# SURVEY OF PATIENTS' ATTITUDE ABOUT ANAESTHESIA AND ANAESTHESIOLOGIST- A PRELIMINARY EVALUATION IN A RURAL HOSPITAL OF NORTH BENGAL

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ABSTRACT

#### BACKGROUND

Image of anaesthesia and anaesthesiologist in the eyes of patients is variedly reported in literature and mostly poor in developing countries. We often realised this underestimation of our risky task, inadequate appreciation and recognition of our effort from patients. Hence, we put an endeavour to explore the existing perception among our patients in this rural region regarding our specialty and anaesthesiologist.

#### **MATERIALS AND METHODS**

This observational, paper-based questionnaire survey was carried out in the pre-anaesthetic checkup (PAC) clinic involving 101 patients scheduled to undergo elective surgery. The survey was carried out using structured interview based on the open-ended questionnaire consisting of 15 MCQ type questions. Data were mostly categorical data such as number of patients (percentage). Statistical comparison has been done between the favourable response (s) and all other responses taken together as unfavourable response (s).

#### RESULTS

About 44% of patients knew that anaesthesiologists are qualified doctors. Thirty percent had knowledge that anaesthesiologist has to be present after induction for continuation of the anaesthesia and for monitoring the vitals. About 10% patients are aware about the other roles of anaesthesiologists outside operating room. Regarding the risk related with anaesthesia and surgery, majority of patients (58%) were not informed at all. A considerable proportion of patients (90%) opined that pre-anaesthetic checkup is useful. Among the high literacy group, considerably higher proportions of patients have answered the favourable options.

#### CONCLUSION

The survey concludes that patients' perception about anaesthesia is poor. The patients also have insufficient knowledge about the exact role of an anaesthesiologist inside or outside the operating room.

#### **KEYWORDS**

Anaesthesia, Anaesthesiologist, Attitude, Knowledge, Patient Education, Perception, Pre-anaesthetic Check-up, Public Awareness.

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#### BACKGROUND

Anaesthesiology is one of the rapidly evolving disciplines of medical science that has made immense development in the recent past. Advancement in surgery and anaesthesia are going absolutely parallel to each other. Anaesthesiologists are playing a decisive role in patient management. In the last two decades, the role of anaesthesiologist has extended not only inside but also outside traditional operating room (OR) settings. An anaesthesiologist plays a very crucial role in intensive critical care units, trauma centres, pain clinics and as a member of resuscitation team all over the world.<sup>1</sup>

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Preoperative patient evaluation is an invaluable task of an anaesthesiologist. It not only helps the anaesthetists to know their patients, choose appropriate anaesthetic technique and get important equipment ready but also helps educate the patient on what to expect and what will happen to the patient. This may help the patient to remain calm and comfortable during surgery. A good anaesthetist-patient relationship established during the preoperative visit may help to reduce patient's anxiety and might reduce the chance of budding of The other medicolegal issues. valuable role of anaesthesiologists such as giving medical advice to other specialties, teaching in medical institutions and doing research were not generally recognised and appreciated.

Although at present there is tremendous health care awareness in developed countries, the awareness among people regarding the specialty of anaesthesiology is not encouraging. The picture is further gloomy in the developing countries such as India.<sup>2</sup> The public image is very poor as many people believe that an anaesthesiologist is not a medically qualified person. The widespread role of anaesthesiologists in short-term care, intensive care as well as in pain relief is not known to the public.<sup>3</sup>

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An anaesthesiologist does not spend as much time with a patient as a surgeon does. He gets to talk with his patient only during his one or two preoperative visits. Hence, there is a widespread misconception amongst the public about the role of anaesthesiologists and their responsibilities inside or outside the OR.

