International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online)
An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm
2014 Vol. 4 (2) May-August, pp. 174-181/Sinha et al.
Research Article

SURGEON – ANESTHESIOLOGIST RELATIONSHIP

Sandip Sinha, *Dhiman Adhikari, Anindita Saha and Samarendranath Samui
Department of Anaesthesiology and Critical Care, Institute of Postgraduate Medical Education and Research, 244 A.J.C. Bose Road, Kolkata, India-700020
**Author for Correspondence*

ABSTRACT
The rapidly changing global scenario especially in medical sciences in the 21st century is the inspiration for a discussion about the future of anesthesiology and surgeon-anesthesiologist relationship. The aim of this study was to find out whether an anesthesiologist chooses his specialization by his own choice or due to failure to specialize in any other discipline, whether anesthesiologists feel dominated and dictated by surgeons, whether in surgeon's opinion anesthesiologists frequently try to avoid performing anesthesia and ways to improve relationships between anesthesiologists and surgeons. A survey was conducted and 104 Indian anesthesiologists and 104 Indian surgeons were asked to fill in a questionnaire.
Analysis of the answers obtained allowed the authors to conclude that 1) An anesthesiologist chooses his specialization according to his interests and not because of failure to specialize in another discipline. 2) Majority of the anesthesiologists feel they are dominated and dictated by surgeons. 3) According to surgeons, anesthesiologists frequently do everything to avoid performing anesthesia, although anesthesiologists feel that in the event of cancellation of a case they do have a reasonable ground to do so. 4) In case of a strained professional relationship, there are several suggested ways to improve relationships between anesthesiologists and surgeons.
The results of this survey revealed that anesthesiologists chooses their specialization according to their own interests and they should not have reasons for negative self-esteem, although majority of them feel dominated and dictated by surgeons. Majority of surgeons feel that anesthesiologists frequently do everything to avoid performing anesthesia, although anesthesiologists feel that in the event of a cancellation of a case they do have a reasonable ground to do so. Anesthesiologists should hope for good interdisciplinary cooperation with the surgeons in the future, and to do so the authors have suggested several positive steps to improve relationships between anesthesiologists and surgeons.

***Keywords**: Surgeon, Anesthesiologist, Relationship, Improvement*

INTRODUCTION
Dr. William Webster, one of the pioneer anesthetists of Western Canada conformed to the modern conception of an anesthesiologist. According to one of his biographers, Dr. Aikenhead, "his opinion was in harmony with the modern viewpoint that doctors would be chosen as anesthetists by virtue of their efficiency in the correlation of the scientific and practical aspects of anesthesia." In the past, surgeons had adopted the attitude that they alone were fully responsible for the patient, and that every phase of the operative procedure, including the administration of the anesthetic, must be under their direction. Despite the fact that this state of affairs constituted a heavy burden, adding to the actual performance of the operation, one cannot deny that many surgeons reveled in this role of exalted authority and would have relinquished it only with considerable reluctance. Under this arrangement, the anesthetist was little more than a technician whose few duties included keeping the patient asleep and relaxed with an anesthetic agent such as ether or chloroform. However, if the patient failed to survive the operation, the anesthetist was expected to assume complete responsibility for the unexpected fatality.
Anesthesiologists, despite their customary calm and reasonable exterior, have been harboring a professional resentment towards this domineering attitude of the surgeon. However, this state of affairs cannot continue today because of the increasing criticality of patients as they undergo increasingly critical operations. In today's changed scenario, the anesthesiologist assumes heightened responsibility. He is no longer just a technician but a specialist and a consultant as well. This change in status has resulted in an encroachment by the anesthetist on the field of influence of the surgeon, albeit gradually. Little

imagination is needed to appreciate the benefits of unconsciousness or sedation at the time of surgery. It is not only a boon for the patient, but the relaxation is a vital technical aid in the exposure of the operative field, that only the surgeon can evaluate. What is less appreciated is that today, the anesthesiologist, as critical care specialist, must also be able to resuscitate the patient and sustain life sufficiently for the surgeon to operate. According to surgeon P.H.T. Thorlakson, too often the surgeon fails to impress on the patient that the anesthetist is much more important than the anesthetic agent, and tends to deny them the credit that is their due. For the sake of the patient, today's fully trained and capable anesthetist must be a welcome member of the surgical team. He no longer resembles the anesthetist of an earlier day whose work was limited to the production of a state of unconsciousness within the constraints of limited technology available to him. Today, during the operation, the anesthesiologist is the 'silent partner' employed in a number of technologically sophisticated tasks with efficiency, freeing the surgeon from anxieties and responsibility that may impair his work and judgement. If mutual respect and harmony exists in the operating theatre, between the surgeon and the anesthetist, much can still be achieved in the elimination of operative failures.

