

ORIGINAL ARTICLE

Public Awareness Survey about Anesthesia and Anesthesiologist (A study of 210 cases)

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ABSTRACT

INTRODUCTION : Anaesthesiologist has always been a “behind the screen” specialist. Despite its phenomenal growth in the recent past, there is inadequate public knowledge regarding the speciality as well as the exact role of anaesthesiologist.

METHOD : The present study was a survey conducted using predesigned questionnaire containing questions related to the awareness and knowledge of anaesthesia among patients, under graduate medical students, post graduate medical students, nursing students and general public.

RESULTS : Only 46% knows that anaesthesiologists are fully trained medical doctors. Only 30% responder knew that their role is also in I.C.U, 25% knew that their role in pain management. 81.4% afraid of post-operative pain, 45.2% afraid their recovery from anaesthesia. Only 149 responders were aware about information given in consent. 76.6% responders did not realise that monitoring, pain management and care of haemodynamic could be under the control of anaesthetists.

CONCLUSION : In conclusion, this study identified deficiencies in patients' knowledge of anaesthesia and the role of anaesthetists. On-going work is still required in order to better explain the wide scope of this profession to the public.

INTRODUCTION

Anaesthesiologist has always been a “behind the screen” specialist. Despite its phenomenal growth in the recent past, there is inadequate public knowledge regarding the speciality as well as the exact role of anaesthesiologist.¹ Many, if not all, practicing an anaesthesiologist have struggled at some point with issue relating to status and image of the speciality. It has been felt that though the role of anaesthesiologist is crucial, he doesn't get the due deserve². There is a general feeling that the speciality of anaesthesia carries low profile when compared to other medical specialities³. Despite great evolution in anaesthesia, the network media doesn't emphasize the role of anaesthesia team in successful outcome of surgery. Rather it focuses on legal aspects surrounding the patients' perioperative complications and demises⁴.

One role that has been much talked about recently is that of the **PERI-OPERATIVE PHYSICIAN**⁵.

With all this back ground, study was conducted to know about:-

- 1] Patients' and general public perception about anaesthesiologist and anaesthesia.
- 2] To impart information to the patients about anaesthesia at the time of pre-operative visit.

MATERIAL AND METHOD

The study of public awareness survey about anaesthesia and anaesthesiologist was carried out in P.D.U. Medical College after approval of Institutional Ethics Committee. We included 210 subjects from these seven groups.

Group 1: Patients enrolled for surgeries

Group 2: Nursing students

Group 3: Under graduate M.B.B.S. students

Group 4: Post graduate students in medicine student

Group 5: common public with literacy level <10 standard

Group 6: common public with literacy level graduates

Group 7: common public with literacy level post graduates

Questions inquiring about role of anaesthesiologist, presence of anaesthesiologist inside the theatre,

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qualification; also about various types, concerns, complications of anaesthesia were asked. The exclusion criteria were who cannot understand importance of the study, language of communication mentally challenged patients, unwilling be involved in the study

We had distributed questionnaires at different time to patients aged 16 and above undergoing elective surgeries in our hospital, Under graduate medical student, Post graduate medical student, nursing student and general public and they were asked to fill. The questions were framed to assess patients' knowledge about anaesthesiologist and their work and patients' attitudes towards anaesthesiologists. The data was expressed as percentage.

QUESTIONNAIRES

Perception of anaesthetists' qualification -

- A1. Fully trained medical doctors who are specialists in their field
- A2. Non specialist medical doctors who give a[I
- A3. University graduates who can give anaesthesia
- A4. Nurses who are trained to give anaesthesia
- A5. Hospital technicians trained to give anaesthesia

Perception of anaesthetists' roles -

- B1. Giving anaesthesia for operation
- B2. Looking after patients in the intensive care unit
- B3. Helping to treat patient with a lot of pain
- B4. Performing major surgery
- B5. Emergency in the hospital generally
- B6. Helping to treat patient in pain after surgery
- B7. Emergency transfers of patients from hospital and accident sites
- B8. Difficulty or specialised intravenous access and monitoring

Perception of anaesthetists' responsibilities -

- C1. Putting the patient to sleep
- C2. Monitoring the heart , blood pressure and breathing
- C3. Helping the surgeon with the actual surgery
- C4. Treating any medical problems that may occur
- C5. Making sure the patient wakes up in good shape
- C6. Making sure the patient in pain free
- C7. Supervising the patients in the recovery room

Attitude of patients towards anaesthesia -

- 1) I would like to meet the anaesthetist before my operation every time.
1 2 3 4 5 6 7
- 2) A good operation result requires teamwork from both the surgeon and anaesthetist.
1 2 3 4 5 6 7
- 3) I am more nervous about the anaesthetic than the surgery itself.
1 2 3 4 5 6 7
- 4) Anaesthetists should tell you what all the possible complications of an anaesthetic are, no matter how serious.
1 2 3 4 5 6 7

Where,

1. strongly agree
2. Agree
3. Somewhat agree
4. Neither agree nor disagree
5. Somewhat disagree
6. Disagree
7. Strongly disagree

