

Anesthesiologists are confronted with difficult patient care decisions that go well beyond preoperative evaluation, selection of anesthetic technique, and postoperative care. As facilitators of perioperative surgical services, we often find ourselves entwined in complex ethical situations. We frequently care for moribund patients urgently rushed to the operating room in a desperate effort to "do all that we can do." We often feel pressured to cut corners in the name of operating room efficiency, cost containment, and job security. We are occasionally asked to participate in activities that may conflict with our own personal moral beliefs in the name of patient autonomy or at the demand of our surgical colleagues.

Bioethics may be viewed by many of us as an abstract discipline pursued by academic physicians and philosophers, only to reach the public consciousness in complex cases that have entered the legal system and the press. However, we deal with bioethical issues every day in our practice in each and every patient encounter<sup>1</sup> We sometimes recognize ethical conflict at the last minute before the patient enters the operating suite. We might question whether the patient truly understands the implications of the impending procedure or perhaps whether appropriate consent was obtained. We might just feel uncomfortable with the circumstances at hand. Usually, our patient interactions follow the shared goal of facilitating recovery from illness in the most expedient, cost-effective manner. Difficulties are encountered when treatment goals conflict. Conflicts may arise between physicians, colleagues, patients, and/or family members. The patient may not agree with the physician's recommendations. The patient or family may demand treatment that is inappropriate or not medically indicated. Family members may disagree with each other about a surgical plan for a patient who is not competent to consent. The anesthesiologist may believe that the surgical plan is inappropriate or lacks sufficient indication. Should the anesthesiologist's role in conflicts such as these be one of acquiescence or active involvement? Should we intervene in decisions already made between the patient, family members, and our surgical colleagues? In the 1999 E. A. Rovenstine Memorial Lecture, Dr. Carl Hug suggested that anesthesiologists become leaders in ethical decision-making.<sup>2</sup>

Most anesthesiologists and surgeons have had little ethics training.<sup>3</sup> A working knowledge of the ethical decision-making process will assist us in making appropriate decisions involving the care of surgical patients.

This discussion will present some approaches to solving ethical problems in clinical practice and will review developments in the field of bioethics that are pertinent to anesthesiologists. In addition, departmental policy suggestions are made. The presentation will utilize case examples to illustrate the decision-making process.

### **Methodology for Ethical Problem Solving**

Physicians are obligated to make morally defensible decisions. A logical and ordered process will help us accomplish this task. Pellegrino<sup>4</sup> suggests three levels to any ethical decision: fundamental presuppositions, ethical theory, and utilization of a practical decision-making framework.

### **Presuppositions**

A reasonable place to start is to examine one's own worldview. Pence<sup>5</sup> defines worldview as "a comprehensive concept of life." Personal experience, religious beliefs, political views, and traditions influence each individual's worldview. Based upon this worldview, we develop presuppositions. Presuppositions are basic values or precepts that we believe to be true. One example of a presupposition is the intrinsic value each individual places on human life. We use these presuppositions as starting points in our deliberations of ethical issues. From these presuppositions, we build to a logical conclusion or decision. Our presuppositions are culturally based. Since we live in a pluralistic society, presuppositions, and hence our moral values, may vary widely. For example, postmodernist philosophers believe it is impossible to justify any moral truth. One version of truth is just as good as another.<sup>6</sup> The opposite extreme is a belief in moral absolutes with little room for tolerance of different viewpoints. This moral pluralism insures that we will occasionally disagree with our patients and colleagues on a correct course of action. If we recognize this starting point, we are better able to understand why our patients or colleagues may reach a different but totally logical conclusion from our own.

### **Ethical Theory**

Ethical theories are utilized at the second level of moral reasoning. Deontological (duty-based), utilitarian (consequence-based) and virtue theories are commonly utilized in deliberation of ethical issues. Out of these general ideas, bioethical theories with specific application to medicine have arisen. An appeal to these theories, and the principles and rules they generate, help to determine a well-reasoned course of action. Two theories used in bioethical decision-making are addressed: principlism and casuistry.

