

Hippocratic Oath and the Contemporary Neurosurgical Practice

Ayhan Kanat¹, Bulent Ozdemir¹, Vacide Ozdemir², Elena Romana Gasenzer³

1-Recep Tayyip Erdogan University, Medical Faculty, Department of Neurosurgery, Rize-Turkey

2- Turkey Recep Tayyip Erdoğan University, School of Health, Department of Medical Nursing, Rize, Turkey

3-Carl Remigius Medical School, Department Physician Assistance Marienburg Str. 6, 60528 Frankfurt a.M. Germany Email: elena.gasenzer@carl-remigius.de

Corresponding Author: Ayhan Kanat, MD, Recep Tayyip Erdogan University, Medical Faculty, Department of Neurosurgery 53100 Merkez Rize Turkey

Mail: ayhankanat@yahoo.com Phone: 90 5065855139 Fax 90 464 2130497

OBJECTIVE: A reassessment of the Hippocratic oath as professionalism and contemporary medicine and neurosurgery seems to be crucial subjects. The purpose of this article is to revisit the “First, do no harm or primum nihil nocere” term of the Hippocratic Oath, and investigate the neurosurgical aspect of this oath.

MATERIAL AND METHODS: We performed a PubMed search to identify studies that evaluated complications in neurosurgical procedures. The terms “complication,” “neurosurgery,” “spine surgery,” “craniotomy,” and “neurological surgery” were all used in the query. We then analyzed the results.

RESULTS: Patient safety" and "errors in neurosurgical practice" are issues gaining more and more prominence in the eyes of the public.

CONCLUSION: The reinvention of neurosurgery coupled with generally unfavorable fluxes in the neurosurgical practice. Technological advancement in neurosurgical practice has created enormous challenges for neurosurgeons and patients. The term of Primum Nihil Nocere has to be followed in neurosurgical practice.

Türkçe Özet

AMAÇ: Hipokrat yemininin profesyonellik ve çağdaş tıp ve beyin cerrahisi olarak yeniden değerlendirilmesi çok önemli bir konu gibi görünüyor. Bu makalenin amacı, Hipokrat Yemini'ndeki "Önce zarar verme ya da primum nihil nocere terme" maddesini yeniden ele almak ve bu yeminin beyin cerrahisi yönünü araştırmaktır.

GEREÇ VE YÖNTEMLER: Nöroşirürji prosedürlerinde komplikasyonları değerlendiren çalışmaları belirlemek için bir PubMed araştırması yapıldı. Sorguda "komplikasyon", "nöroşirürji", "omurga cerrahisi", "kraniyotomi" ve "nörolojik cerrahi" terimleri kullanıldı. Daha sonra sonuçlar analiz edildi.

BULGULAR: Hasta güvenliği" ve "nöroşirürji uygulamalarındaki hatalar" toplum nezdinde giderek önem kazanan konulardır.

SONUÇ: Nöroşirürji pratiğinde genel olarak elverişsiz akışlarla birlikte beyin cerrahisinin yeniden icadı. Beyin cerrahisi pratiğindeki teknolojik ilerleme, beyin cerrahları ve hastalar için muazzam zorluklar yaratmıştır. Nöroşirürji pratiğinde Primum Nihil Nocere "Önce zarar verme"terimi takip edilmelidir.

Interpretation

One of the earliest records of a moral rule for doctors is the Hippocratic Oath(1). Graduates of medical schools typically swear the Hippocratic oath at graduation, either in its original form or in a contemporary variant(2). It established ethical precepts that are still of utmost importance today and is regarded as the earliest example of medical ethics, whereas

medicine has continuously changed, this text was composed in antiquity(2). The explosion of technology has been observed in neurosurgical practice (3),(4) and neurosurgery has gone through moments of great renewal(5). Today is different from the past(6). Times change and people change and the environment for the delivery of health care is changing, neurosurgery, but human nature remains the same, but this explosion has created enormous challenges for neurosurgeons and patients. Medical and neurosurgical progress is affected by many factors(7) . It can be said that with the reinvention of neurosurgery during the past generation, coupled with generally unfavorable fluxes in the socioeconomic and political support climate for our practices, each of us is stressed daily to be bold and audacious to maintain moral stability and to navigate stressful situations in a myriad of encounters. All of us in the medical field occasionally have to make difficult choices. While choosing the best course of action is frequently challenging, choosing whether or not to intervene can occasionally be the most difficult choice(8).

