ETHICS FEATURE

Becoming a Phronimos: Evidence-Based Medicine, Clinical Decision Making, and the Role of Practical Wisdom in Primary Care

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There has been much discussion about the overmedicalization of human experience and the problems incurred by overzealous action-oriented medical care. In this paper we describe the Aristotelean virtue of phronesis, or practical wisdom, and discuss how it can be developed by interested clinicians. We argue that becoming a phronimos requires conscious attention to one's practice by using feedback to continually improve. But there must also be judicious adherence to clinical practice guidelines and advocacy for people-as-patients at individual, community, and national levels. (J Am Board Fam Med 2023;36:531–536.)

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Where is the wisdom we have lost in knowledge?

—T.S. Eliot, "The Rock"

According to Aristotle, the main intellectual virtues include: scientific knowledge (*episteme*), technical knowledge (*techne*), intellectual insight (*nous*), philosophic wisdom (*Sophia*), and practical wisdom (*phronesis*).[1] Translated to medicine, these virtues comprise medical knowledge, procedural skills, meta-cognition, care, and practical wisdom. Current emphasis in medical care privileges *episteme* and *techne*; the others, with their resistance to quantification and standardization, tend to get short shrift.

The *phronimos* is "one who navigates particulars well, one who assigns appropriate weight to them based on context".[2(p.11)] In contrast to rule-based medicine, it is an approach to decision making grounded in an accumulated wisdom gained through previous practice dilemmas and decisions. The critical importance of *episteme* notwithstanding, without practical wisdom, shared understanding and shared decision making in medicine cannot occur.

Phronesis is not the simple accumulation of clinical experiences. Years in clinical practice do not assure the development of practical wisdom. Instead, it occurs through successive refinement of one's performance through deliberate practice.[3] It obliges sustained focus on improvement of one's lesser abilities based on continuous incorporation of feedback.

Phronesis seems to fly in the face of the current emphasis on evidence-based medicine (EBM), which seems to offer a value and context free approach to the care of patients. This approach to medical care has both enhanced and diminished medical practice. EBM has been instrumental in decreasing the seeming random variation in medical practice that once existed. Combined with an emphasis on patient-oriented outcomes,[4] it has moved practice away from the reductionistic approach on disease to embrace complexity.[5,6] However, EBM also has been used by players outside of the profession with business interests to propel uncritical standardization and it has been used by associations within the profession, with their attendant guild interests, to promote their own interests.

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Yet evidence-based medicine has always included a role for phronesis. Whether it is called experience, clinical expertise, or the art of medicine, decision making requires the *reasonable* application of research evidence when making choices about the care of individual patients.[7] It is this reasonableness that requires the phronimos in those decisions.

However, it is this fuzziness of knowing what the clinician brings to the decision making process that has stymied the recognition of its importance. In this article we describe how practical wisdom can be brought to bear on this decision making process. We elucidate the reasons why clinical wisdom should be recognized, particularly in primary care settings, by explaining just some of the ways the phronimos can apply their wisdom in practice.

Phronesis Helps Avoid the Medicalization of the Human Experience

Current efforts to wring "value" from primary care by focusing on diagnostic algorithms and quality metrics reveal fundamental misunderstandings of primary care's purpose.[8] These approaches to standardize medical practice require that every patient entering an examination room has to leave with a diagnosis (that is, if the clinician is to be paid). This assumption often results in overdiagnosis, the labeling of a condition, disease or disorder that would otherwise not cause harm if left undiscovered or undiagnosed.[8,9] Although concerns about overdiagnosis have existed for centuries, in the past 10 years a growing number of researchers, policy makers, and clinicians have begun to systematically document the harms (to patients and to health care resources) incurred by overdiagnosis.[10] Nonetheless, in primary care settings overdiagnosis and overtreatment remain the "elephant in the room" and the harms associated with them are rarely discussed with patients outside of some cancer screenings.[11]

The pharmaceutical industry has also promoted overdiagnosis and overtreatment through transmogrification of elements of the normal human condition into "disorders" requiring treatment.[12] When these medicalized life phenomena are further reduced to acronym formulations (such as "Low T" and "mNCD" [mild neurocognitive disorder]) these names act as "hypnotic suggestions"[13] for patients and exacerbate the medicalization of physical and emotional life challenges. Patients then come to the clinic wanting the latest treatments and they are not typically aware of the controversies surrounding these new disorders or the uncertainties about the efficacy and safety of these new treatments.

