Hippocratic Oath: a critical analysis

Pedro Zanetta Brener¹, Arnaldo Lichtenstein¹

1. Universidade de São Paulo, São Paulo/SP, Brasil.

Abstract

The *Hippocratic Oath* is, perhaps, the most important text of medical ethics in the Western world. Widely discussed since the Middle Ages by students and philosophers, even with the so-called end of Hippocratic medicine in favor of the scientific method, the document still raises essential ethical questions and is adopted, with variations, in various educational institutions worldwide. This review analyzes the original texts, presents some of the interpretations it received throughout history and its readings and versions in different languages, and offers a modern and commented translation of the original in Greek. Finally, its adoption in medical schools today is discussed.

Keywords: Hippocratic oath. Ethics, medical. Bioethics.

Resumo

Juramento de Hipócrates: análise crítica

O Juramento de Hipócrates é, talvez, o mais importante texto de ética médica do mundo ocidental. Amplamente discutido desde a Idade Média por estudantes e filósofos, mesmo com o dito fim da medicina hipocrática em favor do método científico, o documento suscita questões éticas essenciais e é adotado, com variações, em diversas instituições de ensino pelo mundo. Esta revisão procura analisar os textos transmitidos no original, apresentar algumas das interpretações que recebeu ao longo da história e suas leituras e versões em diferentes línguas, além de oferecer uma tradução moderna e comentada do original em grego. Por fim, discute-se sua adoção em escolas de medicina na atualidade. **Palavras-chave:** Juramento hipocrático. Ética médica. Bioética.

Palavras-chave: Juramento hipocratico. Etica medica. Bioetic

Resumen

Juramento de Hipócrates: un análisis crítico

El Juramento de Hipócrates quizás sea el texto de ética médica más importante en el mundo occidental. Desde la Edad Media se viene discutiendo este documento entre estudiantes y filósofos, incluso con el objetivo de la medicina hipocrática a favor del método científico, además de plantear aspectos éticos esenciales, es utilizado con sus variaciones por diversas instituciones educativas. Esta revisión busca analizar los textos en el original, presentar algunas de las interpretaciones que había recibido a lo largo de la historia, sus lecturas y versiones en diferentes idiomas, así como exponer una traducción moderna y comentada del original en griego. Por último, se discute la actual utilización de este documento en las facultades de medicina.

Palabras clave: Juramento hipocrático. Ética médica. Bioética.

The authors declare no conflict of interest.

The *textus receptus*, or "received text" (Chart 1), of the *Hippocratic Oath* combines several similar manuscripts, especially from the *Vaticanus graecus* 276 (V), a codex in the Vatican Library called the "pagan oath"^{1,2}. There are other versions of the oath in Greek, including one in verse, one Christianized,

and another (the oldest) fairly fragmentary one. in the papyrus of Oxyrhynchus. They were found in Egypt and contain documents from the third century BC to the seventh century AD³⁻⁵. The differences between these documents, however, is a discussion that is beyond the scope of this review.

Chart 1. The original oath and its translation

ΟΡΚΟΣ *

Όμνύω Άπόλλωνα ἰητρόν καὶ Ἀσκληπιὸν καὶ Ὑγείαν καὶ Πανάκειαν καὶ Θεοὺς πάντας τε καὶ πάσας ἴστορας ποιεύμενος ἐπιτελέα ποιήσειν κατὰ δύναμιν καὶ κρίσιν ἐμὴν ὅρκον τόνδε καὶ ξυγγραφὴν τήνδε [5] ἡγήσασθαί τε τὸν διδάξαντά με τὴν τέχνην ταύτην

[5] ηηιοασθαί τε τον οισαζαντά με την τεχνην ταυτην ίσα γενέτησιν έμοῖσιν καὶ βίου κοινώσασθαι καὶ χρεῶν χρηίζοντι μετάδοσιν ποιήσασθαι καὶ γένος τὸ ἐξ αὐτοῦ καὶ ἀδελφεοῖς ἶσον ἐπικρινέειν ἄρρεσι καὶ διδάξειν τὴν τέχνην ταὐτην, ἢν χρηίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ ξυγγραφῆς, παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοιπῆς ἀπάσης μαθήσιος μετάδοσιν ποιήσασθαι υἰοῖσί τε ἐμοῖσι καὶ τοῖσι [10] τοῦ ἐμὲ διδάξαντος καὶ μαθηταῖσι συγγεγραμμένοις τε καὶ ὡρκισμένοις νόμῳ ἰητρικῷ, ἄλλῳ δὲ οὐδενί.

