

respiratory pathology took over and left me doubled over, momentarily speechless, and gasping for breath.

From the Boston University School of Medicine and Boston Medical Center, Boston.

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## BECOMING A PHYSICIAN

## “I Swear by Apollo” — On Taking the Hippocratic Oath

Howard Markel, M.D., Ph.D.

Every spring for almost 20 years, I have happily donned a rented robe, hood, and mortarboard to attend medical school commencement exercises. The purpose of this annual foray into pomp and circumstance goes well beyond applauding the achievements of graduates who are about to enter the medical profession. For me, commencement is the perfect opportunity to renew my vows, as it were, standing shoulder to shoulder with both newly minted doctors and like-minded colleagues as we take the Hippocratic Oath.

Although many scholars dispute the exact authorship of the writings ascribed to the ancient physician Hippocrates, who probably lived sometime between 460 and 380 B.C., the oath named for him is simultaneously one of the most revered, protean, and misunderstood documents in the history of medicine (see box).<sup>1</sup> To begin with, it is often misquoted. For example, our mantra of “First, do no harm” (a phrase translated into Latin as “*Primum non nocere*”) is often mistakenly ascribed to the oath, although it appears nowhere in that venerable pledge. Hippocrates came closest to issuing this directive in his treatise *Epidemics*, in an axiom that reads, “As to diseases, make a habit of two things — to help, or at least, to do no harm.”

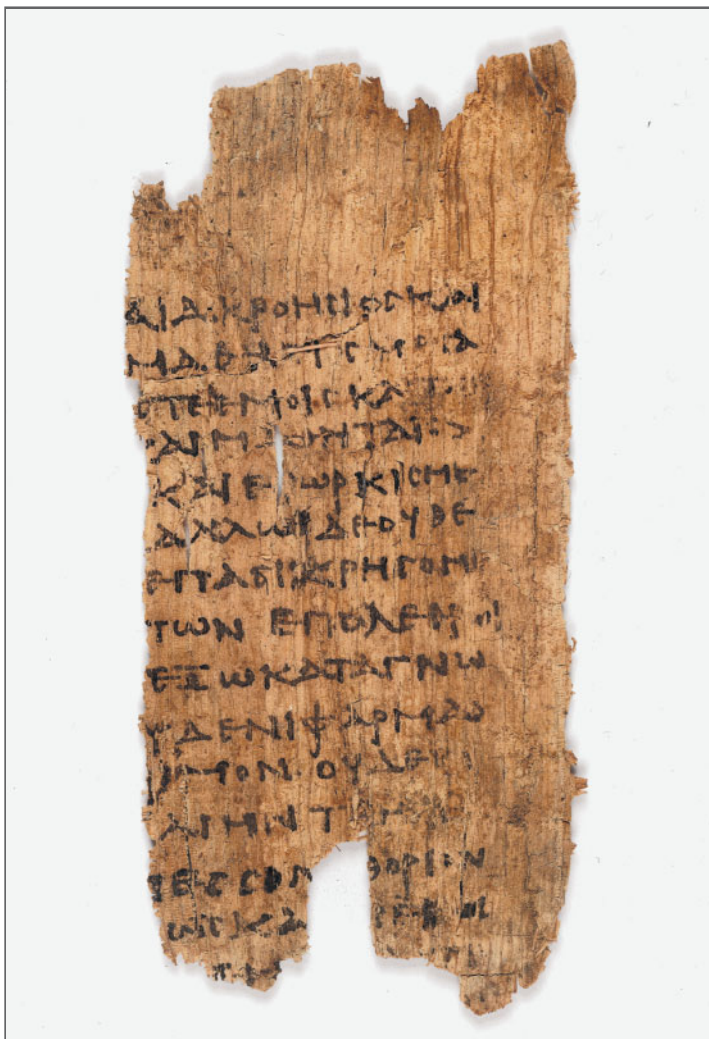
Many doctors practicing today are surprised to learn that the first recorded administration of the Hippocratic Oath in a medical school setting was at the University of Wittenberg in Germany in 1508 and that it did not become a standard part of a formal medical school graduation ceremony until 1804, when it was incorporated into the commencement exercises at Montpellier, France.<sup>2</sup> The custom spread in fits and starts on both sides of the Atlantic during the 19th century, but even well into the

