The field of ethics has evolved substantially over the last 3 decades. According to the World Medical Association, ethics is “the study of morality, careful and systematic reflection on, and analysis of moral decisions and behavior.” Medical ethics deals with moral issues related to the daily practice of medicine. Questions about the behaviors of physicians and health care providers, the decision-making process, values, rights, and responsibilities generate ethical reflection that requires a thorough understanding of philosophical concepts, religion, landmark position statements, opinions from professional societies, and the law. Bioethics (biomedical ethics) is a very broad subject that is concerned with the moral issues raised by developments in the biomedical sciences.

The important principles for the ethical and professional practice of medicine are founded on philosophical concepts proclaimed by many philosophers such as Hippocrates and Asclepius and on the Platonic and Aristotelian theories of morality. More recently, medical ethics as a field has been influenced by the application of moral theories formulated by Kant, Bentham, and Mill. The human rights movement has nurtured the conceptual foundations of medical ethics and bioethics by contributions such as the Nuremberg Code, the Declaration of Helsinki, and the Belmont

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Report⁶ that directly affect the pluralistic and multicultural ways in which we conduct human research and practice in the medical field.²

Finally, medical ethics is closely related to jurisprudence. Most jurisdictions possess laws that specify how physicians and health care providers are required to deal with issues of ethics. Medical licensing authorities and the legislature of each jurisdiction determine practice rules and can punish physicians and health care providers for ethics violations. Medical ethics and jurisprudence are not identical but interact rather closely. As medical ethics can prescribe a higher standard of behavior than does the law, physicians and health care providers may encounter situations in which they are in violation of their jurisdiction’s pertinent laws, so a basic knowledge of one’s practice jurisdiction laws will help guide decisions when ethical dilemmas arise.

PRINCIPLES OF ETHICS

Autonomy

Autonomy is defined as the ability to self-rule, self-determine, or self-govern. Personal autonomy requires, at a minimum, self-rule that is free from coercion from others or from limitations such as inadequate understanding that prevents meaningful choice.³ This principle supports the notion that rational individuals with decisional capacity (or competency in legal terms) are uniquely qualified to decide what is best for themselves. This also means that people should be allowed to do whatever they want, even if doing so involves considerable risk or would be deemed foolish by others, provided that their decision does not infringe on the autonomy of another. Courts have routinely upheld the right of competent persons to refuse lifesaving interventions such as blood transfusions⁹ because either medical therapies in general or specific therapies are prohibited by the patient’s religious or moral beliefs.

The universal right of respect for a patient’s autonomy is rooted in the rulings from the proceedings of the Nuremberg trials (Nuremberg Code)⁹ and are the basis of modern statements of human rights such as the Declaration of Helsinki⁶ and the Belmont Report.⁶ These landmark statements support and guide the basic requirements of voluntary informed consent and the individual’s right to refuse treatment or participation in research. Additionally, a patient’s right to confidentiality is based on the principle of autonomy. In general, people have no legal obligation to keep other people’s secrets, but in the practice of medicine, we have both a moral and a legal obligation to protect our patients’ confidential information.¹⁰

Beneficence

The principle of beneficence is inherent in the role of physicians and health care providers and determines our duty to prevent evil or harm by promoting good and enhancing the welfare of others. In conjunction with autonomy, promoting the welfare of others is the foundation of the physician–patient relationship, as morality requires not only that we treat persons autonomously and refrain from doing harm but also that we contribute to their well-being. Similarly, physicians and health care providers are required to balance benefits, risks, and costs to improve the welfare of people overall. As such, the role of physicians and health care providers as promoters of well-being involves not only their patients but the community as a whole.

