

A View On The Life Of Professor Doctor Akil Muhtar Özden (1877–1949) From The Perspective Of Virtue Ethics *

Erdem Etiği Perspektifinden Ord. Prof. Dr. Akil Muhtar Özden'in (1877–1949) Hayatına Bir Bakış

Arın Namalⁱ, Merve Erdemⁱⁱ

ⁱProf.Dr. (PhD), Istanbul University, Istanbul Faculty of Medicine Department of History of Medicine and Ethics,
https://orcid.org/0000-0002-5624-5280

ⁱⁱAsst. Prof. Maltepe University, Medicine Faculty, Department of History of Medicine and Ethics,
https://orcid.org/0000-0002-8616-991X

ABSTRACT

Aim: This study explores the life and contributions of Akil Muhtar Özden through the lens of virtue ethics. Analyzing his scientific achievements, professional conduct, and ethical reflections, the study seeks to uncover the virtues that shaped his character and legacy.

Methods: This qualitative historical research was conducted between 10 December 2025 and 23 February 2026, systematically analyzing primary sources, including Özden's books, scientific articles, clinical drawings, and archival documents. It employed the thematic content analysis method, guided by virtue ethics, with secondary literature used only for contextual support.

Results: Akil Muhtar Özden is recognized as Türkiye's first scientist to earn an academic degree in medicine abroad. He established the country's first institute and clinic dedicated to experimental drug treatments and authored several influential textbooks, including *İlim Bakımından Ahlak* (Morality in Terms of Science), which was published three times between 1942 and 1950. His life exemplifies the importance of virtues, demonstrating an exceptional moral character and proactive engagement with ethical issues throughout his career as a physician and scientist.

Conclusion: The life of Akil Muhtar Özden stands as a meaningful historical example of virtue-based professionalism. His ethical orientation and scientific contributions have left an enduring impact on the development of modern Turkish medicine.

Keywords: History of the experimental treatment with drugs in Türkiye, History of Turkish medicine, Virtues in Akil Muhtar Özden's life

Öz

Amaç: Bu çalışma, Türk tıp tarihinin önde gelen isimlerinden biri olan Akil Muhtar Özden'in yaşamını ve mesleki katkılarını erdem etiği bakış açısıyla incelemeyi amaçlamaktadır. Özden'in bilimsel üretimi, mesleki yaşamı, etik yaklaşımları ve karakter özellikleri analiz edilerek yaşamını şekillendiren erdemlerin ortaya çıkarılması hedeflenmiştir.

Yöntem: Bu çalışma, 10 Aralık 2025 – 23 Şubat 2026 tarihleri arasında yürütülen nitel bir tarihsel araştırma deseni kullanarak Özden'in kitapları, bilimsel makaleleri, klinik çizimleri ve arşiv belgeleri gibi birincil kaynakları sistematik biçimde analiz etmiştir. Erdem etiği tarafından yönlendirilen tematik içerik analizi uygulanmış; ikincil literatür ise yalnızca bağlamsal destek sağlamak amacıyla kullanılmıştır.

Bulgular: Akil Muhtar Özden, yurt dışında tıp alanında akademik derece alan ilk Türk bilim insanı olarak Türkiye'de modern tıbbın şekillenmesinde öncü bir rol oynamıştır. Deneysel ilaç tedavilerine yönelik ilk enstitü ve kliniği kurmuş; İlim Bakımından Ahlak başta olmak üzere birçok temel ders kitabını kaleme almıştır. Yaşamı boyunca çalışkanlık, özveri, ahlaki bütünlük ve bilimsel sorumluluk gibi erdemleri benimseyerek hekimlik ve bilim insanlığı kimliğini güçlü bir etik temele oturtmuştur.

Sonuç: Akil Muhtar Özden'in yaşamı, erdem temelli mesleki tutumun güçlü bir tarihsel örneğini oluşturmaktadır ve modern Türk tıbbının gelişimi üzerinde kalıcı bir etki bırakmıştır.

