Future doctors as knowledge workers

In July 2020, Health Education England published their Future Doctor report,[1] highlighting the characteristics that the doctors of tomorrow will need to master. Examples included generalist skills and the wisdom to make complex judgements, adapt, and be a catalyst for change. These all require knowledge work skills.

'Knowledge work' is the work that clinicians do to find, create, and use knowledge in everyday clinical practice. Gabbay and May recognised this as the generation of practice-based evidence.[2]

By observing GPs in practice, they revealed how primary care clinicians rarely access or use research evidence directly, but instead rely on the development of 'mindlines' — guidelines-in-the-head. These contain evidence from multiple sources, merged with past experiences and amended through continual learning, to become a clinician's internal guide to practicing everyday medicine.

APPROACHING COMPLEX, INDISTINCT PRESENTATIONS REQUIRES KNOWLEDGE WORK SKILLS

Knowledge work skills are highly valued in professions outside of medicine; but have been arguably neglected within the clinical community. Evidence-based medicine (and associated guidelines) have become the model that defines the way clinicians 'should' use knowledge in practice to manage conditions. Clinical reasoning has focused on decision making regarding diagnosis and treatment.

However, the knowledge work of everyday practice is far more complex, requiring us to go beyond managing single or even multiple conditions. Primary[3] and secondary care[4] clinicians frequently manage indistinct illnesses with no clear pathology, where the patient or their presenting problem may not fit the guidelines. When approaching uncertainty, the temptation can be to keep mining for an underlying cause. However, clinicians have a role as gatekeepers to minimise exposure to the potential harms of medical intervention.[5]

As recognised by Health Education England, today's patients are commonly living with multiple conditions and need tailored understanding and management facilitated by an expert generalist. To enable clinicians to approach complex, indistinct presentations, they require knowledge work skills to facilitate interpretation, explanation, and learning. Developing this full range of knowledge work skills has the potential to reduce treatment burden for patients, while also decreasing the burden of decision making for clinicians.

THINKING, DOING, AND LINKING DIFFERENTLY

At Wise GP, we recognise the need for three elements to support clinicians to become better knowledge workers: thinking differently, doing differently, and linking differently. This requires a raised awareness of knowledge work skills, support for their use, and promotion of linked working within communities of practice. As part of the WISDOM project, online training resources are being designed to provide clinicians with the confidence, skills, and motivation to approach problems when guidelines, research evidence, or medicine don't provide an answer.

All clinicians in primary and secondary care use generalist skills in whole person medicine everyday. Strengthening knowledge work skills could foster improved care by expert generalists for future patients. By using these knowledge work skills, tomorrow's doctors could help to avoid the harms of overmedicalisation of care, promote wider psychosocial and community approaches to supporting people with illness, and be the catalyst for positive change required to re-energise our profession.

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