Recognition of the anaesthesia profession as an independent specialty would encourage future recruits to take up the specialty. Lack of recognition and decreased appreciation of the role of the anaesthesiologist by the patient contributes to the frustration of the anaesthetic practitioner which in turn can lead to decrease in recruiting and retaining the staff in the discipline.<sup>4</sup> With the changing health care environment and advancement in anaesthesiology, the patients and general public needs to be educated.<sup>5</sup> Patients' knowledge and perception about anaesthesiology and the anaesthesiologist should be assessed before put forward of any suggestion. With this background, we conducted a study in an attempt to explore the patients' perception and knowledge regarding anaesthesiology and the role of anaesthesiologists.

#### MATERIALS AND METHODS

After approval by the Institute's Ethics Committee, the present observational paper-based questionnaire survey was conducted in a tertiary care hospital (Teaching institution) in North Bengal, over a span of six months (From October 2016 to March 2017). The study was carried out in the preanaesthetic checkup (PAC) clinic of the Department of Anaesthesiology with 101 patients scheduled to undergo elective surgery. Patients with age <18 years, severe medical illness, psychiatric illness, brain damage, difficulty with hearing, inability to speak, and those who were unwilling to participate were excluded from the study. Written informed consent has been obtained from all participants after reading a leaflet on this investigation. Study was purely verbal in nature. It was a structured interview based on the open-ended questionnaire. Interviews were carried out after PAC by a separate team of a few selected anaesthesiologists. The validity of questionnaire was verified by three experts in the field of anaesthesiology.

Apart from demographic data of patients (Age, gender, and educational level of the respondent) each patient was asked with a standardised questionnaire of 15 questions of MCQ type with options covering discrete facts and sometimes requiring a "yes," "no," "no idea" response. The set of questions aimed in assessing perceptions and knowledge of anaesthesia, importance of PAC and the exact role of anaesthesiologist inside the operating theatre. Questions pertaining to the risk of anaesthesia and surgery, as well as various roles of anaesthesiologist outside the OR were also asked. Patients' desire to know more information and his reaction to the interview was also noted.

Data collected from all respondents were entered in the Microsoft Excel sheet. The number of participants, their percentages of option selected for each question was calculated. Data were mostly categorical data such as number of patients (percentage). Statistical comparison has been done between the favourable response (s) and all other responses taken together as unfavourable response (s). Chi-square test has been done using Epi Calc 2000 (Brixton Health). P<0.05 was considered as significant.

#### RESULTS

Altogether responses were obtained from 101 participants amongst which 49 (48.5%) were male and 52 (51.5%) were female. Literacy level was arbitrarily defined 'low' for those having up to standard VIII education and 'high' for those having more than that. Mean age of male and female patients were 39.2 and 37.8, respectively (Table 1).

## Regarding the Qualification and the exact role of Anaesthesiologist

Regarding the qualification of anaesthesiologist (Q1), about 44% of patients knew that anaesthesiologists are qualified doctors and out of those, relatively more number of females are aware about that. When asked about the source of this knowledge (Q2), majority answered that it was hearsay. Regarding the exact the nature of work done by the anaesthesiologist in the operating room, about 30% had knowledge that an anaesthesiologist has to be present after induction for the continuation of the anaesthesia and for monitoring the vitals (Q3). Remaining 70% of patients had either no idea or wrong idea. Although majority (47%) had no idea about postoperative care personnel (Q4), more number of patients believed that they will be looked after in the postoperative period by surgeons than anaesthetists (34%) versus 19%, respectively). About 90% of patients had no idea about any other role of anaesthesiologists outside the OR (Q5). Out of the remaining 10% patients who answered that there is some role outside the OR, around 6% said about duty in CCU and 3% in pain management. Only one patient mentioned about the role in painless delivery (Q6). (Table 2).

#### Regarding the PAC and its Importance

When asked about whether they are adequately informed about their surgery before this PAC (Q7), about 66% of the patients answered it as positive. Out of this 66%, the female patients are more informed than the males (75% vs. 57%). Those who were not informed (34%) before this PAC, about 50% achieved either full or partial information from this PAC (Q8). Thus, about 17% of total participants still remain 'not informed' even after the PAC.