Anahtar Kelimeler: Türkiye'de deneysel ilaç tedavisinin tarihi, Türk tıbbı tarihi, Akil Muhtar Özden'in yaşamında erdemler

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İletişim- Correspondence Author: Merve Erdem <merve.erdem@maltepe.edu.tr>



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Introduction

Virtue ethics is an ethical theory that emphasizes human virtues as a guide for moral behavior. It argues that actions should arise from an individual's internal character rather than strict rules. To behave morally, one should cultivate virtuous qualities, often by following positive role models and consciously striving to act virtuously over time.¹ In antiquity, discussions centered around four primary virtues: wisdom (*sapientia*), courage (*fortitudo*), temperance (*temperantia*), and justice (*iustus*), and were characterized in the Middle Ages as the cardinal virtues. Christianity later added faith (*fides*), hope (*spes*), and love (*caritas*).² Aristotle was an integral figure in the shaping of virtue ethics. He believed one had to find the balance between excess and deficiency.³ Aristotle argued that a person who adheres to virtues is moral; however, human beings are not naturally inclined to act virtuously. Most people are pleasure-oriented and are unable to lead meaningful and satisfying lives as they neglect virtues. Therefore, Aristotle emphasized that people should be encouraged to cultivate virtue through persistent effort and practice and adopt acting virtuously. Aristotle believed that "The good is learned from the good."⁴ Virtue ethics dominated European thought until the early modern era but lost prominence after the Enlightenment. In the early 20th century, Max F. Scheler (1874–1928) and Nicolai Hartmann (1882–1950) sought to revive it in Germany, though their influence did not extend widely into the Anglo-Saxon world. The modern revival in Anglo-Saxon philosophy is typically traced to Gertrude Elizabeth Margaret Anscombe's (1919–2001) seminal 1958 essay *Modern Moral Philosophy*.⁵ Learning from the lives of virtuous individuals offers a valuable way to understand virtues and their functions; the life of Akil Muhtar Özden, a major figure in Turkish medical history, is one such example. Özden demonstrated exemplary moral character in his professional life as a physician and scientist, engaged with and wrote on the concept of ethics. The basic approach of the ethics of virtues is clearly expressed in his sentence: "The goal of life is to become a person of high morals."⁶ This study offers a comprehensive look at Akil Muhtar Özden's life, examining the key stages of his career and the virtues that emerged throughout these stages.

Material and Methods

This qualitative historical research, conducted between 10 December 2025 and 23 February 2026, examined the life and professional activities of Akil Muhtar Özden using primary sources. The primary dataset includes Özden's published works, such as *Morality in Terms of Science*, *Hıfzısıhha*, and *Fenni Tedavi Dersleri*, as well as his articles in the *Darülfünûn Faculty of Medicine Journal*. His clinical drawings and illustrations, analyzed as firsthand documents reflecting his scientific and ethical perspectives, were accessed through institutional collections, university library holdings, the Archive of the Department of History of Medicine and Ethics at Istanbul Faculty of Medicine (Istanbul University), and digital newspaper archives. Archival materials, including the Istanbul Darülfünûn Medical Faculty Statute and correspondence from the time, were also reviewed. Contemporary newspapers like *Cumhuriyet* and *Akşam*, and statements by Süheyl Ünver, offer insights into Özden's views. The data underwent thematic content analysis through the lens of virtue ethics, focusing on behavioral patterns and moral reflections related to relevant virtues. While secondary literature provided contextual background, the core analysis relied on original sources, offering new perspectives on Özden's legacy. The five historical photographs of Prof. Dr. Akil Muhtar Özden used in this study were obtained from the Archive of the Department of History of Medicine and Ethics at the Istanbul Faculty of Medicine (Istanbul University). The Department granted written permission for publication on 20 February 2026. The findings were organized chronologically by Özden's life stages. Each stage included thematic analysis of his actions, decisions, writings, and initiatives to identify virtues. This dual approach—

chronological narration and virtue-based analysis—systematically reconstructed his moral and professional identity.