διαιτήμασί τε χρήσομαι ἐπ` ὠφελείη καμνόντων κατὰ δύναμιν καὶ κρίσιν ἐμήν ἐπὶ δηλήσει δὲ καὶ ἀδικίη εἴρξειν.

ού δώσω δὲ οὐδὲ φάρμακον οὐδενὶ αἰτηθεὶς θανάσιμον οὐδὲ ὑφηγήσομαι [15] ξυμβουλίην τοιήνδε ὁμοίως δὲ οὐδὲ γυναικὶ πεσσὸν φθόριον δώσω. ἀγνῶς δὲ καὶ ὀσίως διατηρήσω βίον ἐμὸν καὶ τέχνην ἐμήν. οὐ τεμέω δὲ οὐδὲ μὴν λιθιῶντας, ἐκχωρήσω δὲ ἐργάτῃσιν ἀνδράσιν πρήξιος τῆσδε.

ές οίκίας δὲ ὀκόσας ἂν ἐσίω, ἐσελεύσομαι ἐπ' ὠφελεἰῃ καμνὀντων ἐκτὀς ἐὠν [20] πάσης ἀδικίης ἐκουσίης καὶ φθορίης τῆς τε ἄλλης καὶ ἀφροδισίων ἔργων ἐπί τε γυναικείων σωμάτων καὶ ἀνδρείων ἐλευθέρων τε καὶ δούλων.

ä δ' äv ἐν θεραπείῃ ἢ ἴδω ἢ ἀκούσω ἢ καὶ ἄνευ θεραπηίης κατὰ βίον ἀνθρώπων, ä μὴ χρή ποτε ἐκλαλέεσθαι ἔξω, σιγήσομαι ἄρρετα ἡγεύμενος εἶναι τὰ τοιαῦτα.

όρκον μὲν οὖν μοι τόνδε ἐπιτελέα ποιέοντι καὶ μὴ ξυγχέοντι εἴη ἐπαύρασθαι [25] καὶ βίου καὶ τέχνης δοξαζομένῳ παρὰ πᾶσιν ἀνθρώποις ἐς τὸν αἰεὶ χρόνον, παραβαίνοντι δἑ καὶ ἐπιορκοῦντι τἀναντία τουτέων.

Oath

I swear by Apollo the physician, by Asclepius, Hygieia, and Panacea, and by all the gods and all the goddesses, making them witnesses, that I will carry out, according to my ability and my judgment, this oath and this commitment:

To consider my master in this art equal to my parents, to share my livelihood with him and, should he need it, to give him a share of my possessions. To cherish his descendants as my brothers and teach them this art, if they wish to learn it, without payment or compromise. To share the precepts, oral instructions and all other teachings with my children and with those of my master, and also with the apprentices who committed themselves and swore the medical law but with no other.

I will prescribe diets for the benefit of the sick according to my ability and my judgment: I will work against their injury and injustice.

I will not give any fatal drugs to anyone if requested nor will I forward such advice. Nor will I give to a woman an abortive pessary. Purely and devoutly, I will observe my life and my art.

I will not even cut patients with stone but I will give a turn to those who practice it.

In whatever houses I enter, I will enter for the benefit of the sick, refraining from all intentional injustice, from any other destructive action and also from loving relationships with the bodies of women and men, free or slaves.

Whatever I see or hear, during treatment or even outside treatment, about people's lives, I will not divulge further, but I will silence it, considering that these things are confidential.

If this oath I fulfill to the end, without breaking it, may I reap the fruits of my life and of my art, obtaining fame among all men forever, but, if I transgress or fail, may I obtain the opposite of it.

