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Principles and Practice of Surgical Ethics

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This book addresses ethical problems that surgeons confront on a daily basis in patient care, surgical research, and surgical education. The topics considered in the chapters that follow range from the fundamentals of surgical ethics—*informed consent, confidentiality, advance directives, and the determination of death*—through the range of surgical patients, from elective and high-risk patients to poor-risk and dying patients, to intra-professional and inter-professional issues, surgical innovation and research, and the financial aspects of surgical practice, including managed care and the ethical issues that it raises for surgeons.

To our knowledge, this is the first such bioethics volume directed to surgeons and the unique conditions of their work in the medical community. Our goal has been to provide a comprehensive account of surgical ethics by classifying and analyzing most ethical issues that arise in patient care, with other health care professionals, in research and education, in the institutional setting, and with regard to financing and money in surgery. To achieve this goal we invited teams of authors—a surgeon and an ethicist, usually in pairs—to collaborate on each chapter. Leaders in both surgery and bioethics will be found among our contributors.

In their deliberations our contributors have aimed to define the best available ethical position on the issues addressed in their chapters, on the basis of ethical analysis and argument well grounded in surgical experience and reality.

They have taken concrete—and sometimes controversial—positions on particular issues and how surgeons should respond to them in an ethically responsible fashion. We believe they have succeeded in developing a book that will serve as a practical, clinically applicable, reference work for ethically informed and responsible surgical practice, research, and education.

We turn now to the two main tasks of this introductory chapter: first to introduce the reader to the basic concepts and language of surgical ethics and then to provide a method for using the concepts and language of surgical ethics in surgical practice, research, and education.

Basic Concepts

Ethics can be usefully defined as the disciplined study of morality. Morality, in turn, comprises both good and bad character and right and wrong behavior. Ethics asks the general question, "What ought morality to be?" Typically, this general question is broken down into two more concrete questions, "What ought character to be?" and "What ought conduct to be?"

In answering the first question, ethics analyzes characteristics of virtues (habits or traits of character that focus our concern on the interests of others, as well as our own legitimate interests, and motivate us to protect and promote the interests of others as our primary consideration) and vices (habits or traits of character that excessively emphasize self-interest so that it systematically becomes our first and overriding concern) and then develops arguments about the virtues that are required for seeing and routinely fulfilling our obligations and about the vices that put self-interest first and thus undermine our ability to see and do our duty. In answering the second question, ethics analyzes ethical issues about right and wrong action and develops arguments about which actions are ethically defensible, and in this sense "right," and which actions are ethically indefensible and in this sense "wrong."

Surgical ethics, as a sub-discipline of both ethics and surgery, asks, "What ought morality to be in surgery?"—including clinical practice, research, and education. Surgical ethics breaks this general question down into two questions, directed especially to surgery, surgeons, surgical trainees, and other institutional managers, "What ought the character of surgeons to be?" and "What ought the conduct of surgeons to be?"

The Basic Rights of Patients

Surgical ethics is based on a recognition of the rights of patients who require the care of surgeons. Although it is understood that the surgeon is "an authority" in the practice and outcomes of surgery, it is the patient who is "in author-

ity"—that is, the individual in the transaction between caregiver and care-seeker on whom the salient rights devolve.¹ The patient has seven basic rights: three negative rights and four positive rights.² The patient has the negative rights not to be killed intentionally or negligently by the surgeon, not to be harmed by intent or negligence of the surgeon, and not to be deceived by the surgeon. The patient has the positive rights to be adequately informed about the risks and benefits of surgery, to be treated by a knowledgeable, competent practitioner, to have his or her health and well-being more highly valued than the surgeon's own economic interest, and to decide whether to accept treatment under the conditions described. The surgeon's ethical behavior and ethical character should be consistent with recognition of these rights.