Results

Akil Muhtar's years of study and teaching

Akil Muhtar Özden was born on October 1, 1877, in Istanbul and began medical studies at the Military School of Medicine during Sultan Abdülhamid II's reign (Fig.1,2). His support for the Committee of Union and Progress forced him to flee the country in 1896. After his father's death, he continued his education in Switzerland, reflecting strong diligence, perseverance, and commitment to self-improvement. Coming from a prominent medical family, he graduated from the Geneva Medical Faculty in 1902, attended courses at the Pasteur Institute and completed a 1904 dissertation arguing for frequent lumbar punctures in prolonged cerebrospinal meningitis.⁷ He later worked with Prof. Eugene Mayor in pharmacodynamics, was authorized to teach in 1907, and delivered "Practical Treatment" lectures. Known as the first Turkish scientist to earn an academic medical degree abroad, he married Nina Zuraboune Odişelica in 1908.⁸ His medical training and early career also reveal enduring devotion to his homeland and a deep respect for freedom. Throughout this period, qualities such as diligence, hope, perseverance, endurance, discipline, and patriotism shaped his character and professional path.



Figure 1. Ord. Prof. Dr. Akil Muhtar Özden⁹



Figure. 2. Ord. Prof. Dr. Akil Muhtar Özden⁹

Studies at the Istanbul Darülfünûn Faculty of Medicine

In 1908, following the declaration of the Constitutional Monarchy and the end of oppressive rule, the military and civilian medical schools were unified as the Darülfünûn Faculty of Medicine. Dean Prof. Dr. Cemil Topuzlu

(1866–1958), who had met Akil Muhtar Özden in Geneva, invited him to Istanbul, and Özden returned to Turkey.¹⁰ His choice to leave his academic opportunities in Switzerland highlights his patriotism and self-sacrifice. After returning, he prepared the Medical Faculty Statute for Istanbul University, modeled on the Geneva Medical Faculty Statute.¹¹ He was appointed professor at the Darülfünûn Faculty of Medicine in 1909. At that time, the only Pharmacodynamics and Treatment Clinic existed in Switzerland, until Özden established the first equivalent clinic and institute for experimental drug treatment in Istanbul.¹² He also founded an animal laboratory and, when inpatient research was not possible at the Faculty of Medicine, conducted human drug trials in a ward allocated to him at Haseki Hospital. Through these animal and human studies, he identified new indications for several existing drugs, many of which later became standard treatments.¹² His major scientific contributions include identifying the Muhtar Reflex for evaluating local anesthetics, researching the effects of digitalis glycosides on the heart and developing the Santonin test in 1930 for diagnosing liver failure.^{15,16} Özden introduced the electrocardiogram to Turkey in 1910 and joined the board of the nationalist society Türk Ocağı in 1912. He was elected Dean of the Faculty of Medicine in 1916 and 1919, during World War I and the subsequent occupation, and worked to maintain uninterrupted education and clinical services. In a speech to the Sultanate Council on February 26, 1919, he opposed placing Türkiye under foreign sovereignty.¹⁷ He was involved in efforts to end the oppressive regime in Türkiye while in Switzerland and fought *courageously* for the *freedom* of his country.



Figure 3. March 14, 1919, the first Medical Day celebration in Turkish history was held at Darülfünun. Dean Ord. Prof. Dr. Akil Muhtar Özden, third from left in the front row.¹⁸

After becoming dean, Akil Muhtar expanded the Faculty of Medicine library with German and French books and journals, prepared its catalog, supported Turkish medical publications, and ensured the Medical Faculty Journal was published six times a year (Fig. 3). His work during this period reflected virtues of curiosity, innovation, discipline, diligence, and perseverance.