Of course, it is a tall order to acknowledge—much less embrace—uncertainty: we live in a litigious climate where any push-back on the evidence-based medicine paradigm is frowned on. But doing so is essential to avoid the pitfalls of algorithm-based medicine and the harms of overdiagnosis and overtreatment. For example, it is certainly more common (and easier) for a patient who screens positive for depression, has high normal or mildly elevated blood pressure, has upper respiratory symptoms, or who is eligible for prostate cancer screening to be issued a prescription or referred with little additional conversation about the structures and circumstances in their life that are responsible for the symptoms or discussion of the risks as well as the benefits of the management. A one-size-fits-all approach to care, often dictated by "quality measures," prevents shared decision making during which the clinician is giving thoughtful consideration about if and when to treat, or if watchful waiting or lifestyle changes are the best course of action.

For one to truly engage in shared decision making, it is also important to have clinical and epistemic humility. For many presentations in primary care there is considerable question as to the patient's diagnosis (clinical humility). Moreover, the practice of medicine is far from having all the answers to even everyday issues, requiring epistemic humility. The phronimos practices *abductive reasoning*, beginning with an incomplete set of data and proceeding to the likeliest possible explanation for the findings. This is the approach to diagnosis usually taken in primary care. Rather than trying to prove or disprove a diagnosis (or hypothesis), the focus is on being curious and on gathering as much information as possible, developing a working medical hypothesis or diagnosis that is understood at the outset to be tentative and likely incomplete because it can change with more information.[14]

Abductive reasoning emphasizes the importance of "creative leaps" which are often intuitive and tacit.[14] As such, it can bolster the ability to develop a sound diagnostic formulation and facilitate thoughtful consideration about when (or if) to "treat," sometimes leaving medically unexplained physical symptoms without a diagnosis. Debiasing

techniques are also helpful in this regard as they are designed to interrupt decision making processes at the unconscious level where bias resides. The focus is on teaching physicians in training to understand that bias is ubiquitous, that no one is immune, and that it is critical to try to identify and filter assumptions and associations that may trigger bias. In addition, at both the undergraduate and postgraduate level, more attention needs to be paid to teaching how to interrupt implicit decision making governed by heuristics and biases with conscious decision making, often called "double-loop learning.[15]

Phronesis Counters the Rush Toward Medical Intervention

Screening for some diseases can have a marked effect for some disorders, especially those progressive diseases shown to benefit from early identification. However, there is clear and growing evidence that routine screening for some conditions has not reduced mortality rates and has led to more harm than good; thyroid cancer[16] and melanoma[17] are just two of these. Similarly, behavioral health screening (eg, for depression, anxiety, domestic violence), which do not have evidence of benefit[18] may lead to overdiagnosis and overtreatment. In fact, when depression screening tools are used, in many primary care settings, more than 70% of positive screens will be false positives.[19,20] Thus, the phronimos would heed Sir Muir Gray's quip that "All screening programs do harm. . .some do good as well."[21]

Good care requires a sound diagnostic formulation and thoughtful consideration about *if* and *when* to treat. The diagnostic formulation often comprises, along with definite illness, *nonillness* amenable to watchful waiting or lifestyle change.[22] The recent creation of risk factors as "predisease" categories (prediabetes, high normal hypertension, subclinical hypothyroidism), "at risk" conditions, and "vulnerable population" designations also contribute to a rush toward medical intervention.

The controversy over the diagnosis "prediabetes" is a good example. A recent Cochrane review demonstrated that although people with prediabetes may develop diabetes over time, they may become normoglycemic at almost any time. The authors suggest care in treating prediabetes because there is a risk of causing more harm than benefit.[23] Telling a patient that their blood sugar levels are elevated, reviewing dietary changes and discussing how impactful even moderate exercise can be on overall health, is, of course, quite different from telling the person that she "has" prediabetes. Along with the harms of labeling, the diagnosis of "prediabetes" reinforces the erroneous assumption that left untreated, diabetes will inevitably develop.

Phronesis Prompts Judicious Adherence to Guidelines

Clinical practice guidelines, although a laudable attempt to combine the best current research findings with direction from experts in the field, vary widely in their use of research and the wisdom of the experts that create them. Even the best "evidence-based" guidelines are ". . . educated and thoughtful data-based advice. . . [based on] a combination of intellectual, cognitive and social processes."[24]

There is a plethora of guidelines with conflicting recommendations[25] and few have been tested to determine whether they improve patient outcomes.[26] The pharmaceutical and medical device industries have had and continue to have a profound influence on the development of clinical practice guidelines.[27] Sismondo[28] uses the term "ghost-management" by commercial entities to describe the extent of the problem. Others[29] maintain that we are not in an era of EBM (evidence-based medicine) but of *MBM* (marketing-based medicine). In all areas of medicine—from cardiology to psychiatry— it has been well documented that academic-industry relationships have a corrupting influence on clinical trials, systematic reviews, and clinical practice guidelines.[27,30] Although these relationships have been harshly criticized, they are accepted and legal. These practices create "proindustry habits of thought"[31] that are difficult—if not impossible—to mitigate, thus leading to implicit bias when interpreting and writing up trial result and developing recommendations in practice guidelines, resulting in exaggerated claims of the effectiveness of medical treatments[32] which are then amplified when these same researchers are involved in the development of clinical practice guidelines.[33]