Character, Virtues, and the Ethical Concept of the Surgeon as Fiduciary of the Patient

Consider the first question in surgical ethics, what ought the character of surgeons to be? This question arises for surgeons, as for physicians generally, especially around issues of payment. The introduction of capitation into the way surgeons are paid creates a strong financial incentive for the surgeon not to do surgery; in contrast, fee-for-service payment creates a strong incentive for the surgeon to perform surgery. Both systems of payment invite the surgeon who is uninformed by ethical analysis and argument to put his or her own economic interests first. The surgeon who does so then loses sight of the patient's interests—whether surgery is indicated in reliable clinical judgment and how the risk-benefits ratio of surgery compares with medical alternatives (see Chapter 18).

Is a surgeon's willingness to put his or her own financial self-interest ahead of the patient's well-being a vice? Putting self-interest systematically first is antithetical to the character traits that the surgeon should develop because doing so violates the expectation that the surgeon will put the patient's interest first, acting as the patient's fiduciary. Systematically granting primacy to self-interest over and above the life and health of the patient is avoided by the ethical surgeon.

The concept of acting as moral fiduciary of the patient is central to virtually all of surgical ethics. The moral character of the conscientious surgeon is therefore one of the central themes addressed in this book. The law provides a useful departure point for understanding this ethical concept. Being a fiduciary is legally understood to be "a person holding the character of trustee, in respect of the trust and confidence involved in it and scrupulous good faith and candor which it requires" and also to be a "person having duty, created by his undertaking, to act primarily for another's benefit in matters connected with such undertaking."³ The key concept here is that a fiduciary should put aside self-interest, focus primarily on the interest of the person for whom he or she serves as fiduciary, act to protect and promote that individual's interest, and so earn the trust

and confidence of that individual. The concept of the surgeon as the patient's moral fiduciary captures these ideas in the following way. The surgeon should make the protection and promotion of the patient's interests the primary consideration in the surgeon-patient relationship and in surgical research and education. This primary commitment holds self-interest in check and makes it a systematically secondary consideration. Self-interest is thus blunted and not permitted to generate the vice of selfishness in the surgeon's professional character. This makes the fiduciary's role morally demanding.

When the surgeon's ethical, fiduciary-based obligations come into conflict with self-interest, the surgeon confronts the ethical issue of conflict of interest. This issue arises, obviously, regarding money, other compensation, and the changing institutional and financial conditions of surgery in the United States and many other countries. Economic conflicts of interest are addressed in Chapters 17, 18, and 19. Furthermore, surgeons also confront threats to their own health in the care of patients, especially from exposure to blood-borne pathogens, creating an even more complex conflict of interest; while the surgeon has an obligation to treat even those with communicable diseases, the surgeon is entitled to protect his or her own health and has an additional legitimate concern for the many future patients who might be helped (see also Chapter 9).

Ethical Principles

The virtues of being the moral fiduciary of the patient permit the surgeon to maintain his role as "an authority" while permitting the patient to maintain his position "in authority."² The surgeon's attention to the patient's interests include exercising and explaining his status as an authority, whose knowledge and skill the patient seeks, while protecting the patient's right to expect that the surgeon's authoritative posture is properly based in training, experience, wisdom, and concern for the patient. Honesty becomes the general fiduciary commitment to protect and promote the interests of the patient if surgical ethics is to guide the clinical judgment and practice of surgeons in a comprehensive way. The surgeon must be the expert he or she represents himself or herself to be if he or she is to honor the patient's rights not to be deceived, to be fully informed of risks and benefits, and to be free from avoidable risks. The conceptual tools used by ethicists to provide surgeons with such practical guidance are the ethical principles.⁴ Ethical principles guide the surgeon toward concrete actions in the care of patients and the management of their problems.

The ethical principles of beneficence and respect for patient autonomy are directly pertinent to surgical practice, research, and education; they are prominently addressed in the chapters that follow. These two principles apply dual perspectives on the interests of patients to concrete clinical action.

The first perspective is clinical: the well-informed, rigorous clinical judgments of the surgeon about which clinical management strategies can reliably be expected to protect and promote the patient's health-related interests and which strategies can reliably be expected not to do so. This clinical perspective is captured by the ethical principle of beneficence, which instructs the surgeon to act in ways that are reliably expected to result in a greater balance of clinical goods over harms for the patient.