Akil Muhtar's role in the Turkish University Reform of 1933 and his work at the Istanbul University Faculty of Medicine

Özden played an active role in supporting the 1933 Turkish University Reform. Although Prime Minister İsmet İnönü (1884–1973) offered him the leadership of the reform, he declined, believing a foreign expert would avoid political controversy. This decision reflected his fairness and prioritizing the greater good, and he fully supported the reform once initiated.¹⁹ His major clinical contributions included introducing Turkey's first electrocardiography device in 1910, developing the Santonin test for assessing liver function, and implementing the *préssion maximale veineuse* method, then the most objective measure of peripheral circulation.²⁰ These actions show that he was objective, prudent, cautious, and far-sighted. The 1908 French Codex was used in Turkey until the first Turkish Pharmaceutical Codex appeared in 1930. Akil Muhtar Özden served on the 10-member commission that prepared it in 1926 and became its chairman in 1936.¹³



Figure 4. Ord. Prof. Dr. Akil Muhtar Özden gives his last lecture.²¹

During this period, he also worked on adapting chemistry terminology into Turkish.¹⁴ An accomplished author, he published several textbooks, including his 500-page *Hıfzısıhha* (Hygiene) in 1909 and *Fenni Tedavii Tecrübevi ve Seririyatı Tedaviye Dersleri* (Courses on Experimental and Clinical Therapeutics) a year later, which was reprinted six times (Fig. 4). As dean, he launched the *Emraz-ı Dahiliye* (Internal Diseases) series and contributed chapters to its first volume. He co-authored a 233-page work with Besim Ömer Akalın (1862–1940) during the cholera epidemic. Altogether, he produced 264 publications in Turkey and abroad.²² In 1931, he founded the *Journal of Tedavi Seririyatı ve Laboratuvarı Mecmuası* (Revue de Thérapeutique et Expérimentale), which ran until 1943 with 38 issues, featuring French abstracts and several history-of-medicine articles written by Özden himself (Fig. 5). During his academic career, Akil Muhtar Özden was a member of the Société Médicale de Genève, Société Médicale des Hôpitaux de Paris, l'Union Médicale Balcanique, Société Internationale d'Histoire de la Médecine (SIHM), Société Médicale Vienne, and the Société Thérapeutique de Paris. In 1938, he became a corresponding member of the Académie Médecine de

Paris. He served as president of the Turkish Academy of Medicine (1936–1939) and the Turkish Medical History Society (1940–1949) and was the founder and second chairman of Hilal-i Ahmer (Red Crescent) (Fig.6). He also sat on the editorial boards of several foreign journals. His modest conduct in international meetings reportedly fostered sympathy and goodwill toward Türkiye.¹²

