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In Ancient Greece, there existed several different terms for ways of knowing and acting in the world. Commonly referred to as the 'intellectual virtues', many of these terms appear in modern English, as either borrowed words – such as *nous*, intelligence or common sense, and *praxis*, critical reflective practice (as recently discussed in this series by Ng and & Wright<sup>1</sup>) – or as roots to form words about knowledge and its activities – technical/technique (art/skill, from *techne*), philosophy (love of wisdom, from *sophia*), or epistemology (from *episteme*, knowledge/science). Several other related terms remain obscure in everyday English, including *gnome* ('good sense'), *synesis* ('understanding') and the subject of this article, *phronesis* – a form of practical knowing.

While little heard in everyday English, the word phronesis is commonly found in texts relating to modern philosophy, ethics, and education. In fact, its use in these contexts has risen sharply since the 1980s, and the term is now also found in architecture, computer science, economics, engineering, management, and medicine. This broad usage attests to the perceived value of the concept, but also suggests that caution may be necessary regarding the way the term is used and understood in different disciplinary contexts.

The concept of phronesis comes primarily from Aristotle's writings in the *Nicomachean Ethics*, where it refers to wise and practical judgement, a form of reasoning that considers all aspects

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of a particular situation, including the moral or ethical dimensions. <sup>2</sup> The Greek term has been rendered into English in various ways. The convention in English has been to translate the term as 'practical wisdom' (or variations such as practical knowledge or judgement), or most commonly, 'prudence'. While capturing the notion of careful, wise judgement, prudence perhaps suffers from a formal and archaic tone which may undermine its contemporary relevance. The term 'mindfulness' has recently been suggested as an alternative for modern usage.<sup>3</sup> While the mental focus, sound reasoning and self-awareness of mindful practice does indeed have much in common with phronesis, the wider mindfulness' provides a useful alternative rendering in modern English.

Phronesis, then, represents a fundamentally practical form of reasoning concerning human action; an intellectual virtue that enables us to judge what we should do in a given situation. It is a multifaceted concept, involving reasoning, action, context and appropriateness.

By this stage we hope that the relevance of the concept to medical education and clinical practice is emerging. In what follows we consider more specifically how the term has been applied in educational and clinical contexts in medicine, and suggest why its continued, and possibly expanded, use is beneficial.

In educational contexts, the concept of phronesis is commonly contrasted with other terms for knowledge discussed by Aristotle, namely *episteme* and *techne* (and occasionally, *sophia*). Typically, *episteme* is characterised as knowledge which is scientific, universal, invariable, and context-independent, while *techne* is seen as a craft-based, pragmatic, variable and (usually) context-dependent skill. Medical curricula are commonly based on these twin foundations of scientific knowledge and applied clinical skills. Where, then, does phronesis fit in? We, along with many other medical educators, suggest that phronesis represents the integration of this knowledge and competence with appropriate experience, judgement and situational understanding. It is clinical reasoning with explicit consideration of the moral, ethical and value-based considerations relevant to the presentation and the patient's context. The highly regarded American medical educator Pellegrino called this the 'prudential question': *What should be done for this patient?*, drawing a clear distinction with what *can* be done.<sup>4</sup> General practitioner Roger Neighbour argues for phronesis as 'knowing what to do when nobody knows what to do' or even 'knowing when to break the rules', <sup>5</sup> hinting at the novice clinician's

frustration when confronted by the oxymoron of their supervisor's careful recklessness. Or, more succinctly, and acknowledging the widespread influence of Miller's pyramid in medical education, superimposing above 'Does' the level of 'Decides Whether'.

Commonly used terms in medical education such as clinical reasoning, clinical judgement, or even reflective practice capture some of what phronesis represents, but do not necessarily capture the contextual nuances or the moral, ethical and value-based considerations. One of the key tasks of a clinician, and in particular for students to learn, is to understand how to apply the universal, scientific knowledge (episteme) with the appropriate clinical skills (techne) to the particular needs of a particular patient in a particular situation. Several writers<sup>6-8</sup> have argued that this is in fact the essence of medicine; despite the apparent certainty of science or reliability of standardised technical procedures, medicine remains an interpretive practice, where uncertainty and situational judgement are inherent. Scientific knowledge may form its basis, but the practice of medicine requires a judgement as to the appropriateness of a particular diagnosis, investigation or management approach with each patient in every situation, regardless of how many times such a decision may have been made before. Algorithms, evidence-based guidelines and rules of thumb are all useful practice heuristics (another Greek term), but they cannot replace deliberate, thoughtful, contextual and ethical reasoning. This is the hallmark of a professional<sup>9</sup> and to rely largely or routinely on a prescriptive or algorithmic approach to presentations is asking for trouble. Nor will more intricate and prescriptive guidelines, protocols, and procedures overcome the inherent uncertainty of medicine.<sup>10</sup>

This is where phronesis comes in. Phronesis, both classically and in its more contemporary applications, helps determine the appropriate action to take when 'knowledge depends on circumstance'.<sup>8</sup> Professional competencies or duty statements in fact recognise the inherent uncertainty and situatedness of clinical practice. They are full of hedge words – like 'appropriate', 'suitably', 'likely', 'when necessary' – which vaguely suggest the kind of action required, but in reality leave it to the professionals to determine exactly how to act in such circumstances. They are written this way of necessity, because no set of competency standards can articulate precisely how a professional is to practise. They can document the professional claims of expertise, the areas or scope of practice, the necessary educational prerequisites, and the expected technical, ethical and professional standards; but not how to actually practise the knowledge, skill, technique and judgement of the profession in particular

situations. How these considerations translate into everyday reflective practice, and interact with the rational and scientific basis of medical knowledge and the practised artistry of clinical skills, cannot be prescribed or taught algorithmically. The best we can do as educators is to create the conditions for students to understand the need for such thinking and develop their capacity in this area; indeed, this is one of the key bases upon which the role of the humanities in medical education is frequently advanced.<sup>11-12</sup> Phronesis gives us the theoretical framework and pedagogical legitimacy to build such experience into the medical curriculum.

Admittedly, Aristotle himself expressed some doubt about the capacity of young people to use phronesis, when he wrote: '... prudence is concerned with particulars as well as universals, and particulars become known from experience, but a young person lacks experience, since some length of time is needed to produce it' (*Nicomachean Ethics*, 1142a 10-15).<sup>13</sup> But the key point here is experience, not age; and so our goal should be to prepare our students to make wise, practical, 'phronetic' decisions by building in as much clinical experience as possible to accelerate their getting of wisdom, under appropriate guidance, of course.

None of this is to suggest that developing or applying phronesis is easy. Apart from the individual challenge of remaining reflective or judicious enough to do so (or 'keeping your wits about you', with 'wit' in this sense being not too far off the meaning of phronesis), system-wide forces frequently work against it.<sup>9</sup> But that, too, is another factor that needs to be thought through in the exercise of contextual, morally-informed and practical reasoning.

Embracing the goals of phronesis in educational contexts embeds wise judgement, contextual awareness and moral reasoning deeply within medical curricula. If our aim is to shift the emphasis of the contemporary medical curriculum towards a broader and more patientcentred perspective, then the concept of phronesis is both valuable and illuminating. Much more than simply a synonym for clinical reasoning, phronesis offers a way of valuing the specific moral, ethical and clinical considerations unique to each patient encounter, while engaging in safe clinical practice.

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