The second perspective is the patient's: on the basis of his or her values and beliefs, the patient evaluates information about medical and surgical alternatives and makes judgments about which alternatives are more or less likely to protect and promote his or her values. This patient-oriented perspective is subsumed by the ethical principle of respect for autonomy, which instructs the surgeon to identify the patient's values and beliefs, to respect their role in the patient's life, and to elicit the patient's preferences from among medical and surgical alternatives supported in beneficence-based clinical judgment.

Consider the refusal of blood products during surgery for religious reasons, an ethical issue surgeons confront in the surgical management of Jehovah's Witnesses. Recent improvements in surgical technique have greatly reduced intraoperative blood loss and new blood-saving technologies have reduced the need for administration of blood products and non-autologous blood. Nonetheless, the use of blood products and whole blood is often "medically indicated." This common surgical term is beneficence-based: if blood products or whole blood are not used, the patient's risk of death, serious disease, or disabling injury may significantly increase. These outcomes can be avoided, given that the risk of infection from blood-borne pathogens is quite low. Otherwise, serious risks are taken with the patient's health, which appear to be inconsistent with beneficence-based clinical care and therefore are ruled out in good surgical practice.

A surgical perspective on the use of blood and blood products during and after surgery, however, is not the whole of the story any longer in surgical ethics; the patient's perspective must also be honored. The religious beliefs of Jehovah's Witnesses are as sincere as the beliefs of any other of this world's religious communities and traditions. The principle of respect for autonomy teaches that the beliefs of Jehovah's Witnesses about the administration of blood products are worthy of the surgeon's respect. Moreover, because beneficence-based clinical judgment is limited to the patient's health-related interests, the surgeon is in no position to judge the merit of such religious beliefs.

The two principles thus seem to generate a conflict. On the one hand, the surgeon has a beneficence-based obligation to avoid intraoperative and postoperative risks that can be prevented with an intervention that is efficacious and—relative to those risks—sufficiently safe. Such an obligation also implements the

patient's right to be neither killed nor injured by surgery. On the other hand, the surgeon has an autonomy-based obligation not to interfere with the preferences of the patient, especially when those preferences represent and express deeply held values, matters of substantial moral and religious conviction. Such an obligation implements the patient's right to make decisions about his or her care, and to be in authority. How these apparent ethical conflicts should be analyzed and resolved in surgical practice are addressed in Chapters 7, 8, and 9.

Surgeons and the institutions in which they practice no longer simply take care of patients one at a time; surgeons and institutions are increasingly responsible for the care of populations of patients. While this has been true of the military medical corps, the Public Health Service, the Veterans Affairs medical system, and local public hospitals for many decades, managed care organizations (MCOs) also think of themselves as responsible for populations of patients. In addition, the rapid increase in health care costs that this country experienced during the 1970s and 1980s had become unsustainable, in both the private and public sectors, by the 1990s. Surgery, as well as other medical specialties, has entered the era of limited and often scarce financial resources.

In these constrained circumstances, surgeons—and institutions that support their work—confront a systemic and challenging ethical issue: how to ethically allocate limited resources. The reality of surgical practice is that spending resources for the care of one patient may well mean that there will be insufficient resources to care for other patients, a particularly acute ethical issue in the context of flat, or even declining, institutional budgets. These considerations may obscure the boundaries of who is “an authority” and who is “in authority” in the surgeon-patient relationship as institutions assert their power to control the allocation of resources.

Ethics addresses issues concerning the allocation of resources by using principles of justice. More than two thousand years ago, Aristotle conceptualized justice as the rendering to each individual of what is due to him or her.⁵ The key word in this formulation, obviously, is *due*. In the ensuing centuries, there have emerged competing accounts of what is due to someone in the allocation of limited or scarce resources.⁶ In the history of Western philosophy, some have argued that such allocation should be based on meeting fundamental human needs, such as for shelter, clothing, and food. Others have argued that such allocation should be based on natural rights, which precede political orders, to life, liberty, and property. Still others have argued for utilitarianism, allocation of scarce resources with the goal of producing the greatest good for the greatest number. Others still have argued that allocation should be based on merit and accomplishment, what people have earned through personal ability, effort, and sacrifice.