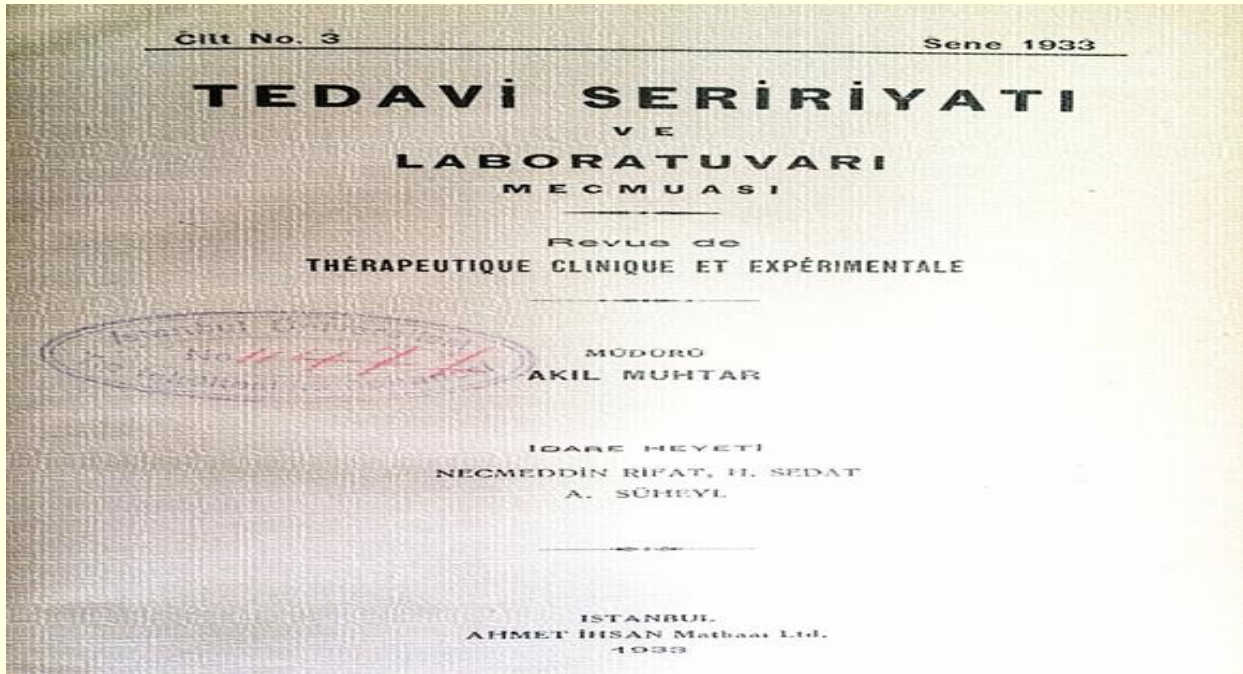


Figure 5. The Journal of Treatment Clinic and Laboratory, published between 1931 and 1943, which Ord. Prof. Dr. Akil Muhtar brought to publication²⁰



Figure 6. Ord. Prof. Dr. Akil Muhtar Özden (front row, first from right), Chairman of the Turkish Medical History Society between 1940-1949, with members of the Board of Directors⁹

Akil Muhtar Özden's efforts to enlighten the public

Akil Muhtar Özden contributed to public enlightenment through newspaper articles and public conferences. Following Albert Einstein's announcement of the theory of relativity, he analyzed it in detail and explained it in three consecutive lectures.²³ Through his history-of-science columns in *Akşam*, he encouraged young people to pursue scientific careers. These efforts reflect key virtues that guided his actions, including industriousness, perseverance, and a strong commitment to purposeful work.

Exemplar as a physician and teacher

Akil Muhtar Özden taught for 37 years and was seen as a moral role model by his students. He expected colleagues to be cultured and to address students in ways that shaped their ethical character. As he said: "These words must be appropriate to the time and place and must have an educational character... Professors must affect the student's soul in such a way as to be a true guide. This is what teaching is for me." After his death, these and other remarks were compiled by Prof. Dr. Süheyl Ünver (1898–1986), founder of the Institute of Medical History at Istanbul University, in *Aforizma – Dr. Akil Muhtar Özden Vecizeleri* (Aphorisms – Dr. Akil Muhtar Özden's Apothegms) (Fig.7).⁶