Attitude of responders about Anesthesia procedure -

1. Is he-charge of operation theatre ?
2. Is he responsible for perioperative care of the patients ?
3. Does he also work outside the operation theatre ?
4. Do you want to know your anaesthetist ?
5. Do you want to choose your anaesthetist ?
6. Are you afraid of operation ?
7. Are you afraid of anaesthesia ?
8. Are you afraid that you will not come out of anaesthesia ?
9. Are you afraid of post-operative pain ?
10. Do you like general anaesthesia ?
11. Do you like spinal anaesthesia ?
12. Have you been anaesthetized before ?
13. You think Anaesthesia is necessary for surgery ?
14. Are you aware of the information given in the consent form which you or your relatives have signed for approval of surgery?
15. 16 In case of any future surgery would you like to know about your anaesthetist ?

OBSERVATION AND RESULT

The study was carried out on 210 persons, 30 in each group which consisted of patients, nursing staff, under graduate medical students, post graduate medical students and general public aging above 16 years and of either sex.

Table : 1 Demographic Profile

Variable	Total
Age(years)	
18-30	155
30-50	30
>50	25
Sex	
Male	104
Female	106

Table 1 shows demographic profile (age and sex) of all groups

Table 2 : Perception of Anesthetists' qualification

	Nursing student (n=30)	Patient (n=30)	MBBS (n=30)	PG Medical (n=30)	< 10 std (n=30)	Post Graduate (n=30)	Graduate (n=30)	Total (n=210)
A1	17	3	30	30	2	5	8	95
A2	10	15	0	0	5	9	15	54
A3	3	2	0	0	8	5	1	19
A4	0	7	0	0	9	7	5	28
A5	0	3	0	0	6	4	1	14

As per table 2 shows that among nursing only 56%, patients group only 10%, public educated < 10 std. only 26%, public educated up to graduate only 5(16%) and public educated up to postgraduate only 26% thought that anesthetists were medically qualified.

Table 3: Perception of Anesthetists' roles

	Nursing student (n=30)	Patient (n=30)	MBBS (n=30)	PG Medical (n=30)	< 10 std (n=30)	Post Graduate (n=30)	Graduate (n=30)	Total (n=210)
B1	30	30	30	30	30	30	30	210
B2	3	0	26	30	0	1	3	63
B3	4	1	20	26	0	1	2	54
B4	2	1	0	0	0	0	0	3
B5	3	0	25	30	0	0	0	58
B6	2	0	17	25	0	0	0	44
B7	3	0	22	26	0	0	0	51
B8	5	0	20	25	0	0	0	50

As per Table 3 subjects among all groups realized that anesthetist involved in giving anesthesia for operations. Only 63(30%) have knowledge about role of anesthetist in I.C.U., poorest knowledge in patients and maximum in medical students. Only 54(25%) have knowledge about role of anesthetist in Pain Management. Only 58(28%) have knowledge about role of anesthetist in Emergency management. Only 44(25%) have knowledge about role of anesthetist in post-operative Pain Management. Only 51(24%) have knowledge about role of anesthetist in Emergency transfer of patients from hospitals and accident sites. Only 50(25%) have knowledge about role of anesthetist in difficult I.V. access.

Table 4 : Perception of Anesthetists' responsibilities

	Nursing student (n=30)	Patient (n=30)	MBBS (n=30)	PG Medical (n=30)	< 10 std (n=30)	Post Graduate (n=30)	Graduate (n=30)	Total (n=210)
C1	30	30	30	30	30	30	30	210
C2	4	0	20	24	0	0	1	49
C3	1	0	0	0	1	0	0	2
C4	3	0	14	20	0	1	1	39
C5	12	6	25	28	6	10	12	99
C6	22	20	30	30	20	22	25	169
C7	2	0	22	25	0	0	0	49

As per Table 5 and graph all subject considered anesthetist to be responsible for putting the patients to sleep. 76.6% did not realize that all vitals (pulse, BP and breathing) were under control of anesthetist. There was only 39(18%) appreciation that treating medical problem during surgery, giving necessary drugs and monitor vital signs are the responsibilities of the anesthetist.

Table 5:Attitude of patients towards anaesthesia

Group	Meet anes bf ot (median)	Require team work (median)	More nervous about anaesthetic (median)	Anae. Should tell complication (median)
1	1	1	1.5	1
2	4	4	5	2.5
3	1	1	4	1
4	2	1	6	1
5	4	4	4.5	2
6	4	4	5	2
7	3	3	5	2

As per table 5 majority person (64.3%) in all groups would like to meet the anesthetist before operation. (65%) feel that a good operation requires teamwork from both the surgeon and anesthetist. Medical students (100%), nursing students (93%) and post graduate people (64%) were giving more positive response. Responder more nervous about anaesthesia. Nervousness about anaesthesia more among patients group and illiterate. Most responder preferred to know all the complication of an anaesthesia, no matter how serious they are.