Hippocratic Oath is a text written so long ago—before the invention of the microscope and radiographic modalities—might lead modern neurosurgeons to believe that it can barely provide them with any insightful information. It is believed that the Greek physician Hippocrates, who established a medical school on the Mediterranean island of Cos, wrote it in the fourth century bc(1). Although the Hippocratic Oath's beginnings are unknown, parts from the third century AD have been discovered, and the Vatican Library is home to the oldest complete copy, which dates to the 11th century(9). The Corpus Hippocraticum, a collection of medical texts whose authorship is commonly credited to the legendary physician Hippocrates, includes the so-called Hippocratic Oath, which is based on a standardized type of oath in the ancient world(10). Currently, the Hippocratic oath is significant for neurosurgeons because it swears to protect the privacy of patients and to avoid doing them harm(11). The aim of all neurosurgical surgeries is "primum nihil nocere" ("First, not harm").

The underemphasized features of the oath maintainer are of great importance for neurosurgical practice today. Elective craniotomy still leads to a relatively high incidence of complications. Early detection of these complications is important for better recovery and outcome. The Oath beautifully addresses many ethical and professional issues that are as germane today as when it was composed(9). This paper is dealing with the enduring influence of the term Primum Nihil Nocere term of in the Hippocratic Oath context of modern neurosurgical practice. It can be considered that this oath is strongly associated with professionalism(11), which is still regarded as the cornerstone and foundation of the medical profession(12).

Neurosurgical procedures have high-risk complications, and progress in the science in absolutely improved neurosurgical safety, but postoperative neurologic deficits in a patient who has undergone a neurosurgical procedure can sometimes be seen, and complications contribute substantially to increased morbidity and mortality in patients after neurosurgical procedures(13). In the era of quality-based reimbursement, understanding and minimizing surgical consequences is more crucial than ever(13). Knowing the anticipated neurologic deficits following a specific neurosurgery treatment and comparing the patient's postoperative neurologic examination to their preoperative neurologic condition are crucial components of the postoperative assessment of patients(14). For patients to experience a smooth postoperative course, careful assessment of known or anticipated problems of the treatment and perioperative efforts to reduce these complications are essential(14). Thus, close and attentive neurologic monitoring in the postoperative setting is crucial(13).

The Hippocratic Oath serves as a summary of the ethical standards of Ancient Greek medicine and helps to maintain the Hippocrates' three-part interaction between the doctor, the patient, and the illness(12). The Hippocratic Oath is viewed from the perspective of neurosurgery in this essay, and implications for neurosurgical practice are drawn. Since

neurosurgery is an occupation and an occupation whose core element is work, based on the mastery of a complex body of neurosurgical knowledge and skills, it is important to understand how knowledge and technical skills are used, even though knowledge and technical skills are crucial in medicine, science, and also in neurosurgery.

Neurosurgery can be accepted as a special area of knowledge and the art of healing is a profession. We suggest that the Oath is the paramount importance of the neurosurgeon–patient relationship and the neurosurgeons' primary obligations to patients. Neurosurgical professionalism cannot flourish without its necessary basis of knowledge, methods, and skills. In addition, neurosurgical knowledge is simply not enough. Optimal neurosurgical and scientific practice require good judgment, respect for the art of neurosurgery and the values learned from mentors and role models, and respect toward patients and families Hippocrates provides neurosurgeons with several different sorts of insights. We might think about what it means today after speculating on what this oath meant in Hippocrates' day. We become professionals by "professing," and this oath still encapsulates the fundamental principles held by neurosurgery specialists. Regardless of the specific situations, these social, economic, political, and scientific shifts are having an extremely stressful and frequently harmful impact on all neurosurgery practitioners. In these circumstances, neurosurgeons must be prepared to deal with changes and reaffirm what is fundamental. Ethical precepts are still of utmost importance today and is regarded as the earliest example of medical ethics(2). In conclusion, it is essential to reinforce neurosurgical professionalism because financial pressures threaten the integrity of the patient-neurosurgeon relationship.

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