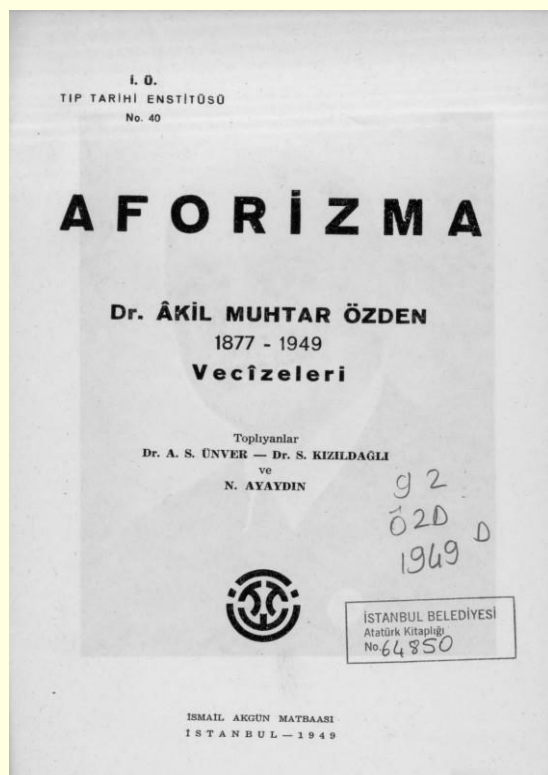


Figure 7. The cover of the book, published in 1949, in which Akil Muhtar's aphorisms were collected⁶

Özden emphasized the need for justice in healthcare, arguing that the same therapeutic outcomes should be achieved at a lower cost. He highlighted the excessive prices of imported medicines, suggesting that reducing these costs could allow for the opening of a new hospital each year. In a conference, he showed how certain diseases could be treated more economically.^{24,25} Throughout his life, he expressed gratitude to his medical professors and prominent figures in medicine, often writing articles in their memory. He also funded the restoration of the mausoleum of Ishak Sukuti, a leader of the Committee of Union and Progress, demonstrating his loyalty and appreciation.

Akil Muhtar as a painter

Akil Muhtar was an artist who created 755 paintings in color and black-and-white, including many charcoal pieces and a few oil paintings (Fig. 8,9,10). He used colored pencils to illustrate patients for their observation files, as color photographs were unavailable. He also drew macroscopic views of his autopsy cases. His colleague, Prof. Dr. Alaaddin Akçasu (1921–2013), published some of these drawings in the book *Examples of the Drawings of Prof. Dr. Akil Muhtar Özden Produced at Sickbeds*.²⁶



Figure 8. Skin findings in actinomycosis healing effects of atabrine (25.3.1941), Akil Muhtar Özden drawing²⁶

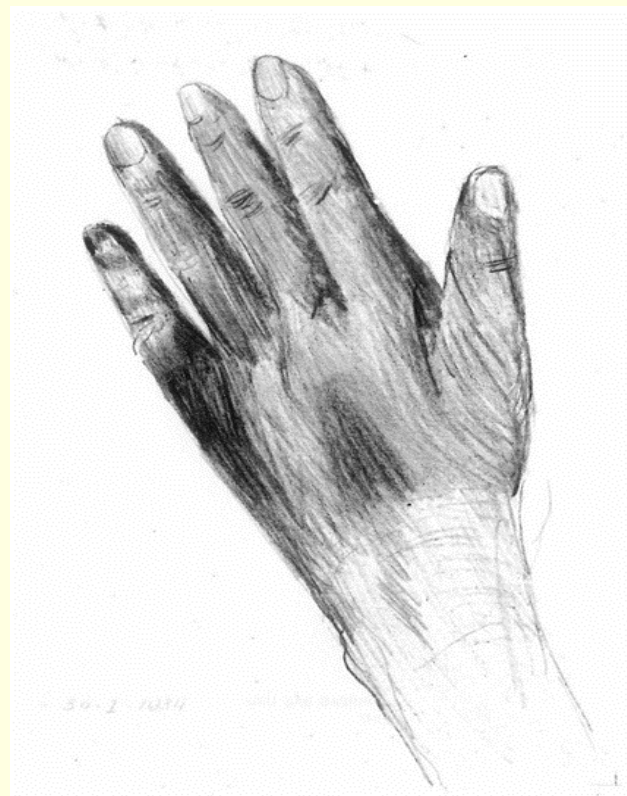


Figure 9. Circulatory disorder seen in pulmonary tuberculosis (10.11.1931), Akil Muhtar's drawing²⁶

Akil Muhtar was among the physicians who treated Atatürk during his final illness and painted his portrait on his deathbed.²⁷ He supported the celebrated Turkish painter Feyhaman Duran and stressed the value of drawing in medicine, stating: “A person who does not know how to paint cannot be a physician.”⁶ He believed that elegance in life reflects inner beauty, and his own painting was shaped by aesthetics, harmony, concentration, creativity, and refined taste, all of which informed his artistic expression.

