Ethics in Surgery

Historical Perspective

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Ethics codes and guidelines date back to the origins of medicine in virtually all civilizations. Developed by the medical practitioners of each era and culture, oaths, prayers, and codes bound new physicians to the profession through agreement with the principles of conduct toward patients, colleagues, and society. Although less famous than the Hippocratic oath, the medical fraternities of ancient India, seventh-century China, and early Hebrew society each had medical oaths or codes that medical apprentices swore to on professional initiation. The Hippocratic oath, which graduating medical students swear to at more than 60% of US medical schools, is perhaps the most enduring medical oath of Western civilization. Other oaths commonly sworn to by new physicians include the Declaration of Geneva (a secular, updated form of the Hippocratic oath formulated by the World Medical Association, Ferney-Voltaire, France) and the Prayer of Moses Maimondes, developed by the 18th-century Jewish physician Marcus Herz.

The American Medical Association (AMA), Chicago, Ill, has made medical ethics a centerpiece of its function since the release of its first Code of Medical Ethics during the 1847 convention at which the group was formed. The AMA was the first national assemblage to bind its membership to a uniform code of ethics. Since then, the AMA has been at the forefront of ethics discussion in the United States, periodically updating the Code of Medical Ethics, and in 1997 forming its Institute of Ethics.

Surgical organizations have traditionally had less interest in ethics discussion than their medical colleagues, as most pragmatic and busy surgeons do not read the plethora of philosophy-based bioethics journals, monographs, and encyclopedias. However, surgeons are increasingly encountering bioethics issues brought about by the changing economic and technological landscape of surgical intervention. This increased need to know has led to renewed surgical interest in the discussion of bioethics issues.

THE HIPPOCRATIC OATH

The ethics precepts set forth by the Hippocratic oath—beneficence, nonmaleficence, confidentiality, and prohibition of abortion, euthanasia, and sexual relations with patients—remained essentially unchanged as an ethics blueprint for Western medicine until the mid 20th century. The origins of the Hippocratic oath are obscure, although most historians agree that the author was not the oath’s namesake, Hippocrates. The earliest version of the oath was an updated Christian version found in the Vatican library in the 10th century AD. The most commonly quoted version is the “pagan” version of the oath found in a 14th-century manuscript. Two prevailing theories exist regarding the origins of the oath.

Most historians believe the oath originated from a sect of Greek physicians who were followers of Pythagoras. The influence of the Pythagoreans is evident in the ascetic nature of the oath, with its strict moral restrictions and demands for an exemplary moral lifestyle for physicians. The oath prohibited surgery, and this was incongruent with the main Hippocratic corpus, which offered instructions on surgical cauterization, phlebotomy, thoracentesis, and drainage of abscesses. An alternative theory regarding the origin of the Hippocratic oath postulates that the oath was created by physician-priests of the cult of Asclepius in ancient Greece. This religious cult promised health to
wealthy members of Greek society at temple spas and served as a commitment by the priests of the temple to keep the therapeutic secrets among themselves.11

Both theories regarding the origins of the Hippocratic oath highlight 2 aspects common to all oaths, codes, and guidelines. First, an important function of the oath is the exclusion of practitioners of medicine not within the originating sect. The Hippocratic oath has a trade-guild flavor evident in the allegiance that takers of the oath swear to their teacher, their teacher’s family, and trade secrets that they are taught.1,4,11 This guild aspect of the oath is similar to the secrecy and commitment to an apprentice’s teacher seen in the medical student oath of ancient India, which predicates the Hippocratic oath and is noted in the AMA 1847 Code of Ethics, which came later.1

Second, the Hippocratic oath delineates a social contract between physicians, patients, and society, a model emulated by future ethics codes. Most medical graduates recite the Hippocratic oath as a covenant with their community rather than as a statement of professional allegiance.2,7

The Hippocratic oath fell largely into obscurity after it was written and was not adhered to, even by the Hellenistic Greek physicians following Hippocrates.1 The principles found in the oath periodically reappeared in Hebrew, Muslim, and Christian medical works such as the seventh-century oath of Asaf and the modified Christian oath according to Hippocrates of the 10th century.1 However, the oath disappeared and was not followed for centuries until it gradually returned to prominence through Byzantine Christianity.9 As the 18th and 19th centuries approached, new ethics concerns and the desire for a sworn oath for medical school graduates led to the return of the oath.1

THE AMA CODE OF MEDICAL ETHICS

In the late 1700s, local epidemics in England caused the trustees of the Manchester Infirmary to double their hospital staff in response to the greater patient load, triggering a bitter controversy between the newcomers and the established, presumably better-qualified staff members.1,6 In 1791, Sir Thomas Percival was designated by the trustees to write a document reviewing regulations for proper etiquette and conduct between staff members at the infirmary. He followed his initial work, Of Professional Conduct Relative to Hospitals, with a treatise written in 1803 titled Medical Ethics: A Code of Institutes and Precepts Adapted to the Professional Conduct of Physicians and Surgeons.9 The focus of these works were rules designed to foster amiable and harmonious relations between physicians, but Percival’s writings also provided guidelines for physician behavior toward patients.9 According to Percival, physicians should “unite tenderness with steadiness and condescension with authority, as to inspire the minds of their patients with gratitude, respect, and confidence.”10 Half a century later, these words appeared verbatim in the first AMA Code of Medical Ethics. Percival’s work ended a period of quiescence in medical ethics extending from ancient Greece through the Middle Ages.1,6,12 However, his work drew heavily from others, including the writings on patient-oriented ethical duties of physicians by the clergymen Thomas Gisborne6 and lectures on the duties and qualifications of physicians by the Scottish physician John Gregory.12

