J Anesth (2009) 23:409–412
DOI 10.1007/s00540-009-0776-x

Journal of
Anesthesia

Special article

Ethical issues in anesthesia: the need for a more practical and contextual approach in teaching

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Abstract
Teaching ethics to medical students is one of the current topics of major interest. Issues of ethics pertaining to anesthesia are unique. This article reviews these issues with respect to the preoperative, intraoperative, and postoperative periods. The author shares the experience of incorporating ethical issues into every clinical scenario in the problem-based learning sessions of both undergraduate and postgraduate students. In addition to separate modules in didactic and clinical formats, incorporating the ethical aspects into every clinical problem has many advantages. This approach will stimulate students to ponder over the ethical dimension of every clinical scenario, and the reinforcement of this approach during teaching in the clinical setting may help in inculcating these qualities in the students. Additionally, this approach contextualizes these issues to the local and regional perspective, instead of lecturing on the ethical codes developed elsewhere.

Key words Ethical issues · Anesthesia · Teaching · Problem-based learning

Introduction

With the advent of high-technology investigations, machines, and software, modern medical students are exposed to a more dehumanized practice of medicine [1]. Although curriculum makers have lately been devising ways and means of teaching ethics to medical students and assessing their competencies in ethics, in many countries, deficiency in the core competencies in ethics has not been considered a criterion that precludes graduation [2]. Medical morality is often not considered a competency to be tested in the making of a physician [3].

Address correspondence to: S. Hariharan
Received: February 26, 2009 / Accepted: April 3, 2009

Although ethics has been introduced in many medical curricula, the subject only offers a set of principles that are supposed to be ideals for a humanistic and virtuous physician. This can be misleading because providing only a set of rules may not necessarily enable their translation into practice [1,4]. It is also difficult to assess the impact of these rules in the final making of a good physician. Hence, there should be a much wider approach to inculcating ethical knowledge in medical students.

Anesthesia is one of the unique clinical branches in medicine. Anesthesia has long been considered to be a "behind the screen" specialty, and patients as well as anesthesiologists' colleagues in the hospital seem to be unaware of the widespread role of the specialty [5]. The anesthesiologist provides care to a patient who primarily consults a surgeon for the ailment, while being referred to the anesthesiologist's care during the perioperative period, which is relatively short. Anesthesia invariably involves incorporating machines and gadgets in patient care. These factors may potentially pave the way for dehumanization in patient care.

Ethical practice in anesthesia is an absolutely essential entity, similar to that in any other specialty. However, very little work has been done in this area within the specialty. In fact, a previous review article has found that there is sparse literature in the field of teaching ethics in all specialties [6]. There has not been enough theoretical work done regarding the overall goals of medical ethics education. Few empirical studies have been done that attempt to examine the effectiveness of the various teaching methods in medical ethics education and their outcomes for students [6]. Hence, it is not surprising that medical ethics has not received enough attention in anesthesia also.

The objective of the present article is to review the unique issues of ethics in anesthesia and to make a case for a more proactive approach towards teaching this aspect to anesthesia students, with special

reference to the problem-based learning (PBL) teaching modality.

Ethical issues in anesthesia

Anesthesia has unique ethical issues. Categorizing these issues under the headings of preoperative, intraoperative, and postoperative periods will be helpful to provide clarity.

Preoperative issues

The anesthesiologist's patient-care paradigm starts from the preoperative period, where evaluation and optimization of the physical status of the surgical patient is one of the core responsibilities to avoid adverse patient outcomes [7]. Patients primarily consult the surgeon for their illness and are then referred by the surgeon to the anesthesiologist. In many situations patients do not even know if the anesthesiologist is a physician and what their exact role is [8]. A previous report found that among patients who said they had never met the anesthesiologist, 45% had had surgery under anesthesia [8]. This emphasizes the point that the anesthesiologist needs to communicate effectively with the patient and should establish a good rapport to win their confidence.

"Informed consent" is a common requirement for anesthesia and surgery in most countries, although there is debate as to whether such consent should be separate for the anesthesia and surgery components [9]. The anesthesiologist should know how much to explain to patients about the anesthetic procedure before asking them to sign the common consent form. Many patients in some geographical regions do not want to know details of anesthesia and leave everything to the anesthesiologist [8].

There is room for many conflicts in the preoperative period. The anesthesiologist may require certain investigative reports for the patient which may be deemed unimportant by the surgeon. Many times the surgeon and/or the patient get an opinion from an internist or a cardiologist who already grants "fitness" for anesthesia, which opinion may conflict with the opinion of the anesthesiologist. It requires an insurmountable effort on the part of the anesthesiologist to convince the patient and the surgeon that the patient needs further optimization before the surgery. Usually, an internist or a cardiologist is considered infallible when compared with an anesthesiologist. The conundrum here is how to assert one's opinion without losing the confidence of the patient and the surgical colleague, and without having a direct conflict with the internist or the cardiologist, as well as avoiding the danger of losing one's practice.

Another major issue which has not been often dealt with in the literature but is commonly encountered in the author's anesthetic practice is the issue of the "need" for surgery in a given patient. Most anesthesiologists do not bother to delve into this area because they believe that it belongs to the surgical domain. Either they feel they do not have the expertise to comment on this, or many times there is the fear of losing the practice. If an anesthesiologist knows for sure according to the evidence-based guidelines that the proposed surgery is not necessary for the patient, what should be his or her role? Is it right to tell the patient to get another opinion or should the anesthesiologist just swallow their pride and proceed with the anesthesia? This may not be an issue when everyone in the medical fraternity practices ethically. However, in this era of the commoditization of medicine, surgery is highly lucrative and it is not uncommon to find surgeons "looking" for "cases" to operate. This is especially pertinent in countries where physicians still have paternalistic attitudes, which may be easily exploited to capitalize on the medical ignorance of the patient. In the author's view, this is an important dilemma that involves the personal ethics of the anesthesiologist.