The aim of human work is not only to gain a salary but also satisfaction from its results. Surgeon and anesthesiologist must work as a team. Physicians of different but complementary specialties, they must work jointly in the management of the patient during the pre-, per- and post-operative periods, with the objective of ensuring the best quality of care and the greatest safety. The unprecedented development of new technologies during the last few decades has modified the responsibilities of these two specialties. Today, the practice of anesthesia is not only facilitating surgical work, during its actual execution, but also facilitating diagnosis and non-surgical therapeutic techniques. So, from a traditional but secondary partner to the surgeon, the anesthesiologist is becoming a privileged collaborator. Within the team, the anesthesiologist must achieve his/her task in all independence, as stated in the Lebanese Code of Ethics.[3] The practice of a shared activity, in the same setting, for the benefit of the patient, requires a clear definition of roles and mutual respect of competencies.

In India, there is lack of public awareness of anesthesiology and esteem for anesthesiologists. Media also suffers from the same bias. In the media, achievements in the operation theatre are usually presented without mentioning the contribution of anesthesiologists. Possibly, the fact that sometimes surgeon are publicly critical of our work adversely affects public opinion.

Therefore, with this background of potential but necessary to avoid friction in the operation theatre, the aim of this study was to find out, whether, in our setting, the anesthesiologist chooses his or her specialization because of a lack of opportunity to specialize in other disciplines, whether they feel dominated and dictated by surgeons, whether, in the surgeon's opinion, anesthesiologists unreasonably try to avoid performing anesthesia, and to explore perception regarding ways to improve relationship between anesthesiologists and surgeons.

MATERIALS AND METHODS

A cross-sectional survey was carried out of anesthesiologists and surgeons attached to teaching hospitals, non-teaching hospitals and those engaged fully in private practice. Surgeon-anesthesiologist couples were excluded. The institutional ethics committee waived the requirement for written informed consent. Potential participants were informed about the scope of the study and their consent sought verbally before they were handed a structured, pre-tested questionnaire in a surgical conference and an anesthesia conference respectively.

The survey participant was asked to respond to the questionnaire, without consulting peers and colleagues, in a relaxed environment in between two sessions in a conference and return the same in anonymous sealed envelopes provided for the purpose. The identities of all the surgeons and anesthesiologists who participated in the study were kept confidential. Sampling was purposive and was continued with the target of obtaining at least 100 responses each from anesthesiologists and surgeons.

As indicated in Table 1, the questionnaire for anesthesiologists contained questions concerning their work and specialization. The surgeons were asked questions connected with their opinion of anesthesiologists'

work. The respondents' age, gender, specialization and place of employment were recorded as part of the questionnaire but name was not asked to preserve confidentiality. Every respondent was free to consult with one of the investigators to clarify the meaning of any questions or terms on the spot. The questions were obtained from a study done by Kwiecinska et al.

RESULTS AND DISCUSSION

Results

Over 95% of anesthesiologists and 90% of surgeons we approached complied to the request. Altogether 208 evaluable responses were obtained – 104 each from anesthesiologists and surgeons. Of the 104 anesthesiologist respondents 66 were male and 38 were female, while out of 104 surgeons 79 were male and 25 were female. The anesthesiologist respondents were aged between 38-62 years while the surgeons were aged between 41-66 years.