Principle-Based Ethics - The bioethicists Beauchamp and Childress<sup>7</sup> promote a common-morality, principle-based method of solving ethical problems in medicine. The principles of beneficence, nonmaleficence, respect for autonomy, and distributive justice are commonly utilized in ethical analysis. Beneficence is the obligation to "do good." It is a group of norms for providing benefits and weighing risks and benefits. Nonmaleficence is the obligation to "do no harm" intentionally. Generally, obligations not to harm take precedence

over those to cause benefit. Respect for autonomy is a norm of respecting the patient's right to self-determination. Requirements for autonomy include three essential items: (1) independence from controlling influences, (2) understanding, and (3) capacity for intentional action. The autonomous patient is not coerced into a certain action by others, understands choices and their implications, and has the ability to act intentionally. Distributive justice is the obligation of fairness, entitlement to care, and equity in its delivery. It is a set of norms for distributing medical care, risks and benefits fairly. Physicians have an obligation to adhere to these principles when treating patients. Principle-based ethical reasoning has been criticized for a variety of reasons. How does one determine which principle takes precedence over another in a conflict? How is a case organized to insure that every important factor is considered? Some argue that these principles are too abstract and rationalistic.<sup>8</sup>

Case-Based Ethical Reasoning (Casuistry) - A practical method for ethical problem-solving is a case-based ethical reasoning model, casuistry, espoused by Jonsen, Siegler, and Winslade.<sup>9</sup> This method takes the facts of a case and analyzes them in a logical and ordered fashion. The facts are compared to those of paradigmatic cases that have been decided by prior consensus. This is analogous to the concept of precedence in judicial proceedings. Examples of such cases and their solutions are readily available.<sup>9</sup>

### **Framework for Analysis**

Applying the facts of a clinical case in light of presuppositions and ethical theory is best accomplished using a framework for analysis. Pellegrino<sup>4</sup> suggests asking the following questions: 1) Who decides? 2) By what criteria? 3) How are conflicts among decision makers resolved? and 4) How is conflict prevented? By asking these questions, the pertinent ethical issues involved may be addressed.

As an alternative, the facts of any clinical ethical case may be analyzed in an organized fashion using the method described by Jonsen. Each case is divided into four topics. The four topics are always present in every case regardless of the circumstances. The topics are as follows: **1) Medical Indications, 2) Patient Preferences, 3) Quality of Life, and 4) Contextual Features.**<sup>9</sup>

The topic **Medical Indications** is an analysis of information about the medical problem at hand. History, physical and laboratory findings, diagnosis, and prognosis with and without treatment are evaluated. Is the condition acute or chronic? Is treatment emergent? Is the process reversible or partially reversible? What are the goals for treatment? Is the goal to attempt cure and return to normal function or is it palliation and comfort? What happens if treatment fails? What are the burdens involved? This topic of medical indications relates to the principles of beneficence and nonmaleficence.

**Patient Preferences** evaluates the patient's right to self-determination. Has the patient received the appropriate information required to make an informed decision about treatment? Is the patient competent to make a decision regarding their healthcare? If not, are there meaningful advance directives? Is a healthcare proxy or appropriate surrogate decision-maker available? Were the correct questions asked of the surrogate? Is the patient's ability to choose being respected? Patient preferences relate to the principle of autonomy.

**Quality of Life** is the most difficult of the four topics to assess. Maintaining or improving quality of life is one of the fundamental goals of medicine. Quality of life is not easily defined. At best it is a value judgment. The patient best judges quality. An observer may also judge quality of life. Physicians most often will rate quality of life at a lower level than that rated by the patient. Conditions such as pain, physical or mental disability, and future chance of improvement all must be evaluated. One area often overlooked by physicians is the possible physical or mental deficits or other burdens the patient may experience if the treatment is successful. If cure is unlikely, are there plans for palliative care?

**Contextual Features** encompass the contexts in which medical care is provided. These might include family issues such as disagreement between surrogates over treatment options or possible inheritance issues. Financial factors are reviewed, such as a prolonged nursing care requirement for a spouse or debt incurred from expensive or extended care. Religious or cultural factors may place restrictions on care or compel continued inappropriate therapy. Are there resource allocation problems such as depletion of blood bank stores or organ availability? Are there legal or research implications? Is there any provider conflict of interest?

With all information gathered, the pertinent facts of the case are analyzed. The relative importance of each topic will vary from case to case. Using this information along with other case decisions, institutional policies and applicable laws, a well-reasoned ethical decision may be rendered. The decision should be an agreement between all parties involved. Once the decision is agreed upon, the new treatment goal is pursued.

### **Ethics Consultation and Mediation**

If disagreement still exists, consultation with the hospital ethics committee or an ethics consultant should be employed.<sup>10</sup> Ethics consultation provides a well-reasoned opinion about the ethical issues involved and suggests a specific course of action. Acceptance of the ethics consultation opinion is always voluntary. If the dispute cannot be resolved and litigation is pursued, the resolution is very unpredictable, may impose future restrictions on the ability

of the involved parties to make independent decisions, and requires much time and expense to resolve. It appears in everyone's best interest to keep ethical decision-making out of the courts.

