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What is medicine for?

Kristin M Collier

Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan, USA

Correspondence to

Dr Kristin M Collier, Internal Medicine, University of Michigan Medical School, Ann Arbor, MI 48109-5368, USA; kristim@med.umich.edu

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‘The Scientist and the Poet’ is an essay, written by English professor Cantor¹ in *The New Atlantis*, which draws on tensions between how scientists and poets see the world. He writes, ‘Poets generally seem to be unsympathetic to science; they question its capacity to tell us *the full truth* about our world.’ This is a notion worth considering for medical doctors and leaders in healthcare. Why would the poets think that objective science would be less than revealing of the full truth? The piece moves through excerpts of works from famous Romantic poets, beginning with Goethe—a poet and scientist—and ends alarmingly with reflections from Shelley’s *Frankenstein*.² Cantor’s critique of science through *Frankenstein* is that science is ‘good’, provided it is oriented towards the humane.

In *Frankenstein*, science is a victim of its own power over nature. In the novel, the protagonist Victor Frankenstein tells of his dedication to science, his study of chemistry and natural philosophy at the university, and his commitment to scientific research. But in the course of practicing science, somehow the power of science escapes Victor’s control. Cantor¹ concludes:

The basic lesson *Frankenstein* can teach us is this: science can tell us *how* to do something, but it cannot tell us whether we *should* do it. To explore that question, *we must step outside the narrow range of science’s purely technical questions and look at the full human context and consequences of what we are doing.*

What Cantor is capturing here is a philosophical—not a scientific—truth: ‘good’ medicine should be concerned with the health of the human person,³ not just the stuff they are made of. If good medicine is caring for persons, not bodies, then physicians have something relevant to learn about persons from the poet, novelist, essayist, philosopher, theologian and the patient-person before them. Yet, medical journals, education and training have a difficult time incorporating personhood from literature, poetry, history, anthropology, archaeology, philosophy and religion into the practice of medicine. Why is this? Is there some rule that medicine should only draw on the natural sciences of mathematics, physics, chemistry and biology? Interestingly, the prominent and respected *JAMA* includes a very small section titled ‘Humanities,’ which appears dead last, after all the scientific-technical medical studies. A charitable view would suggest that ‘Humanities’ is last because medicine’s goals are found in the humanities, in persons.

Perhaps the tension between the scientist and the poet can be resolved through a union of the two views: the physical (the body) and the metaphysical (the person). But what can unite these disparate

perspectives? I propose philosophy—the ancient discipline by which mankind has inquired about the world in all its dimensions—has the power to unite the sciences and the humanities together again.

Today, medical leaders are participating in an industry dominated by the production of science and technology. But what is scientifically possible for the body and what is humane for the person are different questions which medicine must answer together. My aim for this essay is to ask medical leaders a basic question in the philosophical spirit of Socrates: ‘What is medicine for?’

The ancient philosopher Aristotle teaches us that medicine is for health, not in relation to the body alone, but in relation to the person who seeks happiness in human life through the pursuit of virtuous activities. In his *Nicomachean Ethics* he says, ‘For the life of the man who is active in accordance with virtue will be happy’, and ‘By human virtue we mean *not that of the body*’.⁴ So, we discover that virtue, not bodily health, is what provides happiness to the person. Before Aristotle, Socrates states through Plato’s *Apology*, ‘I say that it is the *greatest good* for a man to discuss *virtue* every day’.⁵ For Socrates, virtue is the greatest good in life, and for Aristotle, the virtuous person is a happy person. So, according to these three ancient philosophers—Socrates, Plato and Aristotle—it is virtue, not health, that is essential to the happiness and well-being of persons.

Now what should we make of ‘health’ in this schema of virtue and happiness of the person? Is medicine only concerned with ‘bodily health’ as the final good of the profession, or does medicine further encompass the ‘health of the person’ as this final good? Aristotle does not resolve this question. If medicine is oriented towards the health of persons, then the metaphysical goods of health (such as virtue and character, which bring happiness) are essential to the practice of medicine. For this reason, the Socratic philosophers spoke of virtue as the end of mankind, not bodily health. To make bodily health the end of medicine would be to ultimately arrive at death as the end of medicine—a tragic end. If, however, the end of medicine is persons seeking virtue in life, then medicine is not a tragic profession. Taking the goal of medicine to be health and happiness of human persons, what then should medicine learn from the wisdom of the humanities about persons, which cannot be taught through the sciences about bodies?

To begin to explore this question today, medical leaders should go back in time—for the humanities love history—to London on the 28th of May in the year 1934 to Sadler’s Wells Theatre. ‘The Rock,’ by the great poet Eliot⁶ is making its debut. It is a time of great industrial and scientific progress in Europe,



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much like today, but the opening stanzas of this play arrest the listening audience with what has become lost in progress:

The Eagle soars in the summit of Heaven,
The Hunter with his dogs pursues his circuit.
O perpetual revolution of configured stars,
O perpetual recurrence of determined seasons,
O world of spring and autumn, birth and dying

The endless cycle of idea and action,
Endless invention, endless experiment,
Brings knowledge of motion, but not of stillness;
Knowledge of speech, but not of silence;
Knowledge of words, and ignorance of the Word.