Overall, 66% of anesthesiologists opined that their choice of the discipline had been made voluntarily, while the rest stated that they were compelled to specialize in anesthesia because of lack of opportunity elsewhere or circumstantial reasons. For this 34%, the preferred choice would have been internal medicine (13%), pediatrics (10%), gynecology & obstetrics (7%), surgery (3%) and ophthalmology (1%). All anesthesiology respondents kept regular schedules and 72% opined that they worked hard, of which 20% felt that not only their work was hard but also that it involved considerable risk. Only 8% anesthesiologists felt that administering anesthesia was an easy affair. Surprisingly, most surgeons also estimated the anesthesiologists work as hard (65%) or very hard (18%). Most surgeons (44%) rated the anesthesiologist's skills as good, 20% as excellent, 28% as average and 8% as poor and non-satisfactory. However, only 10% of anesthesiologists assessed their own training as excellent, 55% assessed it as good, 20% as average and 15% as poor.

Cooperation between anesthesiologist and surgeon and mutual respect for each-other's competencies is conducive to good surgical outcome and this cooperation was rated as average (60%), good (20%) or poor (20%) in the anesthesiologist group, with corresponding figures of 54%, 24% and 22%, respectively, for surgeon respondents. Interestingly, there was no excellent cooperation rating from either group. Majority of the anesthesiologists (89%) felt that they are dominated and dictated by surgeons, at least on occasions, and only 8% opined that they felt equal in hospital hierarchy with the surgeons and that their decisions were respected by surgeons; 3% of anesthesiologists did not comment on this.

Table 1: The questions for anesthesiologists and surgeons

Anesthesiologists	Surgeons
What was the reason to choose your specialization and how do you estimate your own professional training and your work?	How do you rate the professional competence and the work of the anesthesiologists with whom you interact?
Rate your interaction with surgeons and whether you feel dictated and dominated by them?	Rate your cooperation with anesthesiologists.
What are the reasons for cancellation of anesthesia and the reasons for changing the decision to disqualify the patient from anesthesia?	What are the reasons for cancellation of anesthesia and the reasons for changing the decision to disqualify the patient from anesthesia?
What are the ways you can suggest to improve relationships between anesthesiologists and surgeons ?	What are the ways you can suggest to improve relationships between anesthesiologists and surgeons ?

A lot of problems and friction originate when an anesthesiologist disqualifies a patient from anesthesia. The various reasons for cancellation of anesthesia, according to anesthesiologists and surgeons, and reasons for changing the decision to disqualify the patient from anesthesia are given in Table 2.

Table 2: Reasons for rescheduling surgery – according to anesthesiologists and surgeons

	Anesthesiologists (%)	Surgeons (%)
Reasons for cancelling operation		
• Necessity for additional tests	79	88
• Patient requires intensive treatment	80	52
• Lack of blood for transfusion	74	36
• Lack of respirator	27	10
• Lack of electrocardiograph	08	11
• Lack of skills	03	30
• Lack of drugs	12	04
• Lack of equipment	07	06
• Reluctance to work	03	54
• Others (stated below)	05	02
Reasons for changing the decision to disqualify the patient from anesthesia		
• Being pressurized by surgeon	54	62
• I never change my mind	11	02
• Instruction from someone other than surgeon	16	09
• Surgery in life-threatening condition		
• Being pressurized by a patient	15	11
• Being pressurized by a supervisor	00	02
• Being pressurized by an internist	25	13
• Being pressurized by a patient's family	03	04
• Fear of losing a job	02	09
• Decision at consultation	14	08
• Fear of being accused of lack of skill	07	01
• Consultation with an internist	18	11
• Consultation with the supervisor	00	00
• Patient's condition getting worse	23	11
• Compensation of general condition	11	00
• Common sense	01	00
• I don't know similar cases	00	06
• Additional tests have been performed	01	07
	01	08

Note: Other reasons for cancelling surgery included: food intake, inappropriate qualification for surgery, patient unprepared for surgery, bad scheduling, patient in terminal condition, lack of assurance regarding proper postoperative care, exceeded competences, lack of consultation.

Both anesthesiologists and surgeons provided their views on improving the relationship and mutual cooperation in the operating environment; there was none from either side who felt that there was no scope or need for improvement. Multiple views were offered and there was quite a bit overlapping of perceptions as can be seen from Table 3.