When asked about the key person for declaring anaesthesia fitness for surgery (Q9), quite sufficient number of patients put credit to surgeons compared with anaesthesiologists (25% vs. 37%). Majority of patients (77%) considered the PAC to be 'time consuming but useful' (Q10). Only 12% patients certified it to be 'quick service and useful'. Most of the patients (71%) preferred one extra visit in the night before operation (Q11) to allay their anxiety.

Regarding the personnel who have informed them about the risk related with anaesthesia and surgery (Q12), majority of the patients (58%) were not at all informed. Only 10% patients had been informed in the surgical OPD before this PAC and about 33% have been informed during recent PAC. A major portion of the patients (89%) had considered the process of laboratory 'investigations and referral to other departments' (Q13) to be essential for the safety and not as harassment. About 80% of the patients thought PAC to be essential for safe surgery (Q14) (Table 3).

No. of Patients		Mean Age (Yrs.)	Level of Education			
			Low Literacy =up to class VIII	High Literacy >class VIII		
Total n=101		38.49	61 (60.39%)	40 (39.60%)		
Gender	Male, n=49 (48.51%)	39.18	27 (55.10%)	22 (44.90%)		
	Female, n=52 (51.49%)	37.83	34 (65.38%)	18 (34.62%)		
Table 1. Demographic Data of Respondent Patients: Gender, Age and Education						

Q1 Q2	(a)Qualified doctors * (b) Paramedical technical staff	What is your		(P value)	Literacy (n=61)	Literacy (n=40)	Square (P value)	Total (n=101)		
Q2										
Q2	(h) Paramedical technical staff	18 (36.73%)	26 (50%)	1.81	16 (26.22%)	28 (70%)	18.83	44 (43.56%)		
Q2	(b) i arametical teenmetal stan	1 (2.04%)	2 (3.85%)		1 (1.63%)	2 (5%)		3 (2.97%)		
Q2	(c) Nursing staff	3 (6.12%)	7 (13.46%)	(0.18)	9 (14.75%)	1 (2.50%)	(0.00)	10 (9.90%)		
Q2	(d) Not known	27 (55.10%)	17 (32.70%)	1	35 (57.38%)	9 (22.50%)		44 (43.56%)		
-	2 If 'yes' to qualified doctor, then how you have got this idea?									
	(a) Examining with stethoscope *	2 (11.11%)	14 (53.85%)		7 (43.75%)	9 (32.14%)		16 (36.36%)		
	(b) Hearsay	11 (61.11%)	10 (38.46%)		9 (56.25%)	12 (42.86%)	-	21 (47.73%)		
	(c) Read in the newspaper	5 (27.78%)	2 (7.69%)		0	7 (25%)		7 (15.91%)		
Q3 What is your idea about the role of anaesthetists?										
	(a) Gives injection or puts gases via mask once only and then becomes free	2 (4.08%)	4 (7.69%)	(0.81)	2 (3.28%)	4 (10%)		6 (5.94%)		
	(b) Gives injection or gases and thereafter continues as necessary and also monitors patients' status *	14 (28.57%)	16 (30.77%)		11 (18.03%)	19 (47.50%)	10.05 (0.00)	30 (29.70%)		
	(c) Gives injection or gases and surgeon maintains thereafter	0	6 (11.54%)		4 (6.56%)	2 (5%)		6 (5.94%)		
	(d) No idea	33 (67.35%)	26 (50%)		44 (72.13%)	15 (37.50%)		59 (58.42%)		
Q4	24 Who will look after you immediately after operation?									
	(a) Anaesthetist *	8 (16.33%)	11 (21.15%)	0.38	4 (6.56%)	15 (37.50%)	15.14	19 (18.81%)		
	(b) Surgeon	23 (46.94%)	11 (21.15%)	(0.53)	22 (36.07%)	12 (30%)	(0.00)	34 (33.66%)		
	(c) Technician	0	1 (1.92%)	(0.55)	0	1 (2.50%)	(0.00)	1 (0.99%		
	(d) No idea		29 (55.77%)		35 (57.34%)			47 (46.53%)		
Q5		Do anaesthetist	-	le outside the	e operating ro	om?				
	(a) Yes *	5 (10.20%)	5 (9.62%)	0.01	. ,	9 (22.50%)	11.78	10 (9.90%)		
	(b) No	44 (89.80%)	47 (90.38%)	(0.92)	60 (98.36%)	31 (77.50%)	(0.00)	91 (90.10%)		
Q6		If yes, v	vhat are those	e fields?						
	(a) CCU	4	2		0	6		6 (5.94%)		
	(b) Labour ward	0	0		0	0		0		
	(c) Pain management	0	3	1	0	3	ľ	3 (2.97%)		
	(d) All *	1	0		1	0		1 (0.99%)		
Categorical data expressed as number of patients (percentage). Statistical comparison has been done between the favourable response (s) and all other responses taken together as unfavourable response (s). Chi-square test done using Epi Calc 2000 (Brixton Health). P<0.05 was considered as significant. Favourable options are marked with * (Star) sign Table 2. Pattern of Patients' Responses Regarding the Role of Anaesthesiologists										