The phronimos is aware of the limitations of practice guidelines and will be able to selectively apply guideline recommendations to patients, paying less attention to doing "the recommended

thing" (as dictated by the guideline) and more attention to doing what is best for that individual patient. They also trust, but verify, practice policies and guidelines. Guidelines vary in their clarity, applicability to practice, and validity of their recommendations. Practice policies aligned with payor incentives may not be applicable to specific patients or reflect best evidence. The Guideline Trustworthiness, Relevance, and Utility Scoring Tool (G-TRUST) is a simple scoring system to identify useful guidelines.[34]

Phronesis Keeps the Examination Room from Being an Island

"Patients" are people affected by the social structures in which they live. For example, in the largest study to date of the effectiveness of pharmacologic treatment of moderate to severe depression, treatment response may have been amplified positively or negatively, by participants' living conditions. Among patients treated with citalopram, higher income or education, ethnicity, health insurance, and employment status were all associated with improved outcomes as compared with their counterparts.[35]

That is why in recent years there have been calls to address the upstream causes of ill-health. In a report for the United Nations, UN Special Rapporteur Dainius Pūras argued for a focus on "global burden of obstacles" to health rather than the global burden of diseases.[36,37] The relationships among race, class, and symptom expression are well established. Health and wellness care must be considered within and directed at the neighborhood, institutional and policy levels. Practical wisdom takes these concerns into account.

This approach goes beyond so-called cultural competence, which focuses on appreciating the diversity and the sociocultural context of their patients' lives to understand and address, *in a political way*, the relationships among race, class, and symptoms to act on the systemic causes of ill health. Organized medicine is recognizing the need to address root, structural causes of illness and suffering in people rather than only reacting to them.[38]

Advocacy can be at many levels, from intervening for individual patients with their utility companies to partnerships with community organizations to lobbying on Capitol Hill. A relatively new approach is the development of medical legal partnerships to address health issues at both the patient and population level.[39–41] That is, laws are framed as tools that can create not only individual-level change but also enduring change on population health. Legal care is reconceptualized as health care[41] and an on-site attorney is an integral part of the health care team. That is, attorneys help to identify unmet *legal* needs that harm health—from at-risk housing conditions to food insecurity and other forms of precarity.[42] The medical-legal partnership model is the antithesis of algorithmic clinical practice, facilitates a more individualized and contextualized approach, and improves public health outcomes.[43,44]

How to Be a Phronimos

One special advantage of the skeptical attitude of mind is that a man [sic] *is never vexed to find that after all he has been in the wrong.*

—William Osler, The Treatment of Disease

The current business approach to primary care is one that aims to standardize processes to assure standard outputs through slavish adherence to algorithms and rules, financial incentives that promote non-nuanced care, and one-size-fits-everyone care to create a medical assembly line approach. Not only does this approach result in exorbitant waste of resources without demonstrated benefit to patients,[45] it hasn't and cannot work in family medicine.

This is not to suggest that we return to a model of training where wisdom is gained predominately through experience—the point is not to pit episteme against phronesis. Rather phronesis is about listening carefully to determine when medical knowledge should be applied to a particular patient at a particular time. Indeed, it is important to note that person-centered care, which is at the heart of family medicine today, requires practical wisdom. That is, practical wisdom requires an empathic comportment in which one focuses on the particulars of a situation to intervene in a manner appropriate to that specific situation. The goal of medical care is to do what is best for an individual patient, not simply what one wants. Phronesis is not a substitute for episteme. Scientific knowledge derived from one's experience is limited in its applicability beyond those experiences. It is the role of medical research to discover (an approximations of the) truth in medicine. It is the role of the clinician to balance these truths with the hopes, fears, and desires of each

patient. This balance results in a relationship oriented to the end of a right and good healing action for the individual patient.[46]

Practical wisdom is difficult to measure, especially when action is privileged over a more "gentle" approach to medicine.[32] It may be difficult to teach. But the current pressures toward conformity of medical practice may result in the loss of the essence of practice. By continuously categorizing and sorting information and reflecting on it, the primary care physician as phronimos meets the needs of a particular patient at a particular time. Occasionally, meeting these needs means following the cookbook recipe. Most times, though, it means using accumulated practical wisdom to "spice to taste."

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