Table 3: Opinion regarding ways to improve mutual cooperation – according to anesthesiologists and surgeons

Strategy	Anesthesiologists (%)	Surgeons (%)
1. Get a second opinion.	52	63
2. Make sure there are clear expectations.	66	48
3. Approve appropriate patients for surgery.	70	47
4. Get to the operating room on time.	83	69
5. Be truthful about scheduling.	94	48
6. Consult on decisions.	60	55
7. Involve annual clinical quality outcomes in your anesthesia group's contract.	66	87
8. Choose a group who feels true ownership of the patient.	70	78
9. Choose an anesthesia group with Ambulatory Surgery Center (ASC) experience.	Not applicable	Not applicable
10. Recruit nursing staff that will keep anesthesiologists happy.	85	82
11. Appoint a strong medical director.	86	78

Discussion

A generation ago the anesthetist was the tame follower of the surgeon, obediently administering anesthetics by whatever technique the surgeon demanded. Times have however changed and the highly trained anesthesiologist now commands parity of status with his surgical colleagues and is increasingly called into consultation on matters of pain relief, sedation, fluid resuscitation, respiratory support and other critical care issues.

Patients are anesthetized not for anesthesia but in order to get surgery done. Therefore, anesthesiologists, in their primary role, are not independent caregivers for the patient but must facilitate the work of surgeons. Hence, the potential for conflict is always present coupled with low self-esteem and a lack of job satisfaction. The anesthesiologist retains full responsibility for what he does with the drugs and equipment at his command to ensure that the patient tolerates the surgery and does so without pain. However, there is no way to restrain a surgeon from excessive surgical adventure. Only the surgeon can stop the surgical process, and, until that moment, the anesthesiologist is committed to staying with the patient. If his opinion is rejected and the operation continued, he cannot quit; the ultimate decisions as to when to operate and when to stop the operation must be taken by the surgeon. Improving interpersonal relationship between anesthesiologist and surgeon is therefore a worthy goal that merits exploration in various settings.

A famous Polish surgeon– Kornel Michejda (in 1940's) predicted the consequences of anesthesiologist's dependence on other specialists - "Losing the opportunity of working in big surgical centers, at the same time he looses the possibility of an independent existence. Every young physician is aware of this danger at the moment he decides to specialize in anesthesiology. Precautions should be taken from the very beginning of a professional life. This could be done by providing the anesthesiologists with an appropriate social status and ensuring a stabilization of employment. Of course, it would be an exceptional "privilege" for this group of physicians but anesthesiology is exceptional. An anesthesiologist can never be an independent worker in the health care system. Patients are anesthetized not just for anesthesia but in order to perform surgery." Results of this survey reveal that anesthesiologists do not have reasons for negative self-esteem. They should hope for good interdisciplinary cooperation with other specialists in the future.

Anesthesiologists necessarily will have to work in hospitals and as part of the surgical team. This should not be a reason for negative self-esteem but rather be viewed as the opportunity to participate in patent care more pro-actively through pre-surgical and post-surgical consultations. The surgeon cannot forget his patient once out of the operation theatre. In the same manner, the anesthetist of today, unlike the

anesthetist of yesterday, must not forget the patient once out of the recovery room. This will also call for cooperation with the surgeon. Various facets of anesthesiology's relationship to surgery is developing – anesthesiology has become a respectable and highly skilled discipline, the anesthesiologist should function as 'the internist of the operating room' and the anesthesiologist and surgeon should be 'partners' in the care of the patient.

The results of this survey reveal that most anesthesiologists in our setting choose their specialization according to their own interests and not because of a lack of possibility to specialize in another discipline. Majority of them feel dominated and dictated by surgeons. Majority of surgeons feel that anesthesiologists frequently do everything to avoid performing anesthesia, although anesthesiologists feel that in the event of a cancellation of a case they do have a reasonable ground to do so. In surgeon's opinion anesthesiologists' skills are good and their work is hard. Cooperation between anesthesiologists and surgeons was estimated as average to good.