One exciting area in the management of ethical conflict is the use of alternative dispute resolution techniques, specifically mediation.<sup>11</sup> Mediation is the use of a neutral third party to help disputants agree on an acceptable resolution of their conflict by a confidential process. Mediation differs from negotiation and arbitration. In negotiation, each party involved seeks to get something from the other party or to "win" in the conflict. In arbitration, a neutral third party analyzes information from all participants and renders a decision. It is likened to presenting a case before a judge and allowing him/her to decide which course of action to take. Mediation is most desirable because the mediator remains neutral in the process and only facilitates a mutually acceptable agreement among all parties involved. Mediation is successful because it facilitates communication between the parties and explores solutions often not even considered prior to the process. Mediation of bioethical disputes is used in several medical centers in the U.S. and Canada. However, physicians may not readily accept this process. A recent survey of neonatologists showed that 75% were reluctant to utilize mediation by ethics committees to solve dilemmas in a neonatal intensive care unit.<sup>12</sup>

### **Recent Developments in Bioethics**

While anesthesiologists are confronted with a wide variety of ethical issues ranging from caring for patients with uncommon religious beliefs to managed care and business problems, issues involving care near the end of life present some of our most difficult challenges. How do we address patients with "do not resuscitate" orders and other advance directives? The issue of futile or inappropriate care and other end of life care issues deserve further discussion.

### **Do Not Resuscitate (DNR) Orders**

Patients with DNR orders in place frequently present to the operating room for a variety of procedures. Since much of the care in anesthesia is considered "resuscitative," many anesthesiologists have difficulty honoring DNR orders because of the perception that their "hands are tied." This may lead to the automatic suspension of these orders in the operating room, thereby breaching the patient's right to self-determination. The ASA Committee on Ethics, with adoption by the 1993 ASA House of Delegates, addressed this issue with publication of *Ethical Guidelines for the Anesthesia Care of Patients with Do Not Resuscitate Orders or Other Directives that Limit Treatment*.<sup>13</sup> This policy statement, which has been recently updated, suggests the importance of communication with the patient or surrogate preoperatively, rejects policies of automatic suspension of DNR orders, and offers one of three options. These are: 1) full resuscitation perioperatively with resumption of the original DNR order in the postoperative period, 2) a limited procedure-specific order where certain resuscitative efforts are accepted and others rejected and 3) a goal-directed option. This last option, added in 1998, consists of a limited "goal and value" directed resuscitation in which the patient would rely upon the judgment of the anesthesiologist and surgeon to use resuscitative measures consistent with the patient's overall goal of care.<sup>14,15</sup> There is some debate over the wisdom of introducing ambiguity into the process with the last options.<sup>16</sup> However, the important issue here is effective communication with the patient or designated surrogate about their wishes prior to operation.

### **Advance Directives**

An advanced directive is a declaration by the patient regarding the type of end-of-life care desired should he/she be unable to make independent decisions. Living wills, designation of a durable power of attorney for health care, and a values history are examples. Advance directives have broad acceptance from a public policy standpoint.<sup>17</sup> Almost every state recognizes advance directives by state law. In 1990, the U.S. Congress passed the Patient Self-Determination Act (PSDA), which requires all hospitals and long-term care facilities that receive federal funding to ask patients if they have or wish to make an advance directive of their wishes regarding end-of-life care. Despite availability, less than 10% of the adult population has executed any type of advance directive. Also, physicians have been slow to accept these declarations when they exist. Studies such as the Study to Understand Prognosis and Preferences for Outcomes and Risks of Treatment (SUPPORT),<sup>18</sup> indicate that in critical care settings, physicians frequently disregard advance directives. Living wills are often vague and poorly written. They may be interpreted not to apply to the patient's specific situation. A durable power of attorney for healthcare is a legal designation of a surrogate decision-maker appointed by the patient who has the authority to make medical decisions on the patient's behalf in the event that the patient becomes incompetent. This vehicle may not serve the patient well if the surrogate and patient did not have specific and appropriate discussions about the patient's wishes prior to illness. In a review of the PSDA, Rich<sup>17</sup> recently stated, "... no advance directive instrument can be effective in influencing care as long as it is created and maintained in isolation of the patient-physician relationship." Several steps may improve this situation. A "values history" could be included in the routine primary care of patients and documented in the medical record. Medical directives that address specific grave conditions could be written. Finally, discussions with surrogates could be more specific. For example, instead of "What do you want us to do for your father?" one might use more appropriate phraseology. "Knowing your father as you do, what do you believe

that he would want us to do under the circumstances?" This emphasizes a substituted judgment perspective rather than a best interest standard in considering these decisions.