Source: Hippocratis opera⁶

The numbering of the lines, indicated in square brackets, is preserved

517

Update

There is no consensus on the date of the oath, which is part of the *Corpus hippocraticum*, a collection of works attributed to Hippocrates (460-370 BC) containing several texts which are no longer considered to be by the author. A play by Aristophanes, *Women at the Thesmophoria*, from 411 BC, seems to quote the oath. However, it is impossible to state this with certainty since the Hippocrates to whom the play refers could be a general. Today, it is believed that the oath dates from the middle to the end of the fourth century BC.

During antiquity, Hippocratic texts were transmitted as the most important medical documents available but the oath was forgotten until the 9th century, when Alquindi and Hunayn ibn Ishaq translated it into Arabic and Syriac. Since then, many scholars, such as Avicenna and Maimonides, have discussed the document and, in the thirteenth century, Pope John XXI disseminated the translations from Arabic into Latin made by Constantine the African and integrated them with other medical texts, spreading the oath⁴. However, these translations modified it so that, in Hunayn ibn Ishaq's translation, for example, the Greek deities were adapted to monotheism³ and kept Asclepius, an uncomfortable fact for some scholars⁷.

In the Renaissance, its importance increased, and the oath was cited by several authors, such as Erasmus of Rotterdam (1499), Thomas Linacre (1538), Paracelsus (1539), and François Rabelais (1543)⁴. In 1508, the medical school of Wittenberg included the oath in its founding statute³. At the beginning of the 19th century, undergraduates at University of Montpellier still recited the oath in Latin⁸.

Discussion

To correctly interpret the *Hippocratic Oath* requires an understanding of the context in which it was created, as well as its function. This is the only way to understand its form and content.

According to the pagan text itself, this would serve as an oath model for the initiation of Hippocratic students, originating in the island of Kos, in present-day Turkey, which would have been the first asclepiade to receive external apprentices for a fee. Until then, the medical profession was exclusive to the families of the asclepiades, that is, the descendants of Asclepius (Esculapius, in Latin), to whom prayers and rituals were dedicated.

Thus, the oath was applied not to the members of the linear family of Asclepius but to those who were linked to medicine by choice, to whom the oath was applied as an ethical model and as an attestation of their commitment to medicine and to their instructor. On the other hand, the *Oath of Delphi*, instituted by the asclepiades of Kos and Cnidus, was made by the members of the family of Asclepius, although not all were physicians⁹.

The *Hippocratic Oath* is structured in four parts—one initial statement, two oaths, and one conclusion. Lines 2 and 4 structure the first oath, in which, in a conventional way, the relevant deities are summoned to witness the commitment and the oath is proposed. Then, from lines 5 to 11, the first oath is made, subordinate to the initial proposition and with its verbs in the infinitive, referring to the duties of the apprentice with his master, his family, and the family of his master. In lines 12 to 23, then, the second oath is made. It has an independent grammatical character which refers to ethical and dogmatic issues. Finally, lines 24 to 26 resume the initial oath and seal the learner's commitment, now no longer with deities, but with society.

The oath begins with: I swear by Apollo the physician, by Asclepius, Hygieia and Panacea, and by all the gods and all the goddesses, making them witnesses, that I will carry out, according to my ability and my judgment, this oath and this commitment (Chart 1). The introduction of the oath is traditional, beginning with the verbal form "I swear," followed by the deities which allow such action. The gods of medicine are mentioned: Apollo, the god of healing; Asclepius, the medical god, son of Apollo; and the daughters of Asclepius, Hygieia, ruler of health and hygiene, and Panacea, ruler of universal remedy. Then, the other deities are summoned to attend the oath. The gods would be responsible for ensuring its fulfillment and for delivering punishment if it were broken.

This first part brings two other relevant points. First, the formula "according to my ability and my judgment," which is repeated later. Translated here as "ability," the Greek word *dynamis* also means "power," "potency;" it is the word that will give us "dynamics" and its derivatives. "Judgment" was used for the Greek *krisis*, a rather complex word that also means "separation," "distinction," "discernment" or "interpretation." Thus, the promises made in the oath are subject to two main limitations: to the limits of possible actions—to fulfill his oath, he who swears cannot go beyond his own power or his abilities—and to the limits of his ability to judge—the fulfillment of his promises is limited by what he can distinguish or discern and therefore understand and interpret.