Some eminent persons have suggested few ways to improve mutual cooperation and relationships between anesthesiologists and surgeons. DougYunker, MD, an anesthesiologist and medical director of Upper Arlington Surgery Center in Columbus, Ohio, discusses three ways to improve relationships between anesthesiologists and surgeons:

1. Get a second opinion. From time to time, the anesthesiologist and surgeon might disagree on whether the patient is appropriate for surgery. When such a stalemate arises, either party might ask for a second opinion from another surgeon or anesthesiologist. This takes the disagreement away from being a personality conflict and focuses it on objective concerns.
2. Make sure there are clear expectations. To avert disagreements over appropriateness of certain patients for anesthesia, anesthesiologists should make sure the surgeon is aware of their expectations on patients' proper weight, blood sugar levels and degree of hypertension.
3. The issue of making the anesthesiologist an owner. According to Dr. Yunker there are positive and negative aspects of this proposal. On the one hand if the anesthesiologist is an owner, he cares about what drugs are being used and the cost of equipment. On the other hand, only surgeon-owners can bring cases to the ASC (Ambulatory Surgery Centers). Anesthesiologist can't do that. "Even if you're not an owner, you are still working hard," Dr. Yunker says. "The motivation for the anesthesiologist is being paid by the case." Compared with hospitals, relationships between anesthesiologists and surgeons at ASCs are excellent, but there is also an elevated level of expectation at ASCs, says Thomas Wherry, MD, medical director of Health Inventures and principal for Total Anesthesia Solutions, a company dedicated to finding strategic solutions for issues relating to anesthesia care. According to him, the surgeon expects a low same-day cancellation rate in an ASC. Additionally, unlike the hospital, they expect the ASC to be a well-oiled machine. The cases should start on time, turnaround should be efficient and the patient should recover easily from the anesthesia. The anesthesiologist also expects the patients to be well-prepared, relatively healthy and to have the required medications and equipment to safely provide care.

Here are four ways Dr. Wherry suggests surgeons and ASCs can improve relations with anesthesiologists.

1. Approve appropriate patients for surgery. Surgeons should not decide to operate on patients inappropriate for anesthesia in an ASC, such as extremely obese patients with severe obstructive sleep apnea. Anesthesiologists will feel resentful if surgeons are pushing them to do cases they don't feel comfortable with. There needs to be an agreed-upon methodology on choosing and screening patients.
2. Get to the operation theater on time. Anesthesiologists must arrive early to get the patient ready for the case, but they may end up waiting for a late surgeon. According to Dr. Wherry, this is a big problem with certain ASCs and is a big dissatisfication issue for the patient, nurses and anesthesiologist. ASCs must be more proactive in dealing with the chronically late surgeon.
3. Be truthful about scheduling. Dr. Wherry says that there needs to be truth in scheduling. When a surgeon says a case should last two hours, it shouldn't then take four hours. The chronically late or under-posted surgeon will have a significant impact on morale. Anesthesia groups tend to run tight schedules and will often travel to several locations. Running past the posted time for preventable reasons will certainly minimize their ability to cover other locations.

4. Consult on decisions. One needs to consult with anesthesiologists on important decisions such as opening an additional operating room or introducing a new service line. So according to Dr. Wherry it's a mistake not to include the anesthesiologists in the decision – making process because one counts on them to make the new plans a success. He also suggests inviting anesthesiologists to medical executive or board meetings. By including them in the process, the institute will more likely to get their buy-in. An anesthesiologist who is included will be more engaged and be more likely to go the extra mile for the Ambulatory Surgery Centers.

Theresa Palicki, administrator of Eastside Surgery Center in Columbus, Ohio, offers following five ways to develop good working relationships with anesthesiologists and achieve improved clinical quality outcomes.

i. Involve annual clinical quality outcomes in your anesthesia group's contract. If the anesthesia group is accountable to a set of quality outcomes — transfer rates and infection rates, for example — they will likely work harder to improve patient safety. Theresa Palicki's center sets annual expectations for its anesthesia group. If the group falls below the threshold in their benchmarks, the group's contract could be terminated for the following year. Incentivizing the anesthesiologists to provide quality care can help the centre and tangibly reward the anesthesiologists when they do good work.

ii. Choose a group who feels true ownership of the patient. When selecting an anesthesia group to work with, it is wise to choose a group that feels responsible for each patient they care for. Theresa Palicki says that some anesthesiologist would think it was appropriate, as soon as the patient was in Post Anesthesia Care Unit (PACU), to think their job was done and they could go home. From the time the patient is put on the schedule, a good anesthesiologist will be looking at the chart, looking at the pre-operative history and doing evaluations. They'll be right there in the PACU looking at the files. She describes an anesthesiologist at Eastside Surgery Center who stood by a patient's car while she sat in it, talking on her cell phone after surgery, to ensure she was safe until she left the parking lot.