In certain circumstances, physicians may be morally and legally obliged to supercede the physician–patient relationship. Some jurisdictions, for example, require that physicians report clinical situations that may be associated with risks to other citizens, such as reporting a newly diagnosed epilepsy case to a governmental office of motor vehicles. Similarly, when physicians believe or fear that a patient may be dangerous to another person, a duty to prevent evil or harm may be invoked. In the case of Tarasoff,¹¹ the court recognized the duty of a physician to warn another person of a dangerous patient’s intent to harm that person even if this meant violating the patient–physician confidentiality agreement. One’s perceptions and intentions—even if in the best interest—should not supercede the wishes or well-being of another competent human being.
Nonmaleficence

The principle of nonmaleficence was introduced by Beauchamp and Childress. This principle establishes the duty to refrain from inflicting harm on others and is sometimes defined by the maxim *primum non nocere*. Obligations of nonmaleficence include not only duties not to inflict harm but also duties not to impose risk or harm. In cases of risk imposition, both the law and morality recognize a standard of *due care* that determines whether the agent who is causally responsible for the risk is legally or morally responsible as well. This standard is specific to the principle of nonmaleficence. Understanding of what lack of due care implies is what defines negligence. The line between due care and inadequate care is often difficult to draw. Specific situations in the ICU that relate to the principle of nonmaleficence and lack of due care include withholding and withdrawing life support, extraordinary (or heroic) treatments, sustenance of technologies and medical treatments, intended effects and merely foreseen effects (theory of double effect), and situations in which definitions of killing versus letting die may become nebulous.

Justice

The principle of justice demands that one act to promote the greatest benefit to the greatest number of individuals while inflicting the least amount of harm. This principle stipulates that similar cases be treated in a similar manner, that the benefits and burdens be shared equally within society, that goods be distributed according to need, that individuals be rewarded for contributions made, and that the degree of effort determine an individual’s reward.

HOW TO DECIDE WHAT’S ETHICAL

There is no right or wrong answer to questions about what is ethical. Because medical ethics involves the study of morality, as mentioned earlier, every individual is ultimately responsible for making his or her own ethical decisions and implementing them. There are several “rational” ways of approaching ethical dilemmas that are characterized by a systematic, reflective use of reason in decision making: principlism, deontology, consequentialism and utilitarianism, and virtue ethics.

Principlism

As it names implies, this moral theory uses ethical principles as the basis for making moral decisions. It applies the principles of autonomy, justice, beneficence, and nonmaleficence to particular cases to determine what is right or wrong. However, the choice of these principles, and especially the prioritization of a patient’s autonomy over other principles, may be a reflection of Western liberal thought that is not widely accepted in other societies. Moreover, these principles may clash in particular clinical situations where there is a need for additional criteria, or thought processes (other moral theories), for resolving such ethical conflicts.

Deontology

A moral theory promoted by Immanuel Kant, deontology is a theory of duty. Kant referred to the demands of the moral law as *categorical imperatives*. Categorical imperatives are principles that are intrinsically valid; they are good in and of themselves; they must be obeyed in all situations and circumstances if our behavior is to observe the moral law. The categorical imperative is that from which all other moral obligations are generated and by which all moral obligations can be tested. In other words, deontology involves a search for well-founded rules that can serve as the basis for making moral decisions whereby the means justify the end.

Consequentialism and Utilitarianism

Consequentialism is a label affixed to theories holding that actions are right or wrong according to the balance of their good and bad consequences. In other words, it denotes theories that take the promotion of value to determine what is right or wrong. A right act, therefore, is that which produces the best overall results determined by a relevant theory of value. One of the best-known forms of consequentialism is utilitarianism. The classical origins of this moral theory are found in the writings of...
Jeremy Bentham and John Stuart Mill. Utilitarians based their ethical decision making on an analysis of the likely consequences or outcomes of different choices or actions. In consequentialism, the end justifies the means.

Virtue Ethics

This moral theory is rooted in ancient Greek philosophical principles promoted by Plato and Aristotle. Virtue ethics focuses less on decision making (rules) and more on the character of the decision makers as reflected in their behavior (virtues). A virtue is a type of moral excellence. Such virtues could be compassion, honesty, prudence, and dedication, among others. Physicians who possess these virtues are more likely to make good decisions and to implement them in a good way.