The second point concerns the promise that "this oath and this commitment" will be carried out. The Greek word *orkos* was translated as "oath," which titles the text in question, and the word *ksyngraphe* as "commitment," which refers to what was signed on paper, "decree" or "contract," both at the end of the first part of the text. The two terms refer to the commitments made, one with the master and his family in the second part, and a moral, ethical, and doctrinal one, signed with society, in the third part.

The second part of the oath thus brings the apprentice's commitment to his master. To consider my master in this art equal to my parents may seem somewhat exaggerated but in the Greece of that period, the process of learning medicine and other crafts could require a long acquaintance with the master. It was thought that the student should live with the master to do so, thus treating him as a father but it is unlikely that this would happen ¹⁰. This interpretation comes from the influence, in the whole oath, of Pythagoreanism, a philosophical school in which masters were considered adoptive parents.

The most likely explanation is another for since the oath was made by apprentices who were not members of the family lineage, there had to be some security for the masters. This contract established their obligations to the master and his family, offering them moral and material guarantees in exchange for the privilege of the disciple, who received instruction and could transmit the knowledge of medicine to his own descendants at no cost⁹. Thus, the master assured his material subsistence and that of his descendants, as well as the knowledge that would be safeguarded for his family.

It is evident the function this commitment acquires: to protect the interests and the privileged condition of the family which holds the medical knowledge from the moment it becomes available to others⁹. Thus, the master and his family would refrain from taking risks of losing exclusivity over knowledge since their subsistence would be guaranteed.

The oath takes a new direction in the third part, in which each oath becomes independent, and its verbs are used in the simple future. This formal change accompanies a change in content: this part is dedicated to ethical, moral, and doctrinal oaths. In this passage, the Greek text is often ambiguous and its readings are not consensual, leading to divergent interpretations.

The first oath in this section is considered the founder of medical ethics and also brings with it an important doctrinal aspect: *I will prescribe diets* for the benefit of the sick according to my ability and my judgment: *I will work against their injury* and injustice (Chart 1). The sphere of activity of physicians in Greek Antiquity was limited to three main activities: dietetics, pharmacology, and surgery. Dietetics was considered the noblest of the three, both by Pythagoreans and others^{10,11}, and thus appears precisely in the first oath.

Most importantly, "for the benefit of the sick." This expression is the Hippocratic maxim which guides medical ethics here and in the first of the *Epidemics*, a work in which the author describes the seasons of the year and their associated diseases, serving as a point of irradiation for all other rules⁹. The benefit of patients is the first and greatest objective of medical practice and is limited only by the "ability and judgment" of the professional. At this point, modernity criticizes the oath since the benefit of the sick is measured exclusively by the doctor, neither consulting patients nor obtaining their consent¹²⁻¹⁵.

The lack of patient participation came to be considered a strong sign of medical paternalism which Hippocrates represented, the *imposing beneficence*¹⁶. Paternalistic or not, it is a fact that the orientation of medical conduct for the benefit of patients, against their injury and injustice, defined the current ethical standards.

The following oath, in which pharmacology arises, is more controversial: I will not give any fatal drugs to anyone if requested nor will I forward such advice (Chart 1). There are several interpretations for this prohibition: from the doctor being a supplier of poisons for the murder of important people to euthanasia. Indeed, the choice of a painless death before incurable diseases was not uncommon in ancient Greece and it is reasonable that the oath refers to the proper posture of physicians in these cases¹⁰.

Euthanasia, praised by many authors, was prohibited neither by religion nor by law. However, unlike Platonics, Cynics, and Stoics, which allowed and even sometimes stimulated suicide in case of illnesses, the Pythagoreans strictly prohibited it ¹⁰. Again, one sees here a possible influence of this current. However, the most accepted is that it is the absolute value attributed by Hippocrates to human life. Around this ethical axis is organized this moral judgment and this doctrinal prohibition, as well as later ones⁴.