While everyone wants to work with committed anesthesiologists, it can be difficult to tell them apart during the interview process. Theresa Palicki recommends asking each group questions about the relationship between the surgeon and the anesthesiologist to get a sense of how they view their role.

iii. Choose an anesthesia group with ASC experience. Anesthesia functions differently in a hospital than in an ASC, and it helps to have an anesthesia group that understands the day-to-day processes of a surgery center, Theresa Palicki says. During the interview process, she asks about the other organizations the group has worked in. If a group has only done hospitals, they might be used to having all hands on deck. If something goes wrong, they can press a button and go to code blue and the whole team comes in. At an ASC, it's a few people who have to be responsible when something unexpected happens.

iv. Recruit a nursing staff that will keep your anesthesiologists happy. Theresa Palicki says anesthesiologist satisfaction often depends on the working relationship between the anesthesiologists and the nursing staff. According to her, nurses that are too pedantic are unwanted. Nurses that follow the rules and also look more at what's best for the patient than at the minute details of the policy are more wanted in the operating room and in the critical care settings.

v. Appoint a strong medical director. If the medical director is a respected presence, one can guarantee a strong ally. Theresa Palicki suggested that ASCs can make the mistake of appointing a low man on the totem pole who is brand new to the group as director. Instead, a person who has been an integral part of the group for a few years and has clinical experience that other anesthesiologists respect is deemed fit to be a medical director. According to her, if things need to be changed in the anesthesia group and one sends someone inexperienced to talk to the anesthesiologists, they won't listen. Eastside Surgery Center's current medical director is president of the entire anesthesia group. Because he has a lot of sway and connections to the community, he fights for the ASC by reaching out to surgeons and convincing them to join the centre.

Conclusion

Cooperation between surgeons and anesthesiologists is very important as they are the cornerstones of any surgical procedure. This is needed for benefit of both the doctor and patients. Anesthesiologists should

hope for good interdisciplinary correlation with the surgeons in the future, and to do so the authors have suggested several positive approaches.

ACKNOWLEDGEMENT
I take immense pleasure to express my sincere and deep sense of gratitude to our Anaesthesia and Urology department for constant support and guidance.

REFERENCES
Bateman VD (1964). Who is the anesthesiologist? *Anesthesia and Analgesia* **43**(2) 190-191.
Callaway W (1972). The anesthesiologist and the surgeon: partners in the operating room. *The Journal of the American Medical Association* **1222**(10) 1315.
Daher M (2007). Recommendations on the relationship between surgeons and anesthesiologists as part of the health care team. *The Lebanese Medical Journal* **55**(2) 59-62.
El-Masry R, Shams T and Al-Wadani H (2013). Anesthesiologist-Surgeon conflicts at the workplace: an exploratory single-center study from Egypt. *Ibnosina Journal of Medicine and Biomedical Sciences* **5**(3) 148-156.
Fields R (August 2010). 5 ways to improve your relationship with anesthesiologists. *Becker's ASC Review, Anesthesia.*
Kwiecinska B, Wujtewicz M, Wegielnik J, Dutka P and Barancewicz P (2005). Surgeons and anesthesiologists, opinions and facts. *Nowiny Lekarskie* **74** 293–297.
Michejda K (1961). *Pol Przegl Chir* **33** 519-26 PMID:13755880.
Page L (2010). 4 ways ASCs can improve relationships between surgeons and anesthesiologists. *Becker's ASC Review, Anesthesia.*
Page L (2011). 3 ways to improve relationships between anesthesiologists and surgeons. *Becker's ASC Review, Anesthesia.*
Smith T (2009). surgeons-v-anesthesiologists-why. *http://anesthesioboist.in.*
Thorlakson PHT (1946). The surgeon-anaesthetist relationship, *Canadian Medical Association Journal* **55** 489-493.