20th century relatively few American physicians formally took the oath. According to a survey conducted for the Association of American Medical Colleges in 1928, for example, only 19 percent of the medical schools in North America included the oath in their commencement exercises.<sup>3</sup> With the discovery of the atrocities that were committed in the name of medicine during World War II and the growing interest in bioethics in the succeeding decades, oath taking began playing an increasing part in graduation ceremonies.<sup>4</sup>

This spring, nearly every U.S. medical school will administer some type of professional oath to its share of about 16,000 men and women who are eager to take possession of their medical degrees. Yet it is doubtful that Hippocrates would recognize most of the pledges that are anachronistically ascribed to him. Such revisionism is hardly unique to our era. Indeed, the tinkering with Hippocrates’ oath began soon after its first utterance and generally reflected the changing values, customs, and beliefs associated with the ethical practice of medicine.

Consequently, there are stark differences between the promises made in the original version and the oaths sworn today. To take the most obvious example, few if any of us now believe in the ancient Greek gods Apollo, Asclepius, Hygieia, and Panacea, and we therefore no longer pledge allegiance to them. Indeed, the evidence indicates that spirituality in general — regardless of its form — now has a distant relationship with medical science: a “content analysis” of the oaths administered at 147 U.S. and Canadian medical schools in 1993 showed that only 11 percent of the versions invoked a deity.<sup>5</sup>

In Hippocrates’ day, the student made a binding



Fragment of the Hippocratic Oath on Papyrus from the Third Century.  
Courtesy of Wellcome Library, London.

vow to honor his teacher as he would his parents and to share financial and intellectual resources with his mentor and the mentor's family. Unfortunately for those of us engaged in medical education today, this pledge has long since passed into disfavor.

There are two highly controversial vows in the original Hippocratic Oath that we continue to ponder and struggle with as a profession: the pledges never to participate in euthanasia and abortion.<sup>1</sup> These prohibitions applied primarily to those identified as Hippocratic physicians, a medical sect that represented only a small minority of all self-proclaimed healers. The Hippocratics' reasons for re-

fusing to participate in euthanasia may have been based on a philosophical or moral belief in preserving the sanctity of life or simply on their wish to avoid involvement in any act of assisted suicide, murder, or manslaughter. We have fairly reliable historical documentation, however, that many ancient Greeks and Romans who were confronted with terminal illness preferred a quick, painless death by means of poison to letting nature take its course. Moreover, there were no laws in the ancient world against suicide, and it was not uncommon for physicians to recommend this option to a patient with an incurable disease. Similarly, abortion, typically effected by means of a pessary that induced premature labor, was practiced in both ancient Greece and the Roman Empire. Many Christian revisions of the Hippocratic Oath, especially those written during the Middle Ages, prohibited all abortive procedures. Not surprisingly, the contentious debate over both of these issues continues today, although the relevant sections are simply omitted in most oaths administered by U.S. medical schools. As of 1993, only 14 percent of such oaths prohibited euthanasia, and only 8 percent prohibited abortion.<sup>5</sup>

Another discarded relic is the vow never to "use the knife, not even on sufferers from the stone." In an era before antiseptic and aseptic surgery, anesthesia, and the scientific management of fluids, blood loss, and surgical shock, it was wise indeed to refer sufferers of these painful concretions to persons who specialized in removing them. Many healers in the ancient world focused their work specifically on kidney and bladder stones, others on cataract removal, and still others on the treatment of external injuries such as wounds. But as recently as the end of the 19th century, most surgical operations were treacherous affairs that carried a high risk of death. Consequently, the passage about "the knife" remains difficult to interpret. Historians have debated for centuries whether this vow bans all surgical procedures by the Hippocratics because of their inherent danger, reflects the fact that these physicians considered surgery beneath their dignity, or represents a promise not to practice outside the bounds of one's abilities.

The Hippocratic physicians understood the importance of avoiding any type of sexual relationship with their patients, yet only 3 percent of the oaths administered by U.S. medical schools at the end of the 20th century specifically prohibited such

### The Hippocratic Oath

I swear by Apollo Physician and Asclepius and Hygieia and Panacea and all the gods and goddesses, making them my witnesses, that I will fulfill according to my ability and judgment this oath and this covenant:

To hold him who has taught me this art as equal to my parents and to live my life in partnership with him, and if he is in need of money to give him a share of mine, and to regard his offspring as equal to my brothers in male lineage and to teach them this art — if they desire to learn it — without fee and covenant; to give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and have taken an oath according to the medical law, but to no one else.