The following prohibition refers to abortion: Nor will I give to a woman an abortive pessary. Purely and devoutly, I will observe my life and my art (Chart 1). There are some interpretations of this passage and the oldest of them, the prohibition of any form of abortion, received support from Christians, the great disseminators of the oath during and after the Middle Ages.

However, in Antiquity, abortion was performed and even considered moral by several authors. Plato and Aristotle considered feticide a regular institution of the ideal state: Plato considered it appropriate when parents were no longer of adequate age to father and raise children and Aristotle, as a method of population control. Soranus, the great gynecologist from Ephesus, interrupted pregnancies when mothers were at risk¹⁰.

For most authors, the embryo was not a living being or gifted with spirit. The reason for the prohibition of abortion in the *Hippocratic Oath* would then stem from Pythagorean influence since this current considered the embryo endowed with soul in a context of maximum appreciation of life^{9,10}.

Although consistent with the rest of the oath, this explanation conflicts with data from Hippocrates' work, for the *Corpus hippocraticum*, within the treatise *De morbis mulierum*, reports several abortions. These methods are not considered "destructive," that is, they are not performed to kill or injure a fetus but rather to expel a dead or sick embryo. Hippocrates also distinguishes abortion from "late flow," and in this he is followed by Sorano¹⁷. Aristotle¹⁷ states, in the *Politics*, that abortion should be prohibited or allowed depending on the presence or absence of sensitivity and life, conditions determined by the time of pregnancy.

Another interpretation to remedy these contradictions was given by the expression employed, *pesson phthorion*, which we translate as "abortive pessary." Thus, it would be a specific type of abortifacient made of herbs mixed with other substances which would cause inflammation when placed in contact with the cervix, leading to abortion³.

Because this is riskier than other methods, the oath would forbid the abortive pessary. There is, however, no evidence to support this hypothesis, which conflicts with what follows in the text: *Purely and devoutly, I will observe my life and my art*. The moral motivation of this prohibition leads us to the ethical concept of preservation or appreciation of life—therefore, it is unlikely that the moral justification for the prohibition deals with a technical specificity⁴.

I will not even cut patients with stone but I will give a turn to those who practice it. (Chart 1). This phrase of the oath is, of all its commitments, the most controversial. The wording in the Greek text is similar to the negatives which precede it: *ou...oude*, a relatively common double negative in Greek prose, but added (only here in the oath) to the particle *mēn*, which reinforces the negative value of *oude*. It is difficult to be sure of what this phrase means, generating several interpretations.

The first would be the restriction only to lithotomy, taking the first part of the sentence for something like "I will not cut, by no means, patients with stone". This interpretation solves a coherence problem as the Hypocratic treaties describe several surgical practices: drainage of abscesses, correction of fistulas and hemorrhoids, phlebotomy, trepanation, reduction of fractures, and cauterization of wounds ^{18,19}. Such a ban would be due to the frequency of fatal complications, which would bring physicians a bad reputation ²⁰.

Celso²¹ describes the perineal lithotomy procedure, in which the surgeon, pressing the bladder toward the sacrum with his fist in the hypogastrium, rectally manipulated the organ until he brought the stone to the trigone or the bladder neck. Once positioned, the calculus was removed by a perineal incision. This description is similar to that laid out in the *Suśruta Samhita*, a book written in Sanskrit between 800 and 600 BC²¹. However, at the time of Hippocrates, the existence of lithotomists in Greece has not been confirmed²¹.

Another interpretation is that the restriction was not to the mentioned procedure but castration, a possibility cited by Littré¹¹. In fact, testicular necrosis was a possible complication of bladder lithotomy due to torsion or thrombosis of the testicular artery. Thus, to facilitate the removal of stones and the introduction of a catheter (which could damage the urethra and adjacent structures), the removal of the genitalia would be an alternative^{19,22}.

There is also the possibility that the prohibition refers to any surgery—this interpretation seems to be the most grammatically appropriate. The structure *ou...oude* that appears in this prohibition could not be translated as "I will not cut, by no means, patients with stone" since, in the previous sentences, it does not have this sense. This grammatical analysis is reinforced by the introduction of the particle *mēn*, which emphasizes *oude* (by itself with a sense of "nor"), so that the *oude mēn* junction only seems to admit the translation "neither," "nor" or "not even"²³. The choice to highlight the lithotomy among the surgeries would be, perhaps, due to the high prevalence of the procedure.

