

## Storytelling in patient case scenarios - a novel approach to health professions online education

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### Why was the idea necessary

Passive, non-interactive theory delivery in online health professions education (HPE) often results in less effective learning outcomes and a lack of learner engagement.<sup>[1,2]</sup> Such traditional approaches contribute to shortcomings in addressing critical thinking and understanding in healthcare training.<sup>[2]</sup> Healthcare workers frequently struggle to apply theoretical knowledge, creating a gap between professional understanding and patients' subjective experiences, which narrative medicine aims to minimise.<sup>[2]</sup> The traditional educational 'info-dumping' approach often used in HPE imposes excessive extraneous cognitive load, overwhelming limited working memory capacity and hampering the transfer of information to long-term memory.<sup>[3]</sup>

### What was tried

We redesigned a multi-modular, 20-hour online contraception course. The course was transformed into a more efficient 6 - 8 hour immersive, story-driven learning experience for professional nurses and was published in February 2025.

Our core innovation involved embedding contraceptive theory directly within unfolding patient narratives, leveraging storytelling techniques such as 'world-building'. This technique involves organically layering crucial information as it becomes pertinent to the story and, when used in HPE, creates a rich, context-driven online learning environment. Such narrative case-based learning is inherently engaging, promoting learner involvement and fostering empathy by allowing learners to connect with characters' experiences.<sup>[2]</sup> This approach promotes empathy, critical thinking, and a more holistic understanding of patient problems in healthcare education.<sup>[2]</sup>

The design, underpinned by Cognitive Load Theory, aims to reduce extraneous load and optimise germane load by presenting theory within a meaningful context.<sup>[1]</sup> Interactive, non-graded decision points are strategically integrated both before and after the relevant theory. 'Before' questions, supported by the 5E model of inquiry-based learning, foster curiosity. 'After' questions, meanwhile, serve to consolidate understanding. This interactive design promotes a learning flow that mirrors real-life patient consultations, a practice also shown to be effective in well-designed online professional learning environments.<sup>[3]</sup>

### What were the lessons learnt

By October 2025, the redesigned course was completed by a cohort of learners at our online school. This retrospective analysis summarised preliminary feedback in Table 1 and demonstrated consistently strong positive reviews. Most respondents reported increased theoretical knowledge and enhanced confidence as contraception providers. The

**Table 1: Likert scale feedback responses of contraception course, February – October 2025**

Feedback Question	Breakdown of positive responses (%)	Total positive (%)
'This course has increased my knowledge on the theory of contraception.'	'Strongly agree' (57.9%) and 'Agree' (38.9%)	96.8%
'Now that I have completed this course, my confidence to be a provider of contraception services is.'	'Excellent' (53.7%) and 'Good' (36.8%)	90.5%
'Did using patient stories help you better understand the theory and content covered in the course?'	'Strongly agree' (48.4%) and 'Agree' (50.5%)	98.9%
'How engaging did you find the interactive questions embedded within the patients' stories?'	'Very engaging' (75.8%) and 'Engaging' (24.2%)	100%

utility of the narrative format was affirmed by nearly all learners, who agreed that patient stories aided understanding, while the interactive questions were universally found to be engaging.

This narrative-driven approach, deeply rooted in cognitive learning principles,<sup>[1]</sup> meaningfully situates learning within clinical contexts. It demonstrates how relevant and interactive learning experiences can significantly improve learner engagement, knowledge retention, and clinical confidence.<sup>[2]</sup> This innovation advances the goal of closing the 'know-