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Qns	Options	Male (n=49)	Female (n=52)	Chi Square (P value)	Low Literacy (n=61)	High Literacy (n=40)	Chi Square (P value)	Total (n=101)
Q7	Have you been informed about specific surgery before this check-up (PAC)?							
	(a)Yes *	28((57.14%)	39((75%)	3.60	35(57.38%)	32(80%)	5.54	67(66.33%)
	(b) No	21(42.86%)	13(25%)	(0.06)	26(42.62%)	8(20%)	(0.02)	34(33.66%)
Q8		nis PAC, are you w		bout your op			anaesthesia	
	(a) Well informed	3(14.29%)	3(23.07%)		2(7.69%)	4(50%)		6(17.65%)
	(b) Partially informed	1(4.76%)	10(76.92%)		10(38.46%)	1(12.50%)		11(32.35%)
	(c) Not informed	17(80.95%)	0		14(53.85%)	3(37.50%)		17(50%)
Q9								
	(a) Anaesthetist *	20(40.82%)	17(32.69%)		13(21.31%)	24(60%)		37(36.63%)
	(b) Surgeon	10(20.41%)	15(28.85%)	0.72	19(31.15%)	6(15%)	15.58	25(24.75%)
	(c) Nurses	0	0	(0.40)	0	0	(0.00)	0
	(d) No idea	19(38.78%)	20(38.46%)		29(47.54%)	10(25%)		39(38.61%)
Q10		it is your idea abo	ut the PAC reg	arding the t	ime consumpti	on and useful	ness?	
	(a) Got quick service and useful*	4(8.16%)	8(15.38%)		10(16.39%)	2(5%)		12(11.88%)
	(b) Time consuming, but useful *	42(85.71%)	36(69.23%)	2.23 (0.14)	43(70.49%)	35(87.50%)	0.78 (0.38)	78(77.22%)
	(c) time consuming & not useful	3(6.12%)	8(15.38%)		8(13.11%)	3(7.50%)		11(10.89%)
Q11		u think that one e	xtra visit in the	e night befor	e operation wi	ll allay your a	nxiety?	
	(a) Yes *	26(53.06%)	46(88.46%)	15.45	44(72.13%)	28(70%)	0.05	72(71.28%)
	(b) No	23(46.94%)	6(11.54%)	(0.00)	17(27.88%)	12(30%)	(0.82)	29(28.71%)
Q12	-	een told about the	risk of anaestl	nesia and su	rgery by this ti	me? Where ar	nd by whom	?
	(a) before PAC, by surgeon *	3(6.12%)	7(13.46%)		7(11.48%)	3(7.50%)		10(9.90%)
	(b) during this PAC, by the anaesthetist *	3(6.12%)	30(57.69%)	35.81 (0.00)	21(34.43%)	12(30%)	0.70 (0.40)	33(32.67%)
	(c) nothing told about the risks	43(87.76%)	15(28.85%)		33(54.10%)	25(62.50%)		58(57.42%)
Q13 Do you think all these laboratory investigations and referral to other departments are 'harassmo						rassment' fo	or you?	
	(a) Yes, it is harassment	3(6.12%)	7(13.46%)		6(9.84%)	4(10%)		10(9.90%)
	(b) No, it is essential for our safety *	46(93.88%)	44(84.61%)	2.23 (0.14)	54(88.52%)	36(90%)	0.05 (0.82)	90(89.10%)
	(c) No idea	0	1(1.92%)		1(1.64%)	0		1(0.99%)
Q14		Do you	think that PAC	is essential	for a safe surg	ery?		
	(a)It is of course essential *	42(85.71%)	39(75%)	1.02	47(77.05%)	34(85%)	0.06	81(80.20%)
	(b)It is needed, but not essential	6(12.24%)	7(13.46%)	1.82 (0.18)	8(13.11%)	5(12.50%)	0.96 (0.33)	13(12.87%)
	(c)No idea at all	1(6.12%)	6(11.54%)	1	6(9.84%)	1(2.50%)		7(6.93%)
Q15	I	Do you have any other queries about anaesthesia and surgery?						
	(a) Yes	8(16.33%)	9(17.30%)	0.02	7(11.48%)	10(25%)	3.16	17(16.83%)
	(b) No*	41(83.67%)	43(82.69%)	(0.90)	54(88.52%)	30(75%)	(0.08)	84(83.17%)
Categorical data expressed as number of patients (percentage). Statistical comparison has been done between the favourable response (s) and all other responses taken together as unfavourable responses. Chi-square test done using EpiCalc 2000 (Brixton Health). P<0.05 was considered as significant. Favourable options are marked with * (Star) sign. Table 3. Pattern of Patients' Responses Regarding the Pre-anaesthetic Checkup								