This philosophical debate remains unresolved because each of these concepts of justice, as well as other formulations of the concept, is intellectually and prac-

tically compelling and captures our different intuitions about what is fair and just in the treatment of people when resources are limited or scarce.

Issues of just distribution of resources become relevant in surgical ethics in transplantation surgery, where organs are scarce and eligible patients are many, and in the financing of surgery, particularly with regard to such third-party payers as public treasuries and private, for-profit insurers. These issues are dealt with in Chapters 6, 17, and 19.

A Surgical Ethics Workup

The reader can use the tools of ethical analysis and argument to address and manage clinical cases in an intellectually rigorous and clinically applicable fashion by following the steps of a surgical ethics workup.⁷ We propose a four-step process.

Identifying the Facts of the Case

Ethical analysis and argument, like clinical judgment and decision making, require a solid foundation in the facts of the clinical case. Otherwise, surgical ethics becomes an abstract and irrelevant exercise. To be well grounded in clinical reality, therefore, a surgical ethics workup begins with the history and clinical workup of the patient's chief complaint. There are two key factual considerations on which subsequent ethical analysis and argument vitally depend.

First, all medically and surgically reasonable alternatives, that is, all alternatives that have a positive and at least neutral risk/benefit ratio, should be identified. The alternative of a trial of non-intervention should be carefully evaluated in this respect. Except for emergencies, such a trial is often medically and surgically reasonable.

Second, it is especially important to identify the patient's social history. Such factors as the patient's occupation, the patient's routine of daily life and activities, the patient's support and caregiving network (a crucial consideration for patients with chronic illnesses), the patient's religious beliefs, and the patient's other relevant values and beliefs should be identified. To elicit the patient's values and beliefs it is clinically useful to ask, “What is important to you about your condition?”⁸ The surgeon should be attentive to expressions of the patient's values and goals for surgical and medical care.

Ethical Analysis

Ethical analysis should be undertaken by considering four “appeals” that together gather relevant information pertaining to the surgeon as the patient's moral

fiduciary and to ethical principles. The first of these appeals addresses the fiduciary role in particular and the remaining three speak to the ethical principles of beneficence, respect for autonomy, and justice.² In applying these four appeals to individual clinical cases, the reader should use the methods of ethics analysis and argument, described here and in the chapters to follow.

Appeal to Virtues. The virtues of the surgeon as moral fiduciary relevant to the case should be identified, along with their implications for the surgeon's ethical obligations. What do the relevant virtues require of the surgeon's clinical judgment, decision making, and behavior? To answer this question, the reader should identify the implications, both short-term and long-term, of the virtues of the surgeon as fiduciary of the patient. Compassion, for example, focuses concern on relief of postoperative pain and suffering, as well as on prevention of long-term suffering from added morbidity and decreased quality of life, considerations that loom large in the care of patients who are poor surgical risks (Chapter 9) and patients who are dying (Chapter 10).

Appeal to Consequences. Beneficence-based clinical judgment is concerned with the clinical consequences of reasonable alternatives for managing the patient's problem. The appeal to consequences therefore involves a careful, precise, and thorough identification of both the clinically good consequences (benefit) and the clinically bad consequences (risk) of available alternatives. In beneficence-based clinical judgment, good consequences are the prevention of premature and unnecessary death and the prevention and effective management of disease, injury, and unnecessary pain and suffering. Pain and suffering are necessary in the surgical management of patients only when they cannot be avoided in the effort to reduce mortality and morbidity.

There are two important dimensions of the appeal to consequences. First, it usually results in the identification of a range of alternatives that are acceptable in beneficence-based clinical judgment. An appeal to consequences that identifies only one reasonable alternative in non-emergency cases is probably flawed and, worse, sets up the surgeon and patient for entirely preventable ethical conflict. Second, it sometimes happens that surgical management is inconsistent with beneficence-based clinical judgment, either because the patient is a poor surgical risk (Chapter 9) or is dying (Chapter 10). The limits of beneficence-based judgment should be identified. What do the beneficence-based consequences require of the surgeon's clinical judgment, decision making, and behavior?

