Deliberate thinking

Avoiding medical errors

Brendon Evans

> *'Expect the unexpected, or you won't find it.'*
>
> – Heraclitus[1]

De Bono's paradigm of the 'six thinking hats'[2] – first published in 1985 – is a highly impactful cognitive framework applied widely in business, psychology and educational fields.[3] It guides the thinker to view a problem from differing perspectives; for example, 'white hat' thinking examines the facts and data about the problem, and 'red hat' thinking explores the feelings and emotions of those involved with – and potentially affected by – the decision. The other points of view are equally important: the 'green hat' for innovation, opportunity and alternatives; 'black hat' for addressing risk, difficulties and problems; 'yellow hat' for positivity and upside; and 'blue hat' for overarching structure and managing the thinking process. Each 'hat' represents an important way of viewing the problem that might be missed if not explicitly called upon. This process also deliberately slows down the cognitive process to avoid quick, less-informed decisions. By explicitly addressing these differing points of view, the model works towards ensuring opportunities are identified and risks avoided.

Missed diagnosis is a significant problem in both general practice and the wider medical profession. It is estimated that 140,000 diagnostic errors occur annually, with 21,000 cases of serious harm and 4000 deaths across the entire Australian medical field.[4] Furthermore, the most common category of litigation against Australian general practitioners is alleged missed diagnosis.[5] Surely, all would agree that each error causing harm is a tragedy that should be avoided whenever possible?

The very nature of some presentations can lead the unwary practitioner into pitfalls. Papers within this issue illustrate emerging evidence of urological complications of obstructive sleep apnoea (OSA)[6] and of insomnia being co-morbidly present with OSA[7] – unexpected twists from common conditions. Systematic approaches might promote timely, correct and complete diagnosis, and the reduction of mistakes.[8]

Fortunately, general practice has a long history of advocating for a systematic approach similar to de Bono's to reasoning through complex medical presentations. Former Editor-in-Chief of this Journal, Professor John Murtagh, has taught for decades to deliberately separate medical thinking into differing points of view.[9] His method consists of first considering the 'probability diagnosis', then systematically addressing: 'serious disorders not to be missed'; 'pitfalls', or commonly missed conditions; 'masquerading' conditions that can present in many different forms; and remembering to consider mental health by asking 'is the patient trying to tell me something'. This deliberate consideration of what might be otherwise unexpected is an outstanding failsafe to minimise misdiagnosis.

As a medical educator, each year I wonder why so many registrars have not heard of this potentially life-saving framework after both medical school and residency. Explicit, focussed, and repeated teaching of clinical reasoning[10] and the systematic diagnostic approach is needed to produce high-quality RACGP Fellows. Furthermore, consistent career-long consideration and application of these principles is the mark of an excellent general practitioner.

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