### DISCUSSION

The present survey was carried out to explore the patients' existing perceptions about anaesthesiologist and anaesthesiology in this rural area. The discipline Anaesthesiology is being misconceived as a 'behind the screen' specialty<sup>6</sup> with insufficient appreciation from the patients and family members while the anaesthesiologists have to take a major blunt of risks associated with anaesthesia and surgery. The patients often do not recall the name of anaesthesiologists while remembering the details of their surgeon. One reason may be that the patients first consult their surgeon and thereafter as per surgeon's workup for the surgery they are referred to the anaesthesiologist. Often the anaesthesiologists assessing preoperatively and the performing anaesthesiologist in operating room are different persons. Moreover, the interview with patients is usually for a brief period and does not put an impression. The image of the anaesthesiologist is poor and many patients do not know that

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anaesthesiologist is a medically qualified physician.<sup>6</sup> Often they consider the anaesthesiologists as mere a technician or assistant of their surgeon. The public often nurture the wrong concept that the anaesthesiologists just administer a calculated dose of injection or certain amount of gases to put the patients asleep for a certain period of time. Often, they have a notion that if this dose becomes high the patients do not wake up and succumb. The continuous process of anaesthesia along with monitoring of vitals is not perceived by most of the patients.

The present study finds that less than a half (44%) of the patients know that anaesthesiologists are doctors. Previous studies have reported various proportions of patients having the knowledge that anaesthesiologists are doctors. The proportions of aware patients starting from 30-40%,<sup>1,2,7,8</sup> 40-50%,<sup>9-11</sup> 50-60%,<sup>6,12-17</sup> 75%,<sup>18,19</sup> to high level ~ 80%,<sup>20-22</sup> and very high level (90% and above),<sup>23-25</sup> all have been documented in the literature. A recent survey even reports quite low (19%) proportion of respondents knowing that anaesthetists should administer anaesthetics and half of this cohort knew that the anaesthetist is a qualified doctor.<sup>26</sup>

Regarding the source of this knowledge (Q2), majority of patients answered that it was from hearsay. Social campaign and existing baseline awareness of public is thus important to transmit the baseline education to a patient about anaesthesia and anaesthesiologists.