TREATING PATIENTS IN THE ICU

Consent for Treatment

The concept of informed consent stems from a principle of personal autonomy. This principle, well guarded by the US Constitution, allows for moral self-determination and is based on 2 important elements: voluntary choice and decisional capacity; it represents the ultimate overt expression of individual human rights. The principle of autonomy is rooted in the fact that rational individuals with decisional capacity (or competency in legal terms) are uniquely qualified to decide what is best for themselves. It also means that people should be allowed to do whatever they want, even if doing so involves considerable risk or would be deemed foolish by others, provided that their decision does not infringe on the autonomy of another. Technically, medical professionals can determine decision-making capacity but lack the legal authority to determine competence; however, their assessment of decision-making capacity serves not only as a guide for many legal determinations but also as the functional equivalent of such determinations in the absence of legal proceedings.

In the United States, the legal doctrine of informed consent incorporates a third element: the disclosure of information, without which voluntary choice and competence cannot be properly exercised. However, excessive emphasis on the disclosure requirement may undermine the implementation of informed consent. It is the physician's finding of incapacity that causes alternative forms for obtaining consent to be sought and a patient's legal rights to be temporarily suspended without the involvement of the court. Frequently in the ICU, critical care specialists encounter situations where patients seem to lack decision-making capacity. This is why, according to White-Bateman et al, “It is critical that physicians learn to apply the standards of assessment of decisional capacity that are used to arrive at a legal determination of competence” and facilitate the institution of medical therapies.

But how can we assess decision-making capacity in emergency situations, and particularly in critically ill patients? According to Beauchamp and Childress, to determine whether a patient lacks capacity, a physician must establish that the subject is able to (a) understand the information relevant to the decision, (b) retain that information, (c) use or weigh that information in making the decision, including information about the reasonable and foreseeable consequences of deciding one way or another or failing to make the decision, and (d) communicate the decision (whether by talking, using sign language, or any other means). However, determining all of these points may be difficult in critically ill patients, because evidence shows that even in the absence of cognitive impairment, acute illness can impair the understanding of disease and especially the concepts of proportionality and risk. Given this, it has been suggested that a procedure for capacity assessment be developed and standardized. Such a procedure should include determining whether the patient understands concise points, such as the diagnosis; the proposed treatment, including the risks and potential benefits of the treatment and its alternatives; and outcome statistics.

Decision Making in the ICU

When a critically ill patient is deemed not to have capacity, the physician must seek an alternate pathway to determine how to obtain consent and proceed with medical interventions. The options in these cases are to determine
whether the patient has drafted an advance directive such as a living will or durable power of attorney (for health care) or, in the absence of an advance directive, to seek the substituted judgment of a proxy, family member, friend, or surrogate authorized by state law. Should the physician be unable to identify an alternative form of consent, the physician must choose to invoke a best interest standard; in the case of an emergency, a justification for treatment using the doctrine of implied consent may be applied.

In nonemergency cases, an ethics or risk management consultation (with the hospital’s legal office) is advisable. Physicians are always encouraged to request ethical and legal counseling when treating incapacitated patients who require medical care and are specifically unfriended, meaning that they have no legally authorized surrogate, family member, or friend willing or able to speak on their behalf.16

**Implied Consent**

When available sources for consent are lacking, a legal exception to the requirement of direct consent may be invoked in emergency situations in which consent of a reasonable person to an appropriate treatment can be assumed.3 In a few life-threatening conditions, such as sepsis or myocardial infarction, patients can be involved in the consent process, and risks, benefits, and alternatives to the proposed intervention can be discussed. However, physicians often use the principle of implied consent to perform lifesaving interventions in those patients who lack decision-making capacity or surrogates. The emergency doctrine of implied consent allows providers to deliver lifesaving interventions that, if not performed in a timely way, could potentially lead to increased morbidity and mortality. If the following conditions are met, the physician can use the doctrine of implied consent: (a) the treatment in question represents the usual and customary standard of care for the condition being treated, (b) it would be clearly harmful to the patient to delay treatment awaiting explicit consent, and (c) patients ordinarily would be expected to consent to the treatment in question if they had the capacity to do so.17

