Change In Patient's Perception And Knowledge Regarding Anaesthetic Practice After A Preoperative Anaesthesia Clinic Visit

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Abstract

Background: This survey was conducted to assess surgical patient's perception about the role of the anesthetist in patient care and to determine any change in this perception after a visit to the preoperative clinic. Methods: Four hundred and eighty one patients filled a questionnaire prior to attending the preoperative anaesthesia clinic and again after the clinic visit over a four month period. Results: Seventy one percent of the patient knew that anaesthetists were medically qualified. Thirty three percent identified the anaesthetist as a person who took care of patients during the surgery which increased to 38 % after clinic visit. Sixty seven percent of patients responded pre visit that an anaesthetist stays with the patient during surgery, this increased to 74% after visit. For postoperative care 42% indentified an anaesthetist as responsible before visit and 46% after it. Only 32% knew that the anaesthetist has role outside operating room which increased to 48 % after visiting the clinic. Majority wanted to know more about anaesthesia both before (77.1%) and after (73.2) clinic visit. Fifty six percent patients were anxious before hospital admission and surgery was the main cause of their anxiety which decreased in 80% of visitors after the visit. Sixty five percent wanted more information after visiting the anaesthetist in the clinic. Conclusion : This audit shows poor perception of the role of the anaesthetist both inside and outside the operating room. However improvement was seen in some areas after preoperative the anaesthesia clinic visit.

INTRODUCTION

In current anaesthetic practice anaesthetists play a pivotal role in Critical Care Units, trauma centers, pain clinics and resuscitation teams in addition to their traditional role inside the operating room. Despite these advances a lack of recognition persists among the medical community and lay public regarding the role of the anaesthetists. Several studies regarding patient perception of anaesthetic practice and the role of the anaesthetist have been conducted in the developed world. These studies from Britain ,United States of America ,Australia and Austria demonstrate that only 50% to 89% of patients perceived their anaesthetist as "medically qualified" [1] .In the developing world patient's awareness about anaesthesia and the anaesthetist is worse. A study from India reported that only 42% patients were aware that the anaesthetist provided anaesthesia and only 38% considered the anaesthetist to be a doctor [2] . An earlier audit conducted at our institution regarding patient's perceptions revealed similar results , where 56% of patients considered anaesthetists to be doctors. [3] In order to improve patient satisfaction and physician preparedness anaesthesia clinics have been setup in most countries and have had a beneficial effect on patient outcome. The purpose of this survey was primarily to determine surgical patient's perception about anaesthesia and anesthetist. Secondarily our aim was to assess any change in this perception after the patients visit to the preoperative anaesthesia clinic.

PATIENTS AND METHODS

The protocol was approved by the ethical review committee of the university and was conducted at the preoperative anaesthesia clinic during the period June 2008 to September 2008. All patients coming for preoperative assessment to the clinic during this period were included. Excluded patients were those with psychiatric illness, brain injury, inability to speak, refusal to participate, pregnant patients and ASA IV. Patients were given a written questionnaire containing open and close ended questions in Urdu or English depending on their language proficiency. The questionnaire was administered prior to attending the preoperative anaesthesia clinic and followed by a post visit questionnaire which

consisted of a combination of the prior questions and new questions. The clinic nurse was allowed to assist the patients and attendants to understand the questionnaire in case of ambiguity to any question. They were instructed to circle the correct answer. Patients were also provided the information that some questions had more than one answer and that "Don't know" was also an option in the questions. The questionnaire is given in the appendix. Forms were collected each day by the primary surveyor.

STATISTICAL ANALYSIS

The information from survey forms was coded and fed in a computer file. The data from survey analyzed using SPSS software package 14 . Descriptive statistics (mean, standard deviation, frequencies) were applied to demographic variables. The data from patients was divided into two groups pre clinic visit and post clinic visit and p-value was used to compare the responses between the two groups.