Appeal to Rights. The principle of respect for autonomy grounds and generates the rights of patients that surgeons should take into account. In making the appeal to rights, it is crucial to distinguish negative from positive rights.² Negative rights involve claims against others to be left alone, unless one is putting

others at risk of harm to which they do not consent. As a rule, negative rights, because they do not make strong claims on the resources of others, are very difficult to limit. In contrast, positive rights involve claims against others for access to and use of their resources of time, money, and ability. Positive rights always come with limits; the only debate concerns what those limits should be. Appeals to rights therefore should always distinguish negative from positive rights.

We earlier identified three negative and four positive rights relevant to surgical ethics. The implications and limits of these rights and of the patient's other relevant values and beliefs for the clinical facts of the case should be identified in the making the appeal to rights. What do the autonomy-based rights and values of the patient require of the surgeon's clinical judgment, decision making, and behavior? Consideration of the clinical implications of these seven rights helps to answer this question.

Appeal to Justice and Equality. Issues of justice and equality arise in surgical ethics primarily with regard to the allocation of limited financial, material, and human resources in the care of patients. An appeal to justice and equality, because of the historical and deep philosophical disagreement about principles of justice, is the most controversial of the four appeals. It should therefore be made with care.

Three concepts of justice currently enjoy prominence in contemporary bioethics.³ The first is an egalitarian concept of justice, which requires that patients be treated as equally as possible. At first, this concept was applied to outcomes of care, but recognition of the biologic variability of disease and of patients' responses to medical and surgical management of their problems has called this concept into question. The emphasis has therefore shifted to a concept of a process of care that is, insofar as possible, equal for patients with similar problems. Practice guidelines and clinical pathways implicitly adopt an egalitarian concept of justice.

The second prominent concept of justice in bioethics is redistributive justice. This concept has been deployed in response to the limited access of many Americans to health care and even more limited access of those in less developed countries. These variations are thought to be unfair, some have argued, and so health care resources and income should be redistributed—away from those with considerable access and wealth and toward those with no or little access and wealth. Redistributive justice calls for universal access to medical and surgical services.

The third prominent concept of justice is libertarian. This concept of justice emphasizes private property and respect for marketplace exchanges of private property and other forms of wealth. This concept of justice calls for a level "playing field" by providing patients with adequate information about the quality of medical and surgical care from different providers and allowing patients and providers to make their own, independent decisions. The marketplace will thus sort out a just distribution of health care resources.

The particular concept or principle of justice to which appeal is made should always be clearly identified and its implications for the case made clear. The same two tasks should also be undertaken for competing concepts and principles of justice. The goal of doing so in the appeal to justice and equality is to avoid the unargued introduction of a favored principle of justice.

The Four Appeals Together. The implications of the four appeals together for the surgeon's clinical judgment, decision making, and behavior should be identified. Areas of agreement and areas of conflict should be precisely stated. Ethical conflicts, especially those generated by the principles of beneficence and respect for autonomy and those generated by conflicts of interest, are addressed in the next step of the clinical surgical workup, ethical argument.

Ethical Argument

Ethical argument requires the surgeon to present clearly stated premises that *together* support a conclusion about what the surgeon's clinical judgment, decision making, and behavior ought to be in the case under consideration. Argument does not start with a "gut feeling" about what the conclusion ought to be, followed by a search for friendly premises. This is flawed ethical reasoning and should be avoided in responsible surgical practice, research, and education.

Instead, the reader should marshal clearly stated reasons about why one or more of the four appeals should guide the surgeon's clinical judgment, decision making, and behavior in the case at hand. The goal is to follow one's reasons, and therefore argument, where they lead. In this way, one submits one's thought processes to the intellectual discipline of ethics and thus achieves an intellectually disciplined study of what the morality of surgeons ought to be.

Once having made an argument, one should invite the critical evaluation of one's colleagues. One should ask the following sorts of questions and address the deficiencies that they identify.