Regarding the exact nature of work done by the anaesthesiologist, the majority (About 60%) had no idea and only one third of them know correctly that the anaesthesiologists continuously perform the process of anaesthesia and monitor the patients' vitals. However, previous studies have reported a greater portion of patients (60%<sup>1</sup> and 89%<sup>27</sup>) recognising the role of an anaesthesiologist in monitoring vitals of patients during surgery. However, a recent study observed that 45.5% of patients considered anaesthesia to be mere 'putting people to sleep and waking them up' and about one fifth (~22%) said 'it involves the preoperative evaluation and perioperative management'.<sup>28</sup>

In the present survey, in reply to asking 'who would look after in the postoperative period', majority had either no idea (47%) or believed that they will be looked after in the postoperative period by surgeons (34%) compared with anaesthetists (19%). A recent study<sup>29</sup> in a developing country among the paramedical staff reports that 71% respondents knew their anaesthesiologists to perform something and 23% believed that anaesthesiologists would manage pain. However, for the management of postoperative complications, respondents put confidence mostly to surgeons, somewhat to other physician (77%, and 18% of respondents) with no mention of anaesthesiologists.<sup>29</sup>

In the present survey, only 10% of the patients knew about the roles of anaesthesiologist outside the OR. Out of these, around 6% knew about duty in CCU and 3% were aware of role in pain management. Only one patient mentioned about the role in painless delivery. The role of anaesthesiologists outside the OR was reported in previous studies as around 15-30%.<sup>1,20,30</sup> A recent study<sup>22</sup> reports that about 65% patients believe that an anaesthetist can manage all types of pain. Prasad & Suresh<sup>18</sup> also found that 68% of their observed patients knew the role of anaesthesiologists in pain management and a major portion (72.5%) knew about painless labour. In our institute although the pain clinic and CCU are running for last 5 years, poor response rate regarding the role outside the OR indicates that these roles are perceived poorly by the patients. Hence, an endeavour should be given by the anaesthesiologists in providing more information voluntarily regarding an anaesthesiologist's various roles outside the OR.

Also, it has to be noted that in the current survey among the high literacy group, considerably higher proportion of patients have answered the favourable options, thus signifying that with higher literacy people are more aware of the qualification, exact role of anaesthesiologist inside and outside of OR. Likewise, with higher literacy we have received considerable favourable response with the questions about who is the key person about deciding fitness for surgery (Q9) and explaining risks of anaesthesia and surgery (Q12). Previous studies<sup>6,26,31</sup> also report that patients with higher level of education have a better knowledge about the anaesthesiologist's role.

In the present study, considerable number of female patients are aware of the risks of anaesthesia (Q12). Comparable responses between male and female patients were observed with other questions between male and female responders. In a recent study, Abdullah S. Alqefari et al<sup>22</sup> also found no differences while considerable association between female gender and better knowledge was observed by other researcher.<sup>11</sup>

In the present survey about one third patients are not adequately informed about their particular nature of surgery before PAC and 50% of those remained so even after the PAC. This implies that further effort and time should be devoted to provide adequate information regarding the nature of anaesthesia and surgery. Regarding the key person for declaring anaesthesia fitness, quite sufficient number of patients put credit to surgeons compared with anaesthesiologists (25% vs 37%). This might result from the preliminary investigation work-up by surgeons and their subsequent continual efforts of referral to PAC clinic and other departments for preparing their patients.

Among the patients who considered PAC to be useful, the majority of patients (77%) considered the PAC to be 'time consuming but useful' whereas only 12% patients certified it to be 'quick service and useful'. Hence, proper allocation of human resource and avoidance of unnecessary referral has to be accomplished to reduce the queue time and also to expedite necessary investigations.