For the analysis of questions with 3 options as answers : Yes, No, Don't Know, McNemar test was applied. On statistician suggestion the answer of "Don't know "was taken nearer to "No" and recoded as one variable and yes as the other. A p value of < 0.05 was taken as significant.

RESULTS

Four hundred and eighty one forms were distributed, 72 forms were found to be incomplete. Four hundred and eight (84%) forms were entered in final analysis. Fifty five percent of these patients had previous anaesthesia exposure. Demographic and educational background data is shown in table 1.

At the preoperative clinic thirty three percent of the patients identified the anaesthetist as a person who took care of patients during surgery, this increased to 38 % after clinic visit. In response to question as to what an anaesthetist does after putting the patients to sleep, 67 % responded that he or she stays with the patient, this increased to 74% after the visit. Forty nine percent agreed that the anaesthetist remained with patient during anaesthesia. Six percent answered that they gave drugs while 19% responded that they also monitors the patient. Post clinic response to these questions were 51%, 4% and 24% respectively.

For postoperative care of patient 42% identified the anaesthetist being primarily responsible compared to 46% after the visit. Only 32% knew that the anaesthetist had a role outside the operating room which increased to 48 % after the clinic visit. Twenty one percent and 14% identified ICU and pain management to be field in which the anaesthetist had a role which became 22% and 19% after the visit. Only few knew of the role of an anaesthetist in emergency and coronary care i.e. 4.6 and 3.6%. Only 5 % knew that they had any role in the labor room . Majority wanted to know more about anaesthesia both before (77%) and after

(73%) clinic visit (p value <0.001) . Out of those who had previous anaesthesia exposure only 16 % remembered the anaesthetist. Almost half (48%) believed that anaesthetists were males and this belief increased to 70% after visiting preoperative anaesthesia clinic. Eighty percent wanted to know more about their anaesthetist (p value <0.001) .

Fifty eight percent wanted to choose their anaesthetist after the visit compared to 26% before clinic visit (p value <0.001). Fifty six percent patients were anxious at the time of preoperative visit and surgery was the main reason of their anxiety (68.8%) compared to anaesthesia (28.4%). Sixty five percent wanted more information after meeting with the anaesthetist in the clinic. Eighty one percent were less anxious after the visit and the decrease in anxiety level was in the range of 50-80% (p value <0.001). In reply to an open ended question regarding main cause of anxiety about anaesthesia their foremost concern was not waking after the operation.

Figure 1

TABLE 1 : Demographic Data

Age (mean±SD)	Mean	38.43± 21.06
Gender	Male	44.5 %
	Female	53.4 %
Education	Primary	5.2 %
	Secondary	13.1%
	Matriculation	8.9 %
	Intermediate	11.0 %
	Graduate	22.7 %
	Postgraduate	15 %
	Uneducated	9.1 %
Prior Exposure to Anaesthesia	Prior Exposure	49.3 %
	No prior Exposure	38.9 %