1. Are the reasons clearly stated? If not, return to the stage of ethical analysis, because lack of clarity in the formulation of reasons is usually the function of lack of clarity and completeness in the four appeals.
2. Do the reasons connect to each other? Argument should not proceed in a shotgun style, with a disintegrated approach that simply lists appeals and asserts a priority among them. Reasons should clearly connect to each other and *together* support the conclusion.
3. Are there other conclusions that could follow? Reasonable people working with the same ethical analysis and argument can reach different conclusions when they interpret clinical facts differently.

4. What clear and coherent opposing reasons could be offered? The goal here is to be open to the well-made ethical analysis and arguments of others.

By making arguments based on thorough ethical analysis that incorporates the four appeals and by subjecting those arguments to critical scrutiny, one is typically assured of an ethically sound conclusion.

Issues of Authority and Power

Ethical analysis and argument can help to address issues of authority and power in the surgeon-patient relationship. These are especially important in surgical ethics because the surgeon is in charge of intraoperative and immediate post-operative care; the patient is in an especially passive role in these time periods, in contrast to the patient's role in most other medical specialties. In undertaking ethical analysis and argument the reader should, therefore, carefully distinguish the surgeon as someone who is "an authority" from someone who is "in authority,"¹ as we noted earlier. The surgeon is surely an intellectual authority about matters of clinical judgment and decision making. Patients therefore expect surgeons to be knowledgeable in these matters and tend to treat surgeons as authorities—that is, as individuals qualified by training and experience to identify and protect, through competent surgical management, the patient's clinical, beneficence-based interests.

To be in authority is different. This involves the power to act on clinical, beneficence-based judgment. The principle of respect for autonomy indicates that this power resides in the competent, adult patient or the surrogate of patients who lack decision-making capacity, either by reason of disease or developmental stage (roughly associated with age in children). The reader should therefore *not* conclude that because the surgeon is *an* authority about clinical matters, the surgeon is therefore also *in* authority to decide whether surgical management will actually occur. The latter consideration becomes especially important in the care of emergency patients (Chapter 5), patients who are poor surgical risks (Chapter 9), and dying patients (Chapter 10).

Conclusion

The discussions in this volume will, we expect and hope, provoke serious thought and lively controversy by raising ethical issues that are pertinent to surgical practice, research, education, and management. As surgery becomes more technologically advanced, as unanticipated surgical therapies are developed and become commonplace (as transplantation has), and as public policies, such as limitations

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on specialty training programs and cost reimbursement, impose themselves on surgical practice, new ethical questions will arise. It has been our goal, in assembling this book with the contributions of our colleagues in bioethics and surgery, to establish a sufficiently sturdy base on which present and future clinical surgical ethical questions may be laid with some sense of stability and confidence that the good of patients, medical institutions, surgery and medicine, and society will be served.

References

1. H. Tristram Engelhardt, Jr., *The Foundations of Bioethics*, 2nd ed. New York: Oxford University Press, 1996.
2. Baruch A. Brody and H. Tristram Engelhardt, Jr., "The Major Moral Considerations," in *Bioethics: Readings and Cases*, Baruch A. Brody and H. Tristram Engelhardt, Jr., eds. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1987, pp. 3-33.
3. Henry Campbell Black, *Black's Law Dictionary*. St Paul, MN: West Publishing Co., 1979, p. 563.
4. Tom L. Beauchamp and James F. Childress, *Principles of Biomedical Ethics*, 4th ed. New York: Oxford University Press, 1994.
5. Aristotle, *Nicomachean Ethics*, in *The Complete Works of Aristotle*, Jonathan Barnes, ed. Princeton, NJ: Princeton University Press, 1985, pp. 1729-1867.
6. James P. Sterba, "Justice," in *Encyclopedia of Bioethics*, 2nd ed., Warren Thomas Reich, ed. New York: Macmillan, 1995, pp. 1308-1315.
7. Laurence B. McCullough and Carol M. Ashton, "A Methodology for Teaching Ethics in the Clinical Setting: A Clinical Handbook for Medical Ethics," *Theoretical Medicine* 15 (1994): 39-52.
8. Laurence B. McCullough, Nancy L. Wilson, Thomas A. Teasdale, et al., "Mapping Personal, Familial, and Professional Values in Long-Term Care Decisions," *The Gerontologist* 33 (1993): 324-332.