All our knowledge brings us nearer to our ignorance,
All our ignorance brings us nearer to death,
But nearness to death, no nearer to God.

Where is the life we have lost in living?
Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?

The cycles of heaven in twenty centuries
Bring us farther from God and nearer to the dust.⁶

In Eliot's poem, we find that science and industry are perpetually busy, participating in the 'cycle of idea and action, endless invention, endless experiment'. But there is a tragic punchline to this progress, a paradox that arrests the modern sensibility in the closing stanzas of the poem: 'Where is the *life* we have lost in living? Where is the *wisdom* we have lost in *knowledge*? Where is the knowledge we have lost in *information*?'

Information should lead us to knowledge, then to wisdom and from wisdom to life. This is how the ancient philosophers mentioned earlier thought about life. Life is more than just bodily biological status; it holds an almost timeless, transcendental, divine, and metaphysical quality. The poet, however, shows that humanity, through its achievements, is not moving upwards towards higher truths, towards God and Life, but is moving downwards 'nearer to our ignorance' and 'farther from God and nearer to dust (death)'.⁶ It is a mortifying vision of the goals of science and technology achieved apart from wisdom. Could Eliot's poem also be a mortifying vision of modern medicine?

Consider an analogy. Modern scientific medicine is like a massive boat propelled by cutting-edge technology. The boat is impressive, moves expediently, travels great distances, but in which direction and towards what destination? Science and technology alone cannot know. The metaphysical thing you do not see, which directs the boat to its proper, good destination, is the rudder of philosophy. This philosophical rudder is essential for aligning the direction of science and technology with the good goals of medicine. Who is attending to the philosophic rudder of medicine today?

The powerful and profitable tools of science and technology, though necessary to medicine as a profession, have created a myopic lens through which medicine's gaze has been captivated for at least a century and probably much longer.⁷ Steinbeck,⁸ in *The Grapes of Wrath*, reflects on the distorted nature of man who is unwisely bound up in technology and biochemistry separate from virtue:

Carbon is not a man, nor salt nor water, nor calcium. He is all these, but he is much more, much more; and the land is so much more than its analysis. That man who is more than his chemistry... that man who is more than his elements knows the land that is more than its analysis. But the machine man, driving a dead tractor on land he does not know and love, understands only chemistry; and he is contemptuous of the land and of himself.

Aiming at the goal of bodily health, sought primarily through scientific and technological means—and absent the wisdom of personhood—only frustrates physicians and their patients when bodily health is not achieved. When bodily health fails—in spite of real fourfold and sixfold per capita increases in medical expenses and technology in the UK and US, respectively, over the past 50 years^{9 10}—the disenchantment of medicine¹¹ naturally follows. Ironically, medicine's disenchantment has been wrought through extraordinary bodily health gains under this scientific model of medicine. But this model of healthcare ultimately fails when our bodily health fails, as it naturally does with the passing of time. When our bodily health fails, in spite of the best scientific and technological treatments, the physician often becomes contemptuous of the patient and of himself because he is unable to achieve bodily health as the supposed goal of medicine.¹² Instead, practitioners of biomedical healthcare ought to concern themselves with the overall health and happiness of human persons. This requires medicine to also be wise, which means that medicine cannot only study the sciences, but must incorporate the humanities as well.

Nineteenth century theologian and philosopher John Henry Newman wrote to medical faculty and students at a medical school in Dublin about the danger of medicine seeing itself only through a scientific-technical lens, studying only science aimed solely at bodily health. He wrote, 'Men, whose minds are possessed with some one object, take exaggerated views of its importance, are feverish in the pursuit of it, make it the measure of things which are utterly foreign to it, and are startled and despondent if it happens to fail them'.¹³ His antidote for this scientific view of medicine aimed only at bodily health was to ensure the perspective of the medical trainee also included theology and religion to inform the metaphysics of personhood in the clinician. Newman¹³ writes that one should strive for an 'enlargement of the mind' and that 'there is no enlargement, unless there be a comparison of ideas one with another' where a properly formed person 'possesses the knowledge, not only of things, but also of their mutual and true relations; *knowledge, not merely considered as acquirement, but as philosophy*'. Newman writes that this is obtained by having an exposure to the entirety of the liberal arts, including the sciences and the humanities. He cautioned that if medicine were to become 'self-contained' within the scientific-technical biomedical silo, absent the humanities, it would only leave the physician unable to be able to become wise.