I will apply dietetic measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice.

I will neither give a deadly drug to anybody if asked for it, nor will I make a suggestion to this effect. Similarly I will not

give to a woman an abortive remedy. In purity and holiness I will guard my life and my art.

I will not use the knife, not even on sufferers from stone, but will withdraw in favor of such men as are engaged in this work.

Whatever houses I may visit, I will come for the benefit of the sick, remaining free of all intentional injustice, of all mischief and in particular of sexual relations with both female and male persons, be they free or slaves.

What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself holding such things shameful to be spoken about.

If I fulfill this oath and do not violate it, may it be granted to me to enjoy life and art, being honored with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot.

*Translated from the Greek by Edelstein.<sup>1</sup>*

contact.<sup>5</sup> On the other hand, virtually all the oaths administered today include the assurances that Hippocrates insisted were touchstones of the successful patient–doctor relationship: the promises of acting in the best interest of the patient and of confidentiality.

Often, the additions made to the Hippocratic Oath are as historically interesting as the deletions. Many of the oaths taken this spring will include vows not to alter one's practice on the basis of the patient's race, nationality, religion, sex, socioeconomic standing, or sexual orientation. Others include assurances of the physician's accountability to his or her patients, protection of patients' auton-

omy, and informed consent or assistance with decision making. In a very real sense, all these changes help to make the act of oath taking eternal, a process that constantly changes to accommodate and articulate changing views of medicine and society.

But regardless of the language or provenance of the hundreds of texts collectively classified as Hippocratic, on commencement day the historian in me invariably takes a back seat to the physician. Whether I am reciting from bowdlerized or amended versions or the original Greek text, as I rise to take the oath with my peers, my heart grows full with reverence for the profession I have chosen.

Despite occasional complaints questioning the

relevance or purity of the oath taking, this symbolic act is a tradition that is unlikely to become superannuated. It serves as a powerful reminder and declaration that we are all a part of something infinitely larger, older, and more important than a particular specialty or institution. Given the myriad challenges facing almost every aspect of medicine in the 21st century, the need for physicians to make a formal warrant of diligent, moral, and ethical conduct in the service of their patients may be stronger than ever.

As every experienced doctor knows, the few minutes we spend giving voice to a professional oath are far easier than the years we must devote to its faithful execution. As Hippocrates famously said, "Life is short, the art long, opportunity fleeting, experience perilous, and the crisis difficult," but the

legacy of medicine suggests that we are capable of fulfilling this noble charge.

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## RETROSPECTIVE

## Dying and Decision Making — Evolution of End-of-Life Options

Timothy E. Quill, M.D.

I recently helped my father to die. He was an engineer, independent, always on the go and in charge. He began to deteriorate rapidly from an ill-defined dementing illness, and his confusion and intermittent agitation did not respond to the standard treatments that were tried. He had made his wishes clear about avoiding any prolongation of his dying, but now he had lost the capacity to make decisions for himself. Furthermore, we did not know whether his remaining life span was measured in months or years. He was unable to sleep or relax at night, despite trials of neuroleptics, antidepressants, and anti-anxiety agents. My mother was exhausted, but neither of them wanted their home to be invaded by strangers. How were we to honor his wishes and values and help him to find dignity and peace in the last phase of his life?

In the 13 years that have passed since I wrote a *Sounding Board* article about helping a patient to die,<sup>1</sup> there have been substantial improvements in palliative care for severely ill patients, particularly in acute care hospitals. Providers of palliative care

attempt to relieve uncomfortable symptoms and improve the quality of life for severely ill patients and their families. Unlike hospice care, palliative care is offered alongside the active treatment of a patient's underlying disease, regardless of the prognosis. Palliative care consultation services, faculty development programs, and a base of evidence-based knowledge have grown exponentially during this period, facilitated enormously by generous financial support from private foundations such as Robert Wood Johnson, Soros, Nathan Cummings, Greenwall, and Gerbode. Unfortunately, much of this funding is drying up, and the reimbursement systems that support clinical consultation services as well as ongoing academic activities may be too fragile to sustain these remarkable gains.

My father was initially a perfect candidate for palliative care. Given his progressive loss of memory and poor prognosis, he consented to "do-not-resuscitate" status but wanted to receive all other potentially effective treatments. Every effort was made to improve his quality of life with the use of