**Advance Directive or Living Will**

The advance directive or living will is probably the best tool to direct care in the event of incapacity, but it is usually helpful in end-of-life situations related to terminal conditions, futile care, and multiorgan dysfunction. Shortcomings of these documents related to care in the ICU are (a) that the physician may not find instructions that clearly guide a treatment decision about particular therapies pertinent to ICU care (central lines, chest tubes, renal replacement therapy, thrombolysis, etc) and (b) the ethical argument that one can’t predict his or her own reaction when faced with disability.14,18,19 Studies have demonstrated a tendency among nondisabled people to view a disabling condition as equivalent to death,19,20 and historically, quality outcomes research has frequently combined death with the severe disability group.14,21,22 For example, quality of life after acute ischemic stroke may be seen as high even in the setting of respiratory failure with ventilator dependency. This may be explained by the transforming potential of a phenomenon called response shift, where patients redefine their personal values and the sense of reaction when facing disability.14,18,19 In this sense, advance directives or living wills, even if legally valid, may be suboptimal for finding treatment directions in critically ill patients, particularly given that goals of self-determination and perceptions that guide one’s chosen moral course may change.14,18,19

**Substituted Judgment Standard**

Obtaining informed consent by an authorized surrogate decision maker is an alternative to gaining direct informed consent. Appointees by advance directive, living will, or durable power of attorney (for health care decisions) or family members identified by state law are expected to make the same decisions as the patient would if the patient’s capacity were intact. This idea of substituted judgment is widely accepted as a valid means of respecting patient preferences.22 Shortcomings of the substituted judgment standard are related to the poor accuracy of the proxy’s ability to predict the patient’s will, which some studies have found to be no better than random chance,14,22,23 and the inherent difficulty of making therapeutic decisions for other persons, which may make
proxies reluctant to participate in the consent process and lead them to defer to the physician's expertise, without even considering the full disclosure of risks and benefits associated with the intervention.\textsuperscript{14,20,24} Particular to cases of withdrawal of life support (discussed subsequently), this standard is based on landmark court decisions in cases such as that of Karen Quinlan, an alleged incompetent (\textit{In re Quinlan}, 70 NJ 10, 1976).\textsuperscript{25} In this case, the Supreme Court of New Jersey established the concept of a \textit{substituted judgment standard}. The court determined that a guardian \textit{ad litem} (appointed by court order) was not necessary to represent a patient independently in a particular case and allowed family members to make decisions on the patient's behalf. The ruling is rooted on an individual's legal right to privacy and the notion that a family member could make the assertion based on the family's best judgment (substituted judgment standard). The decision included legal immunity for the physicians and the suggestion to involve ethics committees in such cases.

\textbf{Best Interest Standard}

When one is making decisions for patients lacking decision-making capacity and having no discernible preferences, widespread support exists for using the best interest standard, which was introduced to give some standing to the interests of incapacitated patients independent of their family or guardian's views.\textsuperscript{26} According to Loretta Kopelman,\textsuperscript{26(p187)} "The best interest standard should be understood as an umbrella covering different usages. First, it could be used to express moral, legal, medical, or other social goals or ideas that should guide choices. Second, it can be used in making practical and reasonable decisions about what should be done in a particular situation, given the available and usually less than ideal options." Pertinent to incompetent or incapacitated patients, the basis of this standard is framed by landmark court decisions such as that of Conroy.\textsuperscript{27} In this case, the Supreme Court of New Jersey permitted the use of the best interest standard to allow the guidance of therapy for an incapacitated patient whose guardian did not know the patient's explicit wishes for a particular situation. This principle is also applicable in cases where the burden of a therapy outweighs the benefits and the pain of interventions, which would make them inhumane. Some of the shortcomings of using the best interest standard are the possibility that the physician will be judged as paternalistic\textsuperscript{28} and the possibility that some will find the principle to be vague and open to abuse, based on the inherent interpretation that it can guide decision makers to do whatever they happen to think is best.\textsuperscript{23}