On Akil Muhtar's book *İlim Bakımından Ahlak* (Morality in terms of science)

In *The Descent of Man* (1871), Darwin explained the evolutionary development of human mental, social, and moral capacities, arguing that morality emerged gradually from instinctive behaviors observed in animals. He maintained that sympathy within a species supports survival and forms the basis of moral behavior. Humans, like animals, possess social instincts linked to self-preservation and the continuation of the species, and the evolution of moral conduct is tied to psychological traits such as empathy and conscience. According to evolutionary ethics, morality is not based on absolute values but on rules that maintain group cohesion and survival; as Darwin noted, no lineage can endure where violence and treachery prevail. His views laid

important foundations for later discussions in bioethics and animal ethics, emphasizing that differences between humans and animals are gradual rather than absolute.²⁸ Akil Muhtar Özden's book *İlim Bakımından Ahlak (Morality in Terms of Science)* was published three times (1942, 1943, 1950)²⁹ and received both praise and criticism. In response, he wrote in *Cumhuriyet* on June 23, 1942: "My aim in this book was to examine the reality of morality from a scientific point of view. I believe that there is a force in nature that has been driving evolution in one direction for millions of years, leading to the formation of the present human brain... I call it the 'evolutionary drive,' which most likely dominates the whole universe." He further defended his views by stating, "Study natural phenomena. They do not happen for nothing; they aim to achieve a goal... That aim is good morality and its use for the benefit of society. Nature only cares about progress and does not forgive those who stand against it... People must avoid selfishness and remember that happiness is everyone's right. The goal in life is to become a person of high morals. Life is full of struggles for this."



Figure 10. Oil paintings Ord. Prof. Dr. Akil Muhtar Özden⁹

Akil Muhtar's retirement and death

In 1941, Akil Muhtar lost his wife of 33 years and wrote an article about his grief and her life.³⁰ When the government introduced a mandatory retirement age of 65, he retired in 1944 with great sadness, as he was known for his passion for teaching. During retirement, he continued to follow scientific innovations; when asked to prepare an addition to the Pharmaceutical Codex, he learned English to use the English Codex.³¹ He remained active, briefly serving as Chief Physician and Internal Medicine Specialist at the Istanbul German Hospital, giving lectures at the Institute of History of Medicine at Istanbul University, and publishing

numerous newspaper articles. He was elected to the Turkish parliament from Istanbul in 1946 and moved to Ankara. Later, he visited Switzerland—a trip delayed by World War II—where he became ill and diagnosed himself with mediastinal lymphoma, the disease that ultimately caused his death. In his book *İç Hastalıkları (Internal Diseases)*, Akil Muhtar included a chapter on his own illness. Even on his deathbed, he continued reading and writing. Although bedridden for a year, he meticulously prepared the final edition of his textbook and worked on the report and illustrations for the experiment he planned to present at the 5th International Pathology Congress in Istanbul. This commitment is a striking example of dedication. After spending several days in a coma, he died on March 12, 1949, which was deeply mourned in Turkey and abroad.³¹ His daughter, Aliye Sarhan, donated his library, paintings, insignia, medical instruments, and his writing desk and chair to the Istanbul University Institute of Medical History, where they are preserved in the Historical Collection of the Faculty of Medicine (Fig.11).⁹