Policy expert and physician Bulger¹⁴ stated in a 2000 *JAMA* piece, 'The greatest challenge facing the academic healthcare community is to restore the marriage between humanistic concerns and scientific and technical excellence in healthcare delivery practices'. The erosion of the humanities in the practice of medicine is associated with the accompanying loss of meaning in medicine and associated levels of physician burnout,¹⁵ loss of the personal relationship between physician and patient due to the 'medical gaze' of the physician,¹⁶ and the overall disenchantment of medicine practiced as a hard science. These shortcomings in medicine today can be further evinced through the growing estrangement we see between the physician and the patient, and the associated breakdown in human trust between

them.¹⁷ We also believe the loss of spirituality and religion within the teaching and practice of medicine has mostly reduced medicine to a merely scientific endeavour, devoid of greater meaning and purpose.¹⁸ Loss of faith in the integrity of medicine as a moral practice is at stake in the eyes of society.^{19 20}

All these modern medical wounds have accumulated alongside the massive proliferation of science and technology and healthcare spending. Therefore, we should not expect additional scientific, technical progress and spending to deliver us from our current medical condition. Scientific information, knowledge and technical tools do have the power to diagnose conditions of the body and aid the body in these conditions, but they do not have the power to heal medicine itself because science cannot tell us how medicine ought to be. Science can tell us what is; science alone cannot answer deeper human and philosophical questions of meaning, morality, purpose and ends.⁴ In treating whole human persons, not just the bodies, medicine and physicians must be more than technically competent; they must also be wise. Medicine requires more than information and knowledge because medicine is a practice requiring physicians not only to be wise but to practice wisdom.

In his *Nicomachean Ethics*, Aristotle wrote, ‘Practical wisdom... is concerned with things human and things about which it is possible to deliberate... but no one deliberates about things invariable, nor about things which have not an end’.⁴ Here, Aristotle is expressing the essence of a profession which requires wisdom, or deliberation, in aiming at what is good. Aristotle himself says it this way, ‘Practical wisdom cannot be scientific knowledge nor art, [but]... is that true and reasoned state of capacity to act with regard to things that are good or bad for mankind’.⁴ Here, we find a helpful philosophical definition of health for physicians: acting with regard to what is good for mankind. In the case of medicine and health, wise physicians must deliberate and act towards what is good for not only their patients’ health, but their neighbours’ health as well. This requires applying knowledge of the highest order, which is what Aristotle calls practical wisdom or phronesis.

Episteme, techne and phronesis are three Greek words describing different categories of knowledge. Thinking about medicine, episteme is bare scientific knowledge: ‘the facts’. Techne involves technology and ‘know-how’. Phronesis, however, embodies the moral grounds of an activity and requires virtue, ethics and judgement. Modern medicine is excellent at both episteme and techne, but knowledge related to wisdom found in phronesis is largely absent from the profession. This is because modern medicine is productive—busy, knowing and doing—but in the midst of all this activity it has neglected the rudder of medicine, philosophy, which directs medicine to its proper ends.²¹

Borrowing from CS Lewis, philosopher Kreeft provides a nautical illustration. He describes sailing orders given to captains of a fleet of ships. These leaders first need to know the answers to three types of questions: How are the ships to cooperate? How to stay shipshape? What is the mission?²² Modern medicine focuses on the first two questions, but the most important answers are found in the third: What is the mission? Why are they at sea? What is their purpose? These are questions of meaning and purpose, transcendental questions of ultimate goods explored through the humanities, which require wisdom to answer. To the philosopher’s mind—and to the good physician leader—these are the first and most important questions we should be asking. Modern medicine, however, is often last to ask these deeply philosophical questions. Why?

First, the answers to these questions of ultimate meaning lay not only in the humanities at large but in many of the major religions of the world and in the study of theology and through philosophy, from which modern medicine has tragically divorced itself.²³ Second, modern medicine itself is terrified of moral disagreement, so it avoids these deeper questions of virtue, meaning and purpose as they create massive conflict within the profession. Medicine, however, cannot avoid these types of moral-theological questions of meaning and purpose if it is to be wise regarding the health and happiness of human persons. Third, the commercial–financial aspects of modern medicine are compelling forces that distract the physician from deeper, more philosophical questions, that are bound up in medicine that cares for patients as persons, not just bodies of persons.³

The phronesis—wise practice—of medicine cannot be performed in a merely technoscience model absent philosophy. If science and technology are busy working, then philosophy is necessary to come along side to examine this work.²⁴ Medical leaders therefore need to develop a philosophical lens of medicine to examine their work. Without such a lens, medical leaders rob themselves of a proper understanding of medicine’s goals related to the health and happiness of human persons, both individually and collectively, in society.

Medicine is a unique vocation that combines philosophic wisdom in the humanities with scientific knowledge and technical skills towards the goal of health and happiness of human persons in society. Good physicians must not only be scientifically and technically competent, but they must also become wise concerning humankind’s ultimate goods: ‘what is good for themselves and what is good for men in general’.⁴ Philosophy and the humanities are therefore necessary for physicians to be able to become wise persons in order to be able to wisely practice medicine on persons.^{25–31}

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