\textbf{Principle of Clear and Convincing Evidence}

In some jurisdictions, the \textit{principle of clear and convincing evidence} may be used in lieu of the substituted judgment standard when dealing with issues pertaining to withholding or withdrawing life-supportive therapies, and it may be applied to comatose patients or patients in persistent vegetative states. This is one of the principles used in the US legal system (the other two being beyond reasonable doubt and preponderance of evidence). This principle can be used by physicians in certain states (Missouri, New York, Florida, among others) to withdraw life support or any other intervention when there is clear and convincing evidence of a patient's previous statements and in the absence of a declaration such as a living will, advance directive, or durable power of attorney. The decision is based on \textit{Cruzan v Director, Missouri Dept. of Health,}\textsuperscript{29} where the court endorsed the right of a competent person to refuse medical therapy even if this results in the patient's death; more important, the court's ruling was based on the liberty interest set forth by the Fourth Amendment of the US Constitution. The case of Terri Schiavo (\textit{Schindler v Schiavo}, 866 So2d 140 [Fla Dist Ct App, 2004])\textsuperscript{30} was ruled following the same principle and endorsing Cruzan's historic court decision.

\textbf{Ethics Consultations and Court-Appointed Guardianship}

In many jurisdictions, if there is no surrogate or agent to act on the patient's behalf, an ethics or risk management consultation (with the hospital's legal office) is advisable. The ethics team can represent the patient's interests by hearing the recommendations of the treating physician or health care providers and then deciding whether the
recommended treatment plan is ethically permissible and in the patient’s interests. This process is usually done with a representative of the hospital’s law office. Additionally, in some jurisdictions, and in the absence of surrogate decision makers, physicians must seek representation of the patient’s interests in the decision-making process through a court-appointed guardian ad litem. Emergency guardianship can be requested through consultation with the hospital’s legal team and the ethics committee. One problem with this system is that court-appointed guardians are often unfamiliar with the patient and have little contact with the medical professionals treating the patients. Interestingly, in a recent study involving homeless persons who lacked family, 80% of subjects indicated they would prefer a physician rather than a court-appointed guardian to make such decisions. Some jurisdictions allow for hospitals or ethics committees to act on behalf of the patient; likewise, treatment can be determined through concurrence with a second physician who is not directly involved in the patient’s health care and does not serve in a decision-making capacity. The American Medical Association has recommended either the involvement of an ethics committee or, like the American College of Physicians, a judicial review for unbefriended patients.

Withdrawal or Withholding

When one is facing withdrawal or withholding of medical interventions, ethical questions cannot be addressed successfully unless the probability of outcomes is entertained. Critical care specialists should make every effort to acquire the highest level of certainty regarding the diagnosis, disease severity, and prognosis with the patient’s wishes in mind. The effort will require a thorough knowledge of the literature and a multidisciplinary team approach to attain a balanced view of the impact of therapeutic decisions and the expected disability on the patient. In addressing these issues, we must answer several clinical prognostic questions: What is the probability of death during the next month and next year (and what are the confidence intervals around that probability)? What are the likely causes of death during the first month and subsequently? If the patient survives, what level of disability and handicap will she or he suffer? What impact will the intervention have on survival and/or disability? Advance directives, the substituted judgment standard, the best interest standard, and the clear and convincing evidence principle may be applied in these circumstances.

Is There a Difference Between Withdrawing and Withholding?