Individual state initiatives may help also. A recent Oregon statewide initiative to communicate advance directives using a bright pink form placed on the front of medical records (Physician Orders for Life-Sustaining Treatment - POLST) conveying specific information about a dying patient's end-of-life care wishes was successful in reducing unwanted ICU care and resuscitative measures.<sup>19</sup> The Medical Association of the State of Alabama and state government agencies recently began an awareness campaign, *Life Plan 2001*, designed to publicize the importance of end of life care discussions with family members before a crisis arises.<sup>20</sup>

### **Futility and Inappropriate Care**

The focus on patient autonomy has created the problem of demand by the patient or family for continued care when that care appears hopeless, simply life extending without any specific goal, or "futile." Attempts have been made to define the term *futility*, without agreement by experts in bioethics and critical care.<sup>7</sup> In fact, given similar critical care patient scenarios, physicians who participated in a national survey were divided on whether to pursue aggressive or palliative care in many circumstances.<sup>21</sup> Perhaps a better approach is targeting specific goals of therapy. The goal may be to return the patient to complete health, attempt some partial recovery, or pursue comfort and palliation. The concept of futility originally was defined because physicians wanted to withdraw care thought inappropriate, sometimes against the wishes of family. However, empirical evidence shows that physicians themselves are often responsible for continuing with inappropriate care. In the SUPPORT study<sup>18</sup>, physicians failed to effectively communicate with families about end of life choices. Even after specific discussions with physicians participating in the study, little communication with families regarding patient preferences occurred. In response, the Robert Wood Johnson Foundation (sponsor of the study) aggressively established a national campaign to improve care at the end of life. In a study by Cher and Lenert,<sup>22</sup> 4.8% of over 81,000 Medicare patients received what the authors described as potentially ineffective care, arbitrarily defined as care ending in death within 100 days of hospitalization whose total cost exceeded the 90th percentile of all patients studied. These patients were said to have had a "full court press" with ultimate failure and consumption of 22% of all ICU resources. This problem has been addressed by generation of futility policies by various ethics centers and a fair process treatment algorithm published recently by the AMA Council on Ethical and Judicial Affairs.<sup>23,24</sup> In addition, specific comfort care algorithms are available to help physicians plan care at the end-of-life.<sup>25</sup> A recent study on patient perspectives about end-of-life care revealed that adequate pain treatment, avoiding prolongation of dying, and achieving a sense of control were important quality issues for patients.<sup>26</sup> The AMA, in concert with the Robert Wood Johnson Foundation, has recently developed the Project on Education for Physicians on End-of-life-Care (EPEC). This ambitious educational program is available on CD-ROM from the AMA upon request. Quill and others recently published a consensus panel report on responding to intractable suffering by use of "terminal sedation" and limitation of food and fluids.<sup>27</sup> Some bioethicists have responded with letters disagreeing with the panel and calling for a retraction.<sup>28</sup> Obviously, end of life issues are very much at the forefront of ethical debate. Because of our role in critical care and pain management, anesthesiologists are in a position to play an active and important role in end-of-life care. The issue of physician-assisted suicide is beyond the scope of this discussion. Perhaps poor end-of-life care is the reason the notion of suicide became popular. The ASA has issued a policy statement, "Quality End-of-Life Care," which opposes physician-assisted suicide and calls for quality palliative or comfort care.<sup>15</sup>

### **Policies Dealing with Ethical Issues in Anesthesia Departments**

Anesthesiologists may circumvent many ethical problems by development of specific policies and in-service education programs for their departments in order to better manage ethical issues. For instance, a DNR policy, which is developed along with surgical colleagues and is consistent with institutional policy, will often prevent delays associated with the unexpected DNR patient added to the surgical schedule. Policies governing conscientious objection<sup>29</sup> by physicians and nursing personnel for patients undergoing elective pregnancy termination and those caring for Jehovah's Witness patients may eliminate cancellations or other difficulties. Education sessions dealing with informed consent issues, special issues involving pediatrics, and other ethics forums will help all personnel better understand issues that may arise. If potential ethical conflicts are addressed prospectively, less disruption of our practice will occur.

### **Summary**

Ethics is an integral part of the practice of medicine. Anesthesiologists encounter difficult ethical problems frequently. Through education, preparation, and use of the many tools available, we will make better decisions with and on behalf of our patients.

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**Suggested Reading**

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**Ethics Internet Sites**

- <http://www.mcw.edu/bioethics/>  
<http://www.med.upenn.edu/bioethics/index.shtml>  
<http://www.cwru.edu/med/bioethics/bioethics.html>  
<http://www.georgetown.edu/research/nrcbl/>  
<http://www.plu.edu/~arnolddg/bioethics.html>