ranking positive answers in different countries

	Would like to know + Have a right to know									
	Malaysia		Denmark		Scotland		Canada		Australia	
Priority	Question	%	Question	%	Question	%	Question	%	Question	%
1	9	93	8	84	14	77	14	93	14	100
2	10	92	5	83	8	77	9	93	9	97
3	1	85	9	83	9	75	5	92	10	97
4	8	82	10	83	10	75	2	90	13	92
5	14	80	7	72	7	65	10	90	11	92
6	11	68	2	67	5	63	8	88	8	92
7	5	67	14	63	1	61	3	87	5	90
8	6	66	1	59	2	61	6	86	6	90
9	13	65	56	8	13	59	1	85	7	89
10	12	64	11	56	6	57	13	85	1	87
11	3	62	3	44	3	49	7	84	2	84
12	7	60	4	42	4	45	4	80	12	82
13	4	58	13	31	11	43	11	72	3	82
14	2	53	12	19	12	40	12	66	4	82

Information related to the anaesthetic care during the perioperative period, received much less positive responses. Only about 53 to 67% of Malaysians were interested in matters like the duration of anaesthesia and surgery, where would they be anaesthetized, where would they recover from anaesthesia, the types of drugs being used on them during the perioperative period and whether they would be subjected to needle injections or bladder catheterisations. Only 65% of the respondents were interested to know about the possible perioperative complications, which include all the minor and major complications.

Mantel-Haenszel Chi-Square analysis results

When allowance was made for gender (using the Mantel-Haenszel Chi-Square analysis controlling for age), there was a difference in attitude attributable to age ($p < 0.05$). It was found that younger patients (< 50 years old) had higher desire for information about anaesthesia than older patients (> 50 years old)

However there was no difference in desire for information between male and female patients when analysis was made using Mantel-Haenszel test controlling for age ($p > 0.05$). Further analysis revealed that patients who have had previous anaesthesia and surgery would ask for more information about anaesthesia compared to those who had none. (The Mantel-Haenszel test was used to control for the effects of age, which might be co-variable with the number of previous operations.)

Discussion

This study was conducted to gain insight into Malaysian patients' perception of perioperative care and their desire for information before they go for surgery. However, this survey was based on a teaching hospital's practice and most of the patients were from the urban areas with generally well-educated and more affluent background. Therefore, the conclusions from the study should be interpreted with caution with regard to those patients from the rural areas.

The majority of Malaysian patients were found to have high desire for information about their perioperative anaesthetic care as shown by the high percentage of positive responses to all the 14 questions being asked in the present study. It was interesting to note that most Malaysian patients were very concerned about their ability to recover from anaesthesia and surgery in the immediate postoperative period. This was reflected by their high desire to get to know more about the time they could get up and ambulate and to eat and drink in the postoperative period. The ability to do these activities may have been perceived as indicators of a successful outcome for their surgery and anaesthesia. Therefore this information should ideally be provided to all the patients as a routine during the preoperative visits.

On the other hand, our patients' disinterest in the information about the actual procedures and drugs used during the course of their perioperative care suggested that generally most of them trusted their doctors' capabilities to give them proper medical care. However, looking at it from a different perspective, this might also be a reflection of a poor knowledge about medical care among them or of their fears and anxieties for needles and medical procedures which were often associated with pain and suffering.

Issues regarding the information about surgical and anaesthetic complications were also avoided by a significant proportion (32%) of the Malaysian patients studied. In many countries, a doctor may decide on the appropriate treatment on the patient's behalf, without disclosing all the risks involved, so long as this management conforms to an accepted standard of medical care[11]. Therefore care should be taken not to arouse too much anxiety in them by giving too much information on this aspect unless specifically requested. In our survey, eighty percent of patients would like to meet with the anaesthesiologists and they might see this as an opportunity to obtain more information about their perioperative care.

Younger Malaysian patients desired more information than older ones. The opportunity for a higher level of education among the younger generations in Malaysia has led to a more educated and well informed patients and hence their desire to know more about their medical care. In this group of patients, the anaesthesiologists should provide more information.

Previous anaesthetic experience was found to have significant influence on the desire for information among Malaysian patients. The exposure to and experience from previous anaesthesia probably had roused their interest to know more about the processes of medical care they underwent. They would like to be more in control of the whole situation and the provision of sufficient information would definitely benefit them in terms of reduced anxieties.

Comparison of the results with those of other developed countries (Scotland[8], Canada[8], Australia[2] and Denmark[9]) revealed some very contrasting rates of response to each question. There were some similarities in the pattern of response to individual questions in the developed

countries (refer Table IV). However there were several differences in attitudes towards information about anaesthesia when Malaysian patients were compared to patients from other countries.

Patients in Scotland, Canada and Australia placed information about their anaesthesiologists (e.g. getting to know and opportunity to meeting the anaesthesiologist) as of highest priority[2,8]. A higher level of awareness about the medical system and medico-legal rights in these countries may have a significant influence over such a response. The anaesthesiologist was the best person to provide them with the desired information and therefore meeting them preoperatively was perceived as of utmost importance. Malaysian and the Danish patients expressed lesser degree of enthusiasm of seeing their anaesthesiologists preoperatively. An explanation could be that the function of the anaesthesiologists was not well known. The role and status of anaesthesiologists should therefore be enhanced and promoted in Malaysia.

Ninety-two percent of Australians wanted to know more about perioperative complications. Malaysian, Scottish, Canadian and Danish patients showed less interest about complications. Therefore explanation pertaining to complications should be selective and limited to important ones. Overzealous attempt to give detailed list of complications could cause unnecessary anxieties and fears.

Similarities were noted pertaining to matters concerning the postoperative course of recovery. In all countries compared, most patients were interested to know the time they could start to mobilize from the bed and ambulate and the time to commence normal oral intake postoperatively. Information related to the nature of postoperative pain and methods of pain relief were also highly rated in all countries. In Denmark it was rated as the most important piece of information to be given to the patients. It is becoming obvious that pain management has recently gained importance in perioperative care. Every effort should be made to explain properly the various options and efficacy of pain control in the practice of modern anaesthesia.

There appears to be no simple solution to the difficult clinical situation regarding the correct amount of information that should be given to the patients. Malaysian patients would seem to want as much information about anaesthesia as the people did in developed countries. Although each patient should be individualized with regard to the provision of information about anaesthesia, it is high time that we are aware with the patterns of information that Malaysian patients would like to know. A high desire for information among Malaysians as showed in this study also means that the anaesthesiologists are expected to spend more time explaining and giving more details to their patients during preoperative visits.

In conclusion, the types of information that were highly desired by Malaysian patients include the time to commence oral intake and to mobilize from their beds, postoperative pain and methods of pain relief. However, Malaysian patients showed less interest toward information about perioperative anaesthetic or surgical procedures and drugs used. They also showed less interest about perioperative complications. Patients under the age of 50 years had a greater desire for information than those who were older. There was no difference in desire for information between Malaysian male and female patients. Patients who have had previous anaesthesia would ask for more information compared to those who had none.

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