

EDITORIAL

MEDICINE IN THE 21st CENTURY: HOW NOT TO LOSE THE ART OF HEALING?

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*Medicine is truly the noblest of all arts.
Hippocrates*

Abstract. In our time of advanced technologies, the Internet, and the enormous acceleration of all areas of humanitarian activity, medical scientists make outstanding discoveries and innovations that revolutionize diagnostic approaches and treatment options, improve patient care, and enrich the way to a healthier world. Is there still a place for the art of medicine in the era of innovations and artificial intelligence?

Although modern technology in the field of medicine with computerization of every aspect (including electronic medical records, laboratory data entry, images, patients' monitoring systems, etc.), young physicians, while embracing that innovation, should be trained in the development of clinical thinking and the establishment of personalized connections to the patients. Young physicians should be taught to adopt the ability to see, hear, and feel a patient's problems, formulate optimal management, and be empathetic to the patient's emotions and suffering.

Communication skills are a key to successful medical practice and a part of "the Introduction to Clinic" course in almost all medical schools, but a substantial lack of time in clinical settings creates new challenges for communication between medical students, clinical teachers, and patients in medical schools. In many areas around the world, including Ukraine, this problem has been aggravated by wars, epidemics, pandemics, and natural disasters. At the same time, developing clinical observational skills remains an integral part of medical education and the basis of medical art. The art of a careful physical exam should not be lost behind a computer screen.

Dnipro State Medical University has traditions of integrating centuries-old world historical experiences of teaching the art of healing into the philosophical concept of forming the critical clinical thinking of medical students. Our medical school has incorporated "diagnosing the canvas" into its curriculum. A thematic gallery of diagnostic symptoms and signs from great artists of all times and peoples has been created, expanding the young physicians' educational horizons in clinical thinking, empathy, and mercy.

Keywords: Medicine, Art of Healing, "Diagnosing the canvas".

In the twenty-first century, do we know the answer to the eternal philosophical question: what is medicine - a science, an art, or a craft? What was the opinion of the medicine patriarchs? Hippocrates considered healing to

be a scientific art [1,2]; Galen, without abandoning this definition, considered medicine as a science, which, however, is unthinkable without creative objectives [3,4]. Today, only the unity of these approaches can bring success to medicine.

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and treatment options, improve patient care, and enrich the way to a healthier world. Is there still a place for the art of medicine in the era of innovations and artificial intelligence?

Although modern technology has overwhelmingly invaded the field of medicine with computerization of every aspect (including electronic medical records, laboratory data entry, images, patients' monitoring systems, etc.), young physicians, while embracing that innovation, should be trained in the development of clinical thinking and the establishment of personalized connections to the patients. Those skills should not be lost in the overwhelming technological advancement. In this aspect, medicine is indeed an art, which, with a human touch, makes a patient feel better; building relationships of trust with patients is fundamental to the ethical practice in medicine. Young physicians should be taught to adopt the ability to see, hear, and feel a patient's problems, formulate optimal management, and be empathetic to the patient's emotions and suffering.

Communication skills are a key to successful medical practice and a part of "the Introduction to Clinic" course in almost all medical schools, but substantial lack of time in clinical settings creates new challenges for communication between medical students, clinical teachers, and patients in medical schools [5]. In many areas around the world, including Ukraine, this problem has been aggravated by wars, epidemics, pandemics, and natural disasters. At the same time, developing clinical observational skills remains an integral part of medical education and the basis of medical art. The art of a careful physical exam should not be lost behind a computer screen. A physical exam makes a physician an artist, not a robotic part of a machine. Unfortunately, individual studies conducted among students and practicing physicians have identified an insufficient level of training in this area of professional skills [6], viz, studies from the Perelman School of Medicine at the University of Pennsylvania [7].

The art of making a diagnosis through careful observation has been an important topic in medical school education for centuries. Looking carefully at the patient and then converting these observations into diagnostics takes a long time to learn. The physical symptoms of disorders have been documented throughout history, sometimes unknowingly, by artists using careful observation and detailed brushstrokes. The works of talented artists from centuries ago provide potential insight into the

pathologies of both the subjects and the artists. These works also offer a unique educational opportunity. As examples, Harvard and Yale Schools of Medicine started teaching the art of diagnosis by studying paintings with their students. A close, skillful analysis of a painting helps students gain experience in observation and the description of the observed [8]. Many paintings display human diseases. Realistic portrayals of pathological features are especially common in Renaissance paintings from the 14th and 15th centuries [8]. Ukrainian medical schools (including Medical Universities in Kyiv, Kharkiv, and Dnipro) have adopted similar approaches during their introduction to the clinic lectures.

Today, in the terabytes of informational space, it is extremely difficult for students to find their routes of professional interest in the medical specialties and not to miss the main thing, i.e., developing not only professional competencies but also emotional ones that form the doctor's personality in society. The largest libraries and e-techs in the world store fundamental academic publications about medical arts [9,10,11,12,13]. They open ways for young medical professionals to find direction to self-education and self-improvement and to reflect on the dominant role of the doctor in the diagnostic process among the prevailing technologies.

Dnipro State Medical University has traditions of integrating centuries-old world historical experiences of teaching the art of healing into the philosophical concept of forming the critical clinical thinking of medical students. Our medical school has incorporated "diagnosing the canvas" into their curriculum. A thematic gallery of diagnostic symptoms and signs from great artists of all times and peoples has been created, allowing the expansion of the young physicians' educational horizons in the realms clinical thinking, empathy, and mercy.