Intraoperative issues

The operating room environment is one of the few areas of the hospital where teamwork is crucial for good functioning. Anesthesiologists should be very diplomatic in their approach to avoid conflicts during this period.

One should take the utmost care to respect patients' modesty and be compassionate to their feelings when they come inside the operating room. It is quite distressing to watch a bunch of people pouncing on the patient, and the surgeon trying to palpate a swelling at the last minute. The "captain of the ship" tendency of surgeons, although slowly waning over time, is still a major issue that can create conflict. In many situations, such as the choice of antibiotics for surgical prophylaxis, there may be differing opinions which need to be carefully dealt with.

It is an absolutely essential quality of an anesthesiologist to be quiet, calm, and unwavering during the intraoperative period. But many times this may be interpreted as being docile and there thus seems to be room for domination by other professionals. Hence, it is equally important to be unperturbed as well as being assertive.

Postoperative period

The anesthesiologist as a perioperative physician has a vital role to play in patient care during the postoperative period. There is a tendency in some anesthesiolo-

gists, especially the "busy" ones, to entrust patient care back to the surgeon during this period. This is a major shortcoming, especially because postoperative care including pain relief is better provided by the anesthesiologist. In this era of ambulatory surgery, anesthesiologists have much greater responsibilities in the postoperative period until the patient is discharged home.

Teaching ethics in anesthesia

How do we inculcate in students the qualities of dealing with the ethical issues in practice? Traditionally it is always assumed that ethical practice will be acquired by students from role models [10]. However, in a complex system of healthcare delivery where public and private healthcare are provided by the same personnel, there is always a conflict of interest in the care provided. In this situation, either the students do not find a role model, or many of them tend to acquire the less ethical aspects of the practice of their seniors.

Ethics is a subject that pervades almost all areas of life, and understanding the subject requires familiarity with not only the basic concepts of day-to-day life contextualized to the geographical region, social outlook, demographics, and belief patterns, but also the setting of the workplace [11,12]. The current modus operandi of teaching ethics in a modular form, incorporating technocratic jargon such as "four principles" and "consequentialism" may be dangerous [13]. This form of teaching cannot achieve what it has been designed to and at worst can lead the student and the practitioner into ignoring their own healthy ethical intuitions and vocabulary [13].

When students are unable to find suitable role models and when the didactic teaching of ethics has little value in imparting the values in practice, what other alternatives are available?

The PBL approach has been found to be an effective method in medical education and it is known to impart deeper knowledge than that achieved with other, didactic, methods and to stimulate student interest [14,15]. The Faculty of Medical Sciences of the University of the West Indies, St. Augustine campus, adopts this PBL approach in both undergraduate and postgraduate medical curricula.

Incorporating issues pertaining to ethics into every clinical problem can be very effective in bringing the topic to the student's awareness. In the author's experience of teaching both undergraduate and postgraduate students in anesthesia and intensive care, this has been a valuable approach in sensitizing the students to this area, without waiting for them to learn it as a separate module.

Following is an example of the approach:

If it is assumed that the topic of the PBL session is central neuraxis anesthesia (spinal and epidural anesthesia), the primary objective of the session will be to teach the students about the details of the technique, the physiological effects, the pharmacology, and the indications and contraindications for the technique. However, during the discussion, in addition to these usual topics, the students will be posed questions such as how much they will explain about the procedure to the patient, what the issues of not having a separate "consent form" for the regional anesthesia are, and what their approach will be if the surgeon is objecting to a regional anesthetic technique. This helps to stimulate the students' thinking in this dimension. Similarly, for every clinical problem, if one includes questions related to ethical values, the students are clearly much more aware of these issues, which they may confront in their day-to-day practice. When the same topic is dealt with in the clinical setting with real patients, the students do remember these issues much better and are able to interact with the patient appropriately in this setting.

Thus it may be argued that including the dimension of ethics in every clinical topic offers the great advantage of imparting these values comprehensively. If students learn ethical issues only as separate modules, such modular teaching requires them to remember these issues and relate them to the clinical situations only as and when they arise. The following may be two possible advantages of the type of teaching that incorporates ethical issues into every clinical problem over modular teaching:

1. In modular teaching, the modules are learned by the students mostly to pass an examination in the subject, whereas by the approach that incorporates ethical issues into every clinical problem the students do not feel the discussion of ethical issues as a separate encumbrance.
2. Many modules are taken from textbooks published in regions other than the one where the students will practice, and ethics should be learned and taught in the context of the region where it is practiced, in accordance with local perspectives. The method of teaching that incorporates ethical issues into every clinical problem offers a unique opportunity to interact with the students, to ascertain their basic ethical knowledge and belief patterns, and to accommodate those perspectives into the discussion.

The benefits of the outcomes of this approach in teaching and learning cannot be statistically established at this time, because this approach has been adopted only by the author. Nevertheless, it is possible to safely state that the students do show an exciting response

while discussing this dimension of the clinical problem, which they would have never have imagined considering otherwise.

In summary, ethical issues in anesthesia are unique; a more proactive, practical and contextual approach to teaching ethics in anesthesia may be facilitated by the PBL teaching method. Incorporation of the ethical dimension into every clinical problem should be tried in medical schools adopting the PBL method of teaching, and the results should be studied in the long term.

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