The major impact of Sir Thomas Percival’s work was felt in American medicine nearly 50 years after his time. In the mid 1800s, repealment of medical licensing laws as elitist and antidemocratic by state legislatures created a chaotic situation in which there was no distinguishing well-trained physicians from those “unworthy of association, either by intellectual culture, or moral discipline . . . to the profession.”13 Two hundred sixty-eight physicians from 22 states met in May 1847 under the leadership of Dr Nathan Davis of Philadelphia, Pa, to form the AMA. Davis designated 2 of his protégés, Drs John Bell and Isaac Hays, to write a document he believed would resolve the confidence crisis in American medicine.5 This 3283-word document became the AMA Code of Medical Ethics and was unanimously adopted in that first conference. The Code of Medical Ethics was a watershed for medical ethics. It was the first attempt by a national professional group to bind its members by a uniform code of ethics. In a much more concrete fashion than the Hippocratic oath, it set forth a contract between the profession, its patients, and the public.5,6 The AMA claimed the right to reinstitute licensing requirements and minimal education standards. In return, the profession promised to drive out quacks, mercenaries, and empirics from its ranks while recommitting to obeying the calls of the sick. The Hippocratic principles of beneficence, nonmaleficence, and confidentiality resurfaced in the Code of Medical Ethics in combination with rules of consultation and professional etiquette prominent in the work of Sir Thomas Percival.

The AMA Code of Medical Ethics has undergone multiple revisions throughout the 20th century, beginning in 1903, largely precipitated by pressures from within the profession and legal restrictions placed by the federal government.1,5,6 In 1957, the Code of Medical Ethics was reduced to 10 Principles of Medical Ethics, which has since become shortened to 7 principles. Much of the current code has been preserved from the original work of Drs Hays and Bell,3 but the configuration has changed to a 4-part document containing the 7 Principles of Medical Ethics; a fundamental statement regarding the patient-physician relationship; opinions of the AMA’s Council on Ethical and Judicial Affairs (CEJA) addressing newly encountered bioethics issues such as human experimentation, family violence, and managed care; and reports explaining the rationales behind the opinions.1,4 The AMA remains on the forefront of bioethics discussions in the United States through the recent establishment of its Institute of Ethics, whose stated mission is “to provide a forum for timely exploration and discussion of the tough decisions now affecting physicians and their patients.”10

A HIPPOCRATIC OATH FOR THE 20TH CENTURY

At the conclusion of World War II, the World Medical Association (WMA) became interested in modernizing the Hippocratic oath.4 During the next 50 years, the international organization published 8 separate declarations of ethics, beginning with the Declaration of Geneva and the International Code of Medical Ethics in 1948.9
The Declaration of Geneva, often recited at medical school graduation ceremonies, reiterates Hippocratic principles of beneficence and confidentiality with emphasis on devotion to patient interests while abstaining from the profit motive and treating colleagues with professionalism. At later conferences of the WMA, modern issues ranging from human experimentation, abortion, transplantation, and human torture to psychiatric care, patient autonomy, and end-of-life care were addressed by various declarations.

Of particular interest, the Declaration of Helsinki in 1964 emphasized the principle of informed consent for volunteers in biomedical research. This issue had been addressed earlier during the trial of Nazi doctors who had experimented with Jewish prisoners in concentration camps during World War II. At this trial, the Hippocratic oath was cited as the guiding ethics principle in medicine by witnesses of the prosecution. After conviction of the Nazi physicians, the tribunal put forth 10 principles relevant to human experimentation, known as the Nuremberg Code. The Nuremberg Code included the concepts of informed consent, societal good, and voluntariness as the foundation for biomedical research.

Although designed as a secular, modernized version of the Hippocratic oath, the Declaration of Geneva and subsequent declarations by the WMA lacked a body to enforce the principles set forth. Most national professional medical groups did not endorse the WMA, and the British Medical Society in London, England, actually withdrew from the WMA. In the 1960s and 1970s, paternalism, a long-held basis for the relationship between physician and patient, began to come under attack. Ethics codes emphasizing paternalism such as the Hippocratic oath and the AMA Code of Medical Ethics were replaced or amended by ethics guidelines emphasizing patient rights and autonomy. These guidelines included the 4-principle approach to bioethics taught at the Kennedy Institute of Ethics, Washington, DC, the Declaration of Lisbon in 1981 by the WMA, and the Patient’s Bill of Rights by the American Hospital Association, Chicago, Ill, in 1972. These documents for the first time discussed full disclosure of diagnosis, prognosis, and treatment options and the patient’s right to refuse treatment. In addition to new attitudes toward patient’s rights, ethics guidelines have experienced pressures from the new economic realities of medicine. Many practitioners today question whether an unaltering devotion to individual patient interest can be maintained when limited financial resources create serious health consequences for a larger group of patients as well as monetary consequences for physicians. Some questioned if a population-based system of ethics should be adopted instead of the Hippocratic oath. The heightened pressures from limited health care dollars, new awareness of patient rights, and burgeoning new technologies have led to the reevaluation of the traditional Hippocratic oath and brought surgeons into bioethics discussion.