DISCUSSION

Anaesthetist provides medical care to patients in variety of situation including preoperative evaluation, consultation with surgical team, creation of a plan for anaesthesia tailored to each patient, airway management, intra operative life support, I.C.U., provision of pain control, intra operative diagnostic stabilization, proper post-operative management of patients, chronic pain control, emergency transport of patient. The speciality of anaesthesia has revolutionized by development of new anaesthetic agents, techniques and development in monitoring system.

As per table 2 of our study, when we asked what is the qualification of the anaesthetist? Out of 210 only 95(46%) knows that fully trained medical doctors who are specialists in their field. 30% of them didn't know that they are doctors. This study supported by Birva N kharat al study on knowledge about anaesthesia and perception about anaesthesiologist among patients at a rural tertiary care Hospital⁶. There were total 300 participants enrolled in the study. Only 233 participants believe that anaesthetist is a doctor.

All responder knew that anaesthesiologist put patient to sleep, only 30% responder knew that their role is also in

Table 6 : Attitude of responders about Anesthesia procedure

	Nursing student (n=30)	Patient (n=30)	MBBS (n=30)	PG Medical (n=30)	< 10 std (n=30)	Post Graduate (n=30)	Graduate (n=30)	Total (n=210)
1	10	2	10	20	1	2	2	47
2	10	1	8	20	0	1	2	42
3	6	0	25	29	0	2	2	64
4	15	8	26	30	8	10	15	112
5	20	8	27	29	8	10	12	114
6	26	25	25	28	26	27	25	182
7	12	15	22	18	15	21	21	124
8	19	18	9	4	18	15	12	95
9	29	25	22	20	26	24	25	171
10	20	22	20	25	19	22	23	151
11	10	8	10	5	11	8	7	59
12	2	5	2	3	3	2	1	18
13	30	25	30	30	22	25	27	189
14	22	18	28	30	10	18	23	149
15	30	16	30	30	12	17	24	159

As per table 19 all over only 22.4% have knowledge that anesthetist is in charge of operation theatre. Only 20% have knowledge that anesthetist is responsible for peri operative care of patient. Only 54.3% were wanted to choose their anesthetist. 81.4% afraid of post-operative pain. 72% like general anesthesia. Only 28% like spinal anesthesia. All over 90% thought Anesthesia is necessary for surgery. 70.9% aware of the information given in the consent.

I.C.U. Only 25% knew that their role in pain management. There is very little knowledge about the role of anaesthetists in emergency transfer of patient from hospital to tertiary centre and accident site to hospital, also role of anaesthetists in difficult intravenous access, airway management and life support skills. Similar study done by Uditanaithaniet al found that Patients aware of Anaesthesiologist's role in ICU, painless labour and relief of chronic pain were only 7.33%, 12.67% and 4.67% respectively. The role of an anaesthesiologist outside the OT - ICU, painless labour & pain clinic was not known to a majority of patients².

Most of respondents considered anaesthetist to be responsible for actually putting the patient to sleep. 76.6% responders did not realise that monitoring, pain management and care of haemodynamic could be under the control of anaesthetists. There was also little appreciation that treating medical problems during surgery (18.6), giving necessary drug, and care and stability of vitals (23.33%) are responsibilities of the anaesthetist. There was little knowledge (23.33%) about role of anaesthetist in post-operative period in recovery

room. Our study also consistent with Bhattarai B, et al found that 72.5% of respondents who knew anaesthesiologists have definitive role in the theatre, still they thought the role was limited to administering drugs and monitoring patients intraoperative, whereas 27.5% had added information about the role of anaesthesiologist in the post-operative period⁴.

Majority of respondents would like to see the anaesthetist preoperatively and many would like to see the anaesthetist after the operation to find out how the anaesthesia proceed and want to know presence of anaesthetists throughout their procedure. In our study 65% responders believe that good operation result requires team work from both the surgeon and anaesthetists. Respondents were more nervous about anaesthesia than surgery. Most of respondents (92.3%) preferred to know all the possible complications of related to drugs and procedure of anaesthesia, in any serious conditions.

In our study, 81.4% afraid of post-operative pain, 45.2% afraid their recovery from anaesthesia and regain the same condition after anaesthesia.

Seetharaman Hariharan done study suggested that the most common fear of patients regarding anaesthesia reported in many studies is 'not waking up' after anaesthesia. Postoperative pain is the next common fear which was expressed by patients across the world¹.

In our study shows that only 149 out of 210 responder aware about information given in consent. Illiteracy could also be the reason; busy hospital schedule not giving doctors enough time to explain the risk factors could be another reason. Similar study was done by Wafaa E. Ismaeil et al. Only 27.64% of the patients were aware of the information given in the consent form which they or their relatives had signed⁷.

CONCLUSION

In conclusion, this study identified deficiencies in patients' knowledge of anaesthesia and the role of anaesthetists. Majority of patients regard the anaesthetist as a medical specialist, the actual roles of anaesthetists in I.C.U. management, pain management, emergency transfer of patients, difficult i.v. access, responsibility of anaesthetists during operation and attitude towards anaesthesia remain poorly understood. On-going work is still required in order to better explain the wide scope of this profession to the public. This would help to alleviate fear among surgical patients, as well as increase the attractiveness of this specialty among medical students and interns.

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