Figure 2

TABLE 2 : Frequency Distribution of Response To Questions

	Pre Clinic visit (Frequency)	Post Clinic visit (Frequency)	*P-value* *
Q1.Are you familiar with the word anaesthesia?			
Yes	385	407	0.01
No	92	49	
Q2.Are you familiar with the word anaesthesiologist?			
Yes	345	343	0.905
No	127	111	
Q3.Is an anaesthetist a qualified doctor?			
Yes	344	344	1.000
No	128	107	
Q4.During the operation who ensures the patients well being?			
Nurse	40	27	0.031
Surgeon	138	130	0.374
Anaesthetist	162	187	0.003
Technician	19	16	0.581
Don't know	77	62	0.041
Q5.During operation once the patient is sleeping what does the anaesthetist do?			
Leave the operating room	16	13	0.508
Stay with the patient	317	326	0.356
Puts another patient to sleep in another room	7	8	1.000
Don't Know	131	89	<0.001
Q6.If the anaesthetist stays with the patient during operation what does he do?			
Keeps the patient asleep	25	18	0.167
Monitors the patient	234	222	0.169
Gives Drugs	29	19	0.013
All of these	91	104	0.086
Don't know	89	66	0.002
Q7.Who looks after the patient immediately after anaesthesia?			
Anaesthetist	195	202	0.483
Nurse	86	82	0.617
Surgeon	59	62	o.742
Technician	12	14	0.754
Don't Know	102	76	<0.001
Q8.Do anaesthetist have any role outside the operating room?			
Yes	152	183	0.001
No	316	233	
Q9.If you think they do have a role outside the operating room in which area or areas are they important? (more than one answer can be encircled			
Intensive care	83	81	0.888
Pain relief in labour	21	18	0.581
Emergency department	18	23	0.332
Pain Management	56	71	0.029
Coronary Care	14	13	1.000
Don't know	196	158	<0.001
Q10.would you like more information about anaesthesia?			
Yes	356	328	0.004
No	102	118	
Q11.If you have undergone anaesthesia before do you remember the person who gave you anaesthesia? (Only asked Pre Clinic visit)			
Yes	71	x	0.004
No	323	x	
Q12.Are anaesthetists mostly male ?			
Yes	227	315	<0.001
No	245	130	
Q13.Would you like to know who your anaesthetist is ?			
Yes	375	132	<0.001
No	94	299	
Q14.Would you like to choose your anaesthetist?			
Yes	123	246	<0.001
No	341	178	
Q15.Do you feel anxious about anaesthesia and/or surgery?			
Surgery	263	185	<0.001
Anaesthesia	200	80	
Q16.What is your main cause of anxiety? (Only asked Pre Clinic visit)			
Surgery	201	X	<0.001
Anaesthesia	83	X	
Q17. Do you still want more information regarding anaesthesia after clinic visit? (Only asked Post Clinic visit)			
Yes	x	256	<0.001
No	x	30.2	
Q 20. Has your anxiety about surgery\anaesthesia decreased after preoperative anaesthesia clinic visit? (Only asked Post Clinic visit)			
Yes	x	81.4	<0.001
No	x	18.6	

* McNemar test

DISCUSSION

The preoperative visit provides opportunity to allay patient anxiety and to improve their awareness and understanding of anaesthesia and surgical experience. A similar study was done in our institution in 1999 [Error! Bookmark not defined.] but the questionnaire was administered only prior to the preoperative visit and no attempt was made to assess the impact of the visit itself.

The response to questions on familiarity with the word anaesthesia and anaesthetist showed improvement as compared to the previous audit done in our institution for same question (80 % vs. 71 %, p value 0.01) which may reflect better recognition of anaesthesia as a specialty. Likewise a higher percentage believed an anaesthetist to be a qualified doctor compared to before (72% vs. 61 %). These results were comparable to same questions asked in developed countries like Britain, United States of America and Australia which showed 50-89% positive response rate. [4] In a study from an Asian country, Singapore 57% of patient identified the anaesthetist as qualified medical personnel [5] this was 38% in India [2]. In Hong Kong an audit showed 49 % thought anaesthetists are specialist doctors . [6] In our audit as expected patient believed more in this notion when they had visited and met the anaesthetist however the difference was not significant (31% vs. 26% p value 1.0). The response to the anaesthetist ensuring patient well being showed an improvement from 37% to 44% (p value 0.003) after the visit, others believed nurses to be responsible for ensuring patient safety. This response was better then the previous response of 29% in same institution. Response to this question is similar to Jather et al from India.(2) Patient in UK were more aware of an anaesthetist being primarily responsible for their intraoperative safety where 80% replied positively. [7] The majority of the patients (67%) believed that they remain in the room while few (3%) believed they leave the room to put another patient to sleep . The knowledge regarding who monitors and give drugs during anaesthesia improved significantly after meeting with an anaesthetist (Don't Know 88 vs. 66 with P value 0.001). More people become aware of the anaesthetist's role in recovery room (Don't Know 102 vs. 76 with P value 0.001) although 35% still believed that surgeon and nurses take care of them in that area. In our previous audit in same institute lesser patient knew this role (31% vs. 46 %) . In survey from UK and Israel [8] better results were demonstrated i.e. 55% and 50% . There was significant difference (p value 0.001) in a positive direction about the of patient`s understanding about an anaesthetist's role outside operating room after the clinic visit.