In the current survey, majority of patients considered PAC workup to be useful and inclined to have an extra visit by the anaesthesiologist before surgery to allay their anxiety. Mushin WW<sup>32</sup> nicely commented that "A pre-operative visit is often as effective as an injection of morphine". Morphine was used almost routinely for preoperative sedation, pre-emptive analgesia and relief of anxiety in the past. The preoperative anxiety in adults ranges from 11-80%.<sup>33</sup> Common concern about anaesthesia remains to be non-arousal from anaesthesia, wake-up (Awareness) during anaesthesia, pain and postoperative nausea and vomiting.<sup>34,35</sup> The pre-anaesthetic consultation, if effectively performed, plays an important role in educating patients and thereby curtailing this anxiety.<sup>5</sup>

In the current survey, lesser patients were aware of the risk of anaesthesia and surgery in the surgery OPD compared with PAC (10% versus 33%, respectively). This may reflect

that anaesthesiologists are more concern about informing the patients about the risks related with perioperative events. Although the majority are not informed at all, thus suggesting more rigorous effort and attention should be paid regarding clear description and disclosure of risks during taking informed consent.

In the present survey, the majority of patients (89%) had considered the process of laboratory 'investigations and referral to other departments' to be essential for their safety and about 80% of the patients thought PAC to be essential for their safety during anaesthesia and surgery (Q13 and Q14). In a Caribbean study, majority of patients expressed that attending PAC process is worthwhile.<sup>6</sup>

The question may arise how much this public image about the anaesthesiologist is really important! Hall IA & Earlam C<sup>36</sup> opined that anaesthesiologists 'should not be upset' with the 'widespread ignorance' and advised to swallow the pride and continue rendering services as 'silent heroes'. However, the opposite views do exist where Ross DG37 proposed that anaesthesiologists should 'not start posing as silent heroes' and rather instigated to bear a low threshold for becoming vocal whenever the situation demands. The author believed that with the increase in appreciation by public, the anaesthesiologist's ability would increase to influence the provision of suitable resources within the area of their expertise. The lack of recognition can simply affect the selfesteem of the anaesthesiologists and help budding job dissatisfaction.<sup>29</sup> This will hamper the performance and thereby the output by the anaesthesiologists in the long run.

Despite the booming role of anaesthesiologists, they are often underestimated not only by patients and public but also by colleagues and administrators. Many of our medical and surgical colleagues consider the process of anaesthesia as mere a procedure and not as a patient-oriented clinical work. Often administrators are unaware about the dimensions of an anaesthesiologist's capabilities and believe that the anaesthesiologist can be replaced by other professionals.<sup>38</sup> The network media should emphasise the role of anaesthesia team in the successful outcome of surgery.<sup>31</sup>

Lack of communication from the side of anaesthesiologists may attribute to the current unfavourable scenario regarding patients' knowledge and perception about anaesthesia.<sup>39</sup> Effective patient education warrants good communication skills, due consideration to adult learning and teaching principles, devoting more time during PAC, and selecting suitable media to meet the individual patient's needs.<sup>40</sup> The use of relevant media, together with reinforcement by the consulting anaesthesiologist, may be able to increase patient confidence and compliance with perioperative events. Patient satisfaction is a complex psychological phenomenon and should be assessed with reliable and valid questionnaires.<sup>41</sup> The magnitude of preparing a patient preoperatively with the use of video seems to depend on the style of presentation of such a video.<sup>42</sup>

There are limitations of our survey. It was a preliminary effort involving less number of patients. Hence, the inference of this observation may not have sufficient external validity. However, we consider that it has thrown some light to the existing problems. Further studies would be beneficial involving large number of patients, and separate evaluation regarding the status of the discipline and image of the anaesthesiologists amongst the administrators, paramedical personnel, etc. remains to be future scopes.

#### CONCLUSION

In this survey, it has been observed that patients' knowledge and perception about anaesthesia is poor. Also, patients are not sufficiently aware about the exact role of an anaesthesiologist in OR and outside the OR. It has to be emphasised that anaesthesiologists should express their activities more to their patients, make use of the media and internet and strive towards providing high quality perioperative care which will help improving their image in the eyes of the public. A close anaesthesiologist-patient contact prior to surgery is a fundamental component of high standard of practice and this can only be achieved by devoting adequate time with patients. Achieving adequate awareness among the public regarding anaesthesia and anaesthesiologists will decide the future image of our specialty.

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