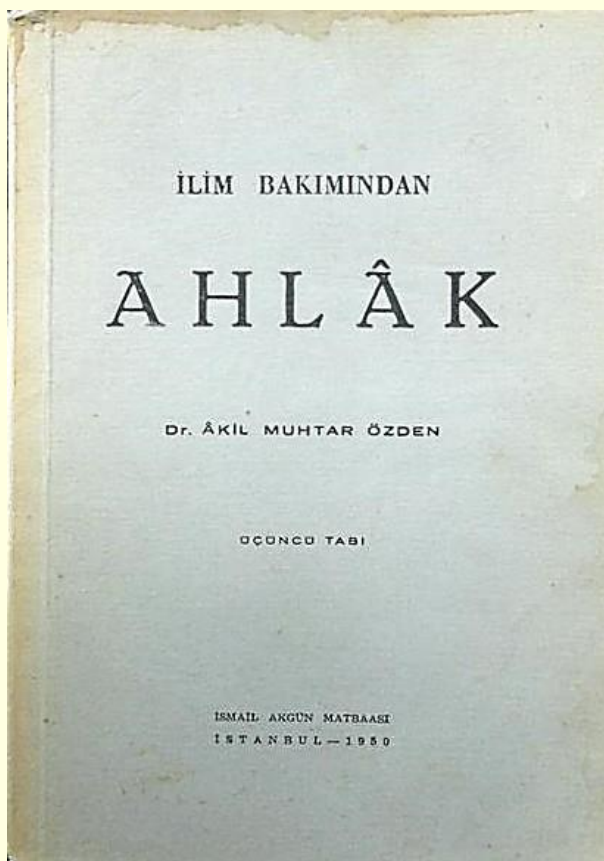


Figure 11. The cover of Akil Muhtar's book *İlim Bakımından Ahlak* (Morality in terms of science)²⁹

Discussion and Conclusion

The analysis of primary sources revealed that Akil Muhtar Özden's professional identity was shaped not only by his scientific competence but also by a consistent commitment to the virtues he upheld. His life story demonstrates how virtues such as diligence, integrity, perseverance, and intellectual curiosity can manifest in multiple domains of professional activity, ranging from pharmacodynamic research to medical education and public engagement. Özden's leadership roles, his efforts to modernize Turkish medical education, and his sustained interest in ethical thought indicate that he viewed medicine as a moral practice grounded in

both scientific discipline and personal character. Furthermore, Özden's engagement with the evolutionary theory of morality highlights an attempt to reconcile contemporary scientific paradigms with ethical inquiry. Although his reliance on evolutionism may be considered limited from the perspective of modern moral philosophy, it illustrates a genuine effort to construct a rational foundation for ethical behavior within the scientific worldview of his time. His emphasis on universality, moral progress, and the social function of virtues points to an understanding of morality that sought to bridge empirical knowledge with normative ideals. Taken together, these findings suggested that Özden's ethical reflections were not abstract observations but were closely aligned with his lived experiences as a physician and scientist. Akil Muhtar Özden led a highly productive life as a physician, scientist, artist, and cultural figure; his achievements were closely tied to the virtues that shaped his personality. He made a significant effort to instill the virtues he internalized in his young colleagues. His adoption of the evolutionist theory of morality reflects the intellectual currents of his era. This can be considered a weakness; however, Akil Muhtar himself examined this theory and sought other arguments to support its validity. Although he approached the concept of morality from a scientific perspective, he identified a set of moral rules that could be universalized and sought to disseminate them in his articles, conferences, and lectures, highlighting the importance he attached to virtues.

Acknowledgments

The authors report there are no competing interests to declare.

Written permission to publish five archival photographs of Prof. Dr. Akil Muhtar Özden was obtained from the Archive of the Department of History of Medicine and Ethics at Istanbul Faculty of Medicine (Istanbul University) on 20 February 2026.

Author Contributions

Fatma Arın Namal: Concept, design, supervision, data collection, analyses and interpretation, literature search, writing-review, critical review.

Merve Erdem: Data collection, analyses and interpretation, literature search.

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