The approach to this question is generally guided by the ethical principles of beneficence, nonmaleficence, and distributive justice; the legal implications of due care and negligence; and strong religious views. Patients, family members, and physicians and health care providers may have strong arguments on this issue. Some may feel comfortable with both withdrawing and withholding, and some may feel comfortable when deciding not to start a therapy but may feel uncomfortable deciding when to stop that therapy, or vice versa. The US court system has examined this controversy and has noted that withholding a therapy can be based on an active or inadvertent omission. However, the moral and legal implications are based on the issue of intent. If one has a duty to treat but actively or inadvertently omits an effective therapy, then one can be found negligent by the court system; but fundamentally, both acts are similar in that the treatment is never started. In the case of Earle Spring (In re Earle Spring, 405 NE 2d 115 [Mass 1980]), a Massachusetts court commented on the issue of continuing renal replacement therapy in an elderly woman: “The question presented by . . . modern technology, once undertaken, is at what point does it cease to perform its intended function?” In this ruling, the court upheld the concept that physicians have no duty to continue ineffective therapies and concluded that its position was consistent with a moral responsibility.

In practice, when physicians and health care providers encounter these situations, some feel morally responsible for the effects of withdrawing care; others may find that there is no difference and therefore will feel no moral responsibility for the end results. According to Beauchamp and Childress, “Feelings of reluctance about withdrawing treatments are understandable, but the distinction between withdrawing and withholding is
morally irrelevant and can be dangerous.” In regard to life-sustaining therapies, other courts have upheld the concept that there is no difference between withdrawing and withholding.6,37

Very frequently in the ICU, physicians and health care providers don’t know whether a therapy will be effective. In this case, it would be better to attempt a trial of medical therapy, by setting goals of care, determining whether those goals can be achieved by ongoing reassessment, and allowing the ICU team to determine whether the therapy is effective or ineffective while maintaining good communication with patient’s family, friends, and/or surrogates.12 This approach would allow the physician or health care team to withdraw an ineffective therapy rather than withhold a potentially beneficial treatment, limiting the chance for undertreatment and avoiding ethical dilemmas.

Finally, according to the World Health Organization, health in its broader sense is defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity,”38 a goal that is sometimes difficult to achieve in the ICU. This is echoed by the words of Hippocrates: “The purpose of medicine is to do away with the sufferings of the sick, to lessen the violence of their diseases, and to refuse to treat those who are overmastered by their diseases, realizing that in such cases, medicine is powerless.”39 In such cases, treatment may be considered futile.39 According to the Society of Critical Care Medicine’s Ethics Committee, treatments that offer no physiological benefit to the patient and therefore fail to achieve their intended goal may be considered as futile. Additionally, the committee advised against treatments that are unlikely to confer any benefit, treatments that are possibly beneficial but extremely costly, and treatments that are controversial and of uncertain benefit.39

**SUMMARY**

Medical ethics deals with moral issues related to daily practice of medicine.1 Questions about the behaviors of physicians and health care providers, the decision-making process, values, rights, and responsibilities generate ethical reflection that requires a thorough understanding of philosophical concepts, religion, professional societies’ position statements, and the law. The principle of autonomy, professional responsibility, and the common law require physicians and health care providers to obtain consent before giving any treatment. A medical treatment or procedure must be adequately explained and the patient must have the capacity to consent to it. If a patient does not have decision-making capacity, emergency treatments must be given using alternative forms of consent. In the case of life-threatening conditions when there exists the possibility of significant disability or death from complications, it is difficult to predict how fears of future disability will ultimately alter the predefined preferences of an individual patient or surrogate decision maker. In issues relating to advance directives and withholding and withdrawing life support therapy, clinical prognostic questions require specific answers, so caregivers should strive to achieve the highest level of certainty regarding the diagnosis and prognosis with the patient’s wishes in mind.

**REFERENCES**