The prohibition of any surgery could again be influenced by the Pythagorean inspiration of the oath since Pythagoreans were forbidden to touch blood and considered the surgery a reprehensible practice ¹⁰—an analysis which is little accepted today. The solution would be to understand that the oath establishes a division between medical practices and surgery, which would be considered less dignified ¹⁰.

In fact, surgical practices were later left to barbers. Thus, a hypothesis is raised that the prohibition of surgery would be a later addition (in the Roman or early Christian era), which would explain both the restriction and the reference to specialized "lithotomists," who would have emerged in the region after the oath ¹⁸.

Then, the text takes up its prior emphasis in moral and doctrinal prohibitions, emphasizing

the ethical end of medical practice, the benefit of the sick. What is shown here is a double motivation: the first objective is benefit and its realization requires abstention from injustice and harmful actions. An important point in this passage is the reiteration of the epistemological limit of medical ethics, as can be seen in the oath regarding "*intentional* injustice." The function of the adjective is analogous to the formulation "according to my ability and my judgment," that is, there is the affirmation of a limit of medical knowledge, of a border of the perception of the professional as to what is fair and beneficial, and it is only within this limit that he can operate for the benefit of the sick.

The promise of abstention from unjust and destructive or harmful actions is complemented by the refusal of sexual ties with patients. This refusal contrasts with the contemporary Greek morality, especially with enslaved men and women, often sexually exploited. Here, again, the Pythagorean influence would prevail since they were more severe regarding sexuality than other philosophers, regardless of the social strata involved ¹⁰. In this passage, one can establish a counterpoint to *doulas*, which appear in Plato's texts as enticers of prostitution and performers of abortion. This point was certainly essential for the reception of the oath during the Middle Ages as it draws Hippocratic ethics closer to Christian and Muslim ethics.

Subsequently, the commitment to secrecy, so dear to medicine to this day, is signed. This includes what the doctor will hear, *during treatment or even outside treatment, about people's lives* (Chart 1). Such comprehensiveness has been highlighted throughout history as attesting to the medical commitment to privacy beyond its practice, properly speaking, being part of the "respect for life" and of the action "for the benefit of the patient" which govern the Hippocratic discourse and of the entire ethical conception of medicine, its moral implication, and its professional practice.

Finally, the text reveals the worldly face of the oath: fame among men forever comes from its fulfillment and the punishment for moral corruption would be its opposite. To understand this aspect, one must better understand the context of Greece at that time.

Hippocrates would have come into contact with rhetoric via the great Sophist Gorgias⁴ and

it is even believed that Sophists have written some of the Hippocratic texts²⁴. The very concept of "art," *tekhne*, is a starting point for Hippocrates' writings and is employed by him in the same way as in sophist texts²⁵.

What is verified in the final passage of the oath is that the objective of this behavior, of just and virtuous medical action, would be to cultivate good opinion among contemporaries and ensure physicians eternal fame²⁵. Thus, the oath of the physician is not based on *tekhne*—he carries out its life and his art in medical practice, in dealing with the patient—but aims at what the Greeks called *doxa*, "opinion," that is, emphasizing his personality based on his special virtue²⁵.

This form of rhetorical artifice can be understood as valuing a concept—in this case, virtue or medical ethics—by reinforcing other attributes—medical morality and doctrine. However, it has another element in mind, a third point—social status, fame, and self-promotion which is a typically Sophist procedure.

Thus, the final oath shows the objective of the elements listed in the course of the Hippocratic text, that is, to obtain what he wants—fame and consideration among men today and always—, the apprentice must follow the identified precepts, meet the requirements, and obey the raised obligations and prohibitions. In doing so, he ends up verifying and complying with the ethical system postulated in the oath, its moral judgments, and its doctrinal determinations. Thus, by distinguishing this system of virtues and ethically exercising medical practice, he will finally achieve the motivating design, the purpose of his first action: fame.