ETHICS AND SURGERY

The major oaths, codes, and guidelines regarding medical ethics have not come from surgical organizations. The Hippocratic oath forbade surgery. Whether this prohibition actually outlawed surgery or simply relegated the discipline to specialists is not clear. As mentioned earlier, the Hippocratic corpus described numerous surgical procedures. However, the Hippocratic oath was not composed by followers of Hippocrates. As interest renewed in medical ethics with the formation of the AMA in 1847, surgeons were once again excluded. The AMA Code of Medical Ethics criticized all physicians claiming special abilities and labeled them as quacks. The American College of Surgeons (ACS), Chicago, Ill, was formed in 1913, and the Fellowship Pledge of the ACS is one of the earliest surgical ethics guidelines. Each initiate of the college affirms the pledge by signing a statement on the application and reciting it during the initiation ceremony. The pledge promises to place the welfare and rights of the patient above all else. It also instructs its initiates to avoid overcharging and fee splitting. At its formation, the ACS also established a central judiciary committee to deal with reports of misconduct by its fellows. In 1994, the ACS compiled an 18-page booklet summarizing a statement of principles, which covers principles of patient care, qualifications for surgical privileges, and qualifications for fellowship. In response to the resurgence of interest in bioethics caused by new technologies, economic pressures, and emphasis on patient rights, the Journal of the American College of Surgeons has featured an essay on bioethics since 1998.

The Royal Australasian College of Surgeons published a Code of Ethics in 1993. This Code of Ethics was provoked by the same issues that have led to a more visible surgical presence of bioethics in America, namely patient autonomy, financial constraints on treatment access, expectations of improved outcomes, and rapid flow of high technology. The Royal Australasian College Code of Ethics has 4 sections: a preamble, the surgeon and the patient, the surgeon and the profession, and the surgeon and society. Principles in this code include beneficence, autonomy, informed consent, confidentiality, cordial dealings with colleagues, and importance of working for the good of society. Like the Fellowship Pledge of the ACS, the Code of Ethics provides a standard of ethical behavior expected from fellows of the Royal Australasian College of Surgeons.

In 1986, the College of Medicine of South Africa adopted the college credo: the college (1) is committed to the maintenance of the highest professional and ethics standards through the primary roles as an education and postgraduate examining body; (2) is opposed to all forms of discrimination on the grounds of race, religion, or sex, and believes that such discrimination is incompatible with the ethical practice of medicine; (3) is committed to striving for the improvement of the health of all the people of South Africa; advocates a unitary health service organization supported by an open university policy in a nondiscriminatory society, which encourages equitable and fair access to education, health, recreational and other social services; and energetically pursues its policy of making available to neighboring territories and other states in Africa its multidisciplinary educational resources; (4) strongly endorses internationally recognized human rights standards as set
out in the 1975 Declaration of Tokyo, deplores torture, and strongly condemns the involvement of medical practitioners in such practices; recommends that the medical care of prisoners and detainees should be constantly under review to ensure optimum care; and believes that it is of the utmost importance that their rights should be clearly stated and enforced; and (5) condemns all forms of violence and is committed to the development of a just and peaceful society.

The United Nations Declaration of Human Rights was adopted on December 10, 1948, by the General Assembly of the United Nations (without dissent) at 3 AM. The preamble of the declaration states that "whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world." The declaration proceeds to outline 30 articles that define a clear and common understanding of these rights and freedoms, which are important to the realization of human rights.

### CONCLUSIONS

Oaths, codes, and guidelines for the ethical practice of medicine date back to the Hippocratic oath of the 4th century BC (Table). This oath of vague origin was largely forgotten at the time of its composition, but gradually assumed a place of prominence through its influence on Christian, Muslim, and Hebrew medical works in the Middle Ages. It gradually reappeared in the 18th and 19th centuries as renewed interest in medical ethics culminated in the work of Sir Thomas Percival and the AMA Code of Medical Ethics. Surgeons were not involved in the Hippocratic oath or the guidelines of the AMA that followed. The earliest ethics composition by surgeons was the ACS Fellowship Pledge. As the landscape of medicine changed, new demands placed on physicians through patient autonomy, managed care, and rapidly evolving technologies have eroded and altered the long-practiced ethics concepts from the Hippocratic oath and AMA Code of Medical Ethics. These new forces have caused surgeons to seek greater visibility and responsibility in discussing and deciding bioethics issues, as evidenced by the Code of Ethics from the Royal Australasian College of Surgeons and the newly established essays on bioethics in the Journal of the American College of Surgeons.

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### REFERENCES