For example, we want to share two self-portraits of Taras Hryhorovych Shevchenko (1814-1861), also known as Kobzar. For example, we would like to cite two self-portraits of Taras Grigoryevich Shevchenko (1814-1861), also known as Kobzar, the guardian of national memory. It's also not surprising that the Russian Empire engraver, ethnographer, public figure, and fellow of the Imperial Academy of Arts (Figure 1). He is considered a national hero, a symbol of Ukraine, and a member of the Ukrainian national movement.

His parents were peasants in the village, which first was ruled by Poland, but later was annexed by Imperial Russia.



Figure 1. The first self portrait was done at the age of 29 (1840) and the second at the age of 46 (1861) years old. As one can see, the portraits reflect the spiritual development and mental suffering of one of the most outstanding fighters for Ukrainian freedom, but also his physical illness (rheumatic fever, heart disease).

Two of his younger siblings were born blind. In 1822, Shevchenko was sent to a school, where he was taught to read and write. His teacher, the precentor of the village church, was a harsh disciplinarian who had a tradition of birching the children in his class every Saturday (14). In his novel *Artist*, Shevchenko described how, during this pre-academic period, he painted such works as *Apollo Belvedere*, *Fraklete*, *Heraclitus*, *Architectural Bas-relief*, and *Mask of Fortune*. His talent was recognized by prominent Russian artists, including Briullov [15]. In May 1843, Shevchenko travelled to Ukraine, where he met many intellectuals, poets, and artists. He wrote: "Study, read, and learn for others..." [16]. In 1844, Shevchenko wrote the poem "Dream", describing the social and national oppression of the Ukrainians by the Russian upper classes. He was arrested in St Petersburg in 1847 for composing poetry in the "Little-Russian language" (an archaic Russian name for the Ukrainian language) of "outrageous content". He was kept under the strictest surveillance, without the right to write or paint, and sent on a forced march from St. Petersburg to southwest Russia and later to one of Russia's worst penal settlements.

In the winter of 1858, Shevchenko finally returned to St. Petersburg and saw the African American Shakespearean

actor Ira Aldridge performing with his troupe. Using translators, the two became good friends over discussions of art and music. Shevchenko drew Aldridge's portrait and gifted the artwork to him.

The poet endured 24 years in serfdom, ten years in exile, and the rest of their life under the watchful eye of gendarmes. After difficult years in exile, Shevchenko's illnesses (rheumatic fever, heart valve disease, progressive decompensated heart failure) took their toll upon him (Figure 1, right image). Shevchenko died in St Petersburg on March 10, 1861, the day after his 47th birthday.

Shevchenko's difficult childhood and years of exile resulted in several debilitating diseases, such as rheumatic fever, heart valve disease, and heart failure. These illnesses ultimately determined his life prognosis, as evidenced by Figure 1 (right image). Shevchenko's passing occurred in St. Petersburg on March 10, 1861, the day after his 47th birthday, while he was in severe pain and experiencing an increasing decompensation of heart failure.

Taras was an exceptional figure in Ukraine's history, a true national hero, and a symbol of the Ukrainian people. He was a prolific poet, novelist, painter, engraver,

ethnographer, fellow of the Imperial Academy of Arts, public figure, and influential member of the Ukrainian national movement. His contributions to Ukrainian culture and society are immeasurable and continue to inspire generations.

Ukrainian nationalism has deep and powerful roots. The legacy of Taras Shevchenko lives through the centuries, inspiring the freedom of many nations. George H. W. Bush, the 41st US President, invoked the words of Taras Shevchenko at the President's news conference on May 6, 1992. The Taras Shevchenko Memorial is a bronze statue and stone relief-adorned wall located in the Dupont Circle neighborhood of Washington, D.C. On the monument is this verse composed by Shevchenko more than a century ago:

...
*Our soul shall never perish,
 Freedom knows no dying,
 And the greedy cannot harvest
 Fields where seas are lying;
 Cannot bind the living spirit,
 Nor the living word,
 Cannot smirch the sacred glory
 Of th'almighty Lord.*

Taras Shevchenko's literary legacy, a cornerstone of modern Ukraine, has served as a spiritual and political compass. His works, a symbol of Ukraine, have transcended borders with translations in numerous languages, leaving an indelible imprint on the culture of Western and Southern Slavs. Shevchenko's relevance is underscored by his fearless stand against the oppressive Russian Empire almost two centuries ago, a struggle that resonates in Ukraine's ongoing resistance. His work stands as a testament to the transformative power of literature, a reminder that even the most modest voice can ignite change.

Today, the prophetic appeals of the Ukrainian Kobzar are more relevant than ever (The Poem "Caucasus"):

...
*Fight, and you will win.
 God help you!
 You are the truth, the glory, and your will is holy!*

Amidst the current struggle for freedom and national independence, the use of Kobzar's image as a symbol takes on a profound significance in shaping the personal characteristics of medical students. It not only fosters a

sense of national pride and patriotism but also cultivates essential professional traits such as empathy, compassion, observation, clinical thinking, and diagnostic skills. This educational role is fundamental and should not be overlooked.

CONCLUSION Nowadays, medicine is the science of creative art, and the art of medicine is priceless in every nation. In Ukraine, despite the war, medical humanism, human values, and dignity predominate and is still very important in medical education.

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