The oath is, therefore, perfectly adequate since, while motivating the apprentice to fulfill it by the opportunity of *doxa*, it also prescribes the virtuous exercise of an art, and only by fulfilling this prescription, merely intermediate or instrumental in the logic of the apprentice, the future physician can achieve his goal. Thus, regardless of the apprentice's first intentions, the oath ensures that their practice is "for the benefit of the patient" while guaranteeing the fulfillment of their desire and serving as a perfect approximation between doctor and patient, in the interest of both.

Final considerations

Although it is widespread among the faculties of the Western world, the *Hippocratic Oath* is not the only one since new oaths have emerged from the Nüremberg trials. The most emblematic is the *Geneva Declaration*, which eliminates the main controversies of the original oath: it removes its religious passages and financial obligations to the master and his family; it includes clauses regarding respect for racial, political, sexual, and religious diversities, attention to human rights in any circumstance, care for one's own health; and it removes the nod to fame and prestige²⁶.

The *Hippocratic Oath* is neither totally related to current medical practice nor to modern medical ethics but it certainly laid its foundations. Thus, its adoption in medical schools should be dependent on its critical and historically localized reading as a very relevant document for the development of medical ethics.

Reflecting on the content of the oath shows important aspects of medicine in antiquity. Moreover, studying its transmission enables the understanding of the history of ethics in medicine. To repeat it, however, as an attestation of the virtuous practice of medicine, is to ignore its historicity, its contradictions, and, finally, its limitations.

References

- Rütten T. Editio princeps des hippokratischen Eides in der HAB (wieder-)endeckt. Wolfenbütteler Bibliotheks-Informationen. 1997;22:4-7.
- Irigoin J. La véritable (?) édition princeps du Serment d'Hippocrate. Revue des Études Grecques. 1999;112(2):715-8.

