

# The power of ‘I don’t know’: Embracing uncertainty in medicine - a brief reflection

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## Why was the idea necessary?

Medical education has traditionally emphasised certainty, rewarding students for correct answers rather than reflective reasoning or curiosity. This culture can discourage acknowledgement of knowledge gaps, limiting the development of adaptive expertise, reflective practice and collaborative decision-making.<sup>[1,2]</sup> Yet clinical practice is inherently uncertain: patients often present with complex and ambiguous conditions, evidence evolves and guidelines may conflict. Students who fear appearing incompetent may engage in superficial learning or defensive practice, potentially compromising patient care.<sup>[1]</sup> The hidden curriculum also reinforces the notion that admitting uncertainty signals weakness, contributing to overconfidence, missed learning opportunities, and reduced psychological safety within clinical teams.<sup>[2]</sup>

Recent work has sought to frame uncertainty more constructively, for example by explicitly teaching uncertainty tolerance, integrating reflective discussion of clinical ambiguity, and normalising uncertainty as a core professional competency rather than a deficit.<sup>[4,5]</sup> Approaches such as structured analytic frameworks, uncertainty-focused case-based teaching, and guided reflection aim to help learners recognise uncertainty, communicate it effectively, and make safer decisions in its presence.<sup>[4,5]</sup> There is therefore a growing need not only to acknowledge uncertainty but to cultivate attitudes and skills that enable students to respond constructively, supporting deeper understanding and safer, more adaptive clinical practice.<sup>[3-5]</sup>

## What was tried?

During clinical rotations as a fourth-year medical student, I deliberately reflected on and engaged with moments of uncertainty. A pivotal case involved a patient presenting with thrombocytopenia, neurological deficits, and renal impairment, raising suspicion for thrombotic thrombocytopenic purpura. Rather than guessing or remaining silent, I verbalised my uncertainty and sought guidance from the supervising consultant. This created a teaching moment in which reasoning, differential diagnosis frameworks, and the limitations of current knowledge were explicitly discussed.

Following the encounter, I documented my reflections and shared them with peers in discussion sessions. These reflections focused on strategies for managing ambiguity, recognising cognitive biases and fostering intellectual humility. By deliberately confronting uncertainty rather than avoiding it, I was able to integrate new knowledge more effectively, strengthen my clinical reasoning skills, and develop a mindset that values learning over performance.<sup>[2,3]</sup>

## What were the lessons learnt?

Acknowledging uncertainty transformed a potentially stressful encounter into a rich learning experience. Key lessons included:

- **Intellectual humility enhances learning:** Admitting ‘I don’t know’ created space for guided mentorship and deeper understanding of complex concepts.<sup>[3]</sup>
- **Adaptive expertise develops through reflection:** Engaging with ambiguity improved structured reasoning and enhanced long-term knowledge retention.
- **Collaborative practice strengthens patient care:** Transparency regarding uncertainty fostered open team discussions, reducing the risk of errors and improving collective decision-making.
- **Cultural shift is possible:** Sharing reflections encouraged peers to adopt similar practices, challenging the hidden curriculum that equates uncertainty with incompetence, even though meaningful cultural change may unfold slowly over time.
- **Enhanced resilience and curiosity:** Embracing uncertainty increased my motivation to research, ask more rigorous questions, and approach future cases with confidence tempered by insight into personal limitations. However, expressing uncertainty in clinical settings required significant resilience, as some senior clinicians continue to value decisive certainty over reflective doubt. Learners therefore had to navigate the possibility of negative judgement while maintaining their commitment to transparent and safe decision-making.<sup>[6]</sup>

Integrating uncertainty into medical curricula can help foster reflective, adaptive and resilient physicians. Practical strategies include case-based learning with incomplete information, assessment that rewards reasoning processes, modelling uncertainty during teaching rounds, and structured reflective sessions for students to explore knowledge gaps in a safe environment.<sup>[1,2,6]</sup> Encouraging students to view ‘I don’t know’ as a starting point for inquiry promotes intellectual humility, lifelong learning, and safer, patient-centred care, preparing future clinicians to navigate complex, real-world clinical scenarios with confidence and collaboration.

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