The perception about the anaesthetist's role in pain management was much improved compared to our previous audit (3.3 vs. 19.5). Irvin [(7)] showed that patients perception in Hong Kong was that the anaesthetist has a greater role in emergency room and ICU

(16.6%) then in pain management (3.3%). In Israel more patient who had previous anaesthesia exposure believed anaesthetists were involved in pain management (21%) then in other areas, but without previous exposure it was similar to Hong Kong (2% vs. 3%). Only few 24% (p value 0.004) of our patients remembered their anaesthetists from the previous anaesthesia experience compared to 66.5 % in the Indian audit. This reply could have been influenced by preoperative premedication.

It has been shown that the majority of patients admitted to hospital for elective surgery experience anxiety preoperatively. [9] Previous work has demonstrated greater impact of preoperative clinic visit in reducing anxiety rather than visiting patient an evening before surgery. [10] In our survey the primary cause of this anxiety was the surgical intervention (68%). This was in contrast to developed countries e.g. UK where anaesthesia was the main cause for anxiety (70 %) . This reflects lack of knowledge of impact of anaesthesia in surgical outcome. In response to open ended question asking about different causes for concern regarding anaesthesia, patients major concern was not awakening after anaesthesia followed by awareness during anaesthesia, competence of anaesthetist, pain , drug overdose and first ever experience of anaesthesia. Patients main concern regarding surgery were success of surgery, competence of surgeon, wrong diagnosis and fear of death. Some anaesthesia related concerns were also mentioned in this category like awareness during surgery, pain, bleeding, and recovery after surgery and postoperative coma. This clearly reflects confusion regarding the role of surgeon and anaesthetist in patient care and responsibility among the general population.

Results of this audit although showing better results as compared to the previous survey in our institution, are not encouraging. Most results showed a change in attitude in positive direction after the preoperative clinic visit which highlights the impact of proper preoperative anaesthesia review by a qualified anaesthetist but further efforts are

needed to propagate anaesthesia further as specialty and to enhance the image. Patient education is frequently ignored such as " patient prefer not to know" or "they become more anxious with knowledge " . Enlightening the patient as to what is going to happen to them prior to , during and after surgery with explanation of the role of the anaesthetist will not only relieve their anxiety but also serves to enhance a positive attitude. [11]

Despite 53% of female patient in our survey very few knew the role of the anaesthetist in labour room. This area needs more dissemination of information of the anaesthetists role in this area. Brochures describing basic knowledge regarding anaesthesia and its preparation, role of the anaesthetist in postoperative surgical pain as well as labour pain may help to increase awareness among patients.

No statistically significant difference was seen in responses based on educational differences among patients except for the awareness of word anaesthetist as more educated patients were aware of this word. Our institution is a tertiary care private hospital catering to a population mostly from middle class and above and results may not be truly reflective of the rest of our country

Stress needs to be given on the patient education at the time of preoperative visit. The anaesthetist should introduce themselves as being "Qualified Doctor ". A proper and brief explanation of their role in perioperative period , what the patient is going to experience and what can be expected from the anaesthetist during and immediately after the surgery and clearing up for any queries. If effectively performed will help to expand our role well beyond that of the physician-anaesthetist to that of the perioperative physician. [12]

APPENDIX

QUESTIONNAIRE FILLED BY THE PATIENTS:

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