- Askitopoulou H, Vgontzas AN. The relevance of the Hippocratic Oath to the ethical and moral values of contemporary medicine. Part I: the Hippocratic Oath from antiquity to modern times. Eur Spine J [Internet]. 2018 [acesso 9 set 2022];27(7):1481-90. DOI: 10.1007/s00586-017-5348-4
- **4.** Davey LM. The Oath of Hippocrates: an historical review. Neurosurgery [Internet]. 2001 [acesso 14 nov 2021];49(3):554-66. Disponível: https://bit.ly/3RPBQXf.
- **5.** Schubert C, Scholl R. Der Hippokratische Eid: wie viele Verträge und wie viele Eide? Med Hist J [Internet]. 2005 [acesso 16 nov 2021];40(3-4):247-73. Disponível: https://bit.ly/3qnYdYo.
- 6. Hippocrates. Hippocratis opera. Lipsiae: Teubner; 1927.
- **7.** Strohmaier G. Hunayn Ibn Ishāq et le serment hippocratique. Arabica [Internet]. 1974 [acesso 19 nov 2021];21(3):318-23. Disponível: https://bit.ly/3TULklY.
- 8. Nutton V. What's in an Oath? J R Coll Physicians Lond [Internet]. 1995 [acesso 14 nov 2021];29(6):518-24. Disponível: https://bit.ly/3TZTrOg.
- 9. Jouanna J. Hippocrate. Paris: Fayard; 1992.
- Burguière P, Gourevitch D, Malians Y, éditeurs et traducteurs. Soranos d'Ephèse: maladies des femmes. Paris: Belles Lettres; 1988.
- Littré É. Œuvres complètes d'Hippocrate: traduction nouvelle avec le texte grec en regard, collationné sur les manuscrits et toutes les éditions, accompagnée d'une introduction de commentaires médicaux, de variantes et de notes philologiques, suivie d'une table générale des matières. Paris: Libraire de l'Académie Nationale de Médecine; 1851.
- Cascais AF. A experimentação humana e a crise da auto-regulação da biomedicina. Análise Social [Internet].
 2006 [acesso 20 nov 2021];41(181):1011-31. Disponível: https://bit.ly/3RzhqSy.
- **13.** Ligiera WR. Os princípios da bioética e os limites da atuação médica. Revista Ibero-Americana de Direito Público [Internet]. 2005 [acesso 16 set 2022];5(20):410-27. Disponível: https://bit.ly/3QIDVmY.
- **14.** Drumond JGF. Bioética e direito médico: o princípio da beneficência na responsabilidade civil do médico. Unimontes Científica [Internet]. 2001 [acesso 22 nov 2021];1(1):1-8. Disponível: https://bit.ly/3BtPtpJ.
- **15.** Muñoz DR. Bioética: a mudança da postura ética. Rev Bras Otorrinolaringol [Internet]. 2004 [acesso 18 nov 2021];70(5):578-9. DOI: 10.1590/S0034-72992004000500001
- Beier M, Iannotti GC. O paternalismo e o juramento hipocrático. Rev Bras Saúde Mater Infant [Internet].
 2010 [acesso 22 nov 2021];10(supl 2):S383-9. DOI: 10.1590/S1519-38292010000600017
- **17.** Angeletti LR. Le concept de vie dans la Grèce ancienne et le serment d'Hippocrate. Rev Philos Louv [Internet]. 1992 [acesso 9 set 2022];90(86):156-79. Disponível: https://bit.ly/3eDeUfH.
- Askitopoulou H, Vgontzas AN. The relevance of the Hippocratic Oath to the ethical and moral values of contemporary medicine. Part II: interpretation of the Hippocratic Oath – today's perspective. Eur Spine J [Internet]. 2018 [acesso 14 nov 2021];27(7):1491-500. DOI: 10.1007/s00586-018-5615-z
- Nittis S. The Hippocratic oath in reference to lithotomy: a new interpretation with historical notes on castration. Bull Hist Med [Internet]. 1939 [acesso 15 nov 2021];7(7):719-28. Disponível: https://bit.ly/3DdtHaZ.
- **20.** Androutsos G, Marketos SG. La taille vésicale et le serment hippocratique. Prog Urol [Internet]. 1995 [acesso 13 nov 2021];5(3):426-40.
- **21.** Raffensperger JG, Raveenthiran V. Pediatric vesicolithotomy from ancient India to Greece, Arabia and the western world. Pediatr Surg Int [Internet]. 2019 [acesso 20 nov 2021];35(6):737-41. DOI: 10.1007/s00383-019-04477-2
- **22.** Buchholz B, Merino SF, Pérez ML, Gelpi RJ, Rancich AM. Prohibición de la litotomía y derivación a expertos en los juramentos médicos de la genealogía hipocrática. Actas Urol Esp [Internet]. 2016 [acesso 17 nov 2021];40(10):640-5. DOI: 10.1016/j.acuro.2015.12.014
- 23. Denniston JD. The Greek particles. 2^a ed. Oxford: Clarendon Press; 1954.
- **24.** Vancamp B. Hippocrate et son temps. Revue de Philosophie Ancienne [Internet]. 2001 [acesso 19 nov 2021];19(2):15-22. Disponível: https://bit.ly/3BoAyfx.

- **25.** Triebel-Schubert C. Bemerkungen zum Hippokratischen Eid. Med Hist J [Internet]. 1985. [acesso 21 nov 2021];20:253-60. DOI: 10.11588/propylaeumdok.00005123
- 26. Sanchez-Salvatierra JM, Taype-Rondan A. Evolución del Juramento Hipocrático: ¿qué ha cambiado y por qué? Rev Méd Chile [Internet]. 2018 [acesso 17 nov 2021];146(12):1497-500. DOI: 10.4067/s0034-98872018001201498

Pedro Zanetta Brener - Master's student - brener.pedro@gmail.com

0000-0001-7092-4039

Arnaldo Lichtenstein – PhD – alichten61@gmail.com

Correspondence

Arnaldo Lichtenstein – Rua Capote Valente, 127, ap. 101, Pinheiros CEP 05409-000. São Paulo/SP, Brasil.

Participation of the authors

Arnaldo Lichtenstein participated in the idealization, writing, and final draft. Pedro Zanetta Brener participated in the literature review, writing, and translating the oath from ancient Greek. Received: 11.21.2021

Approved: 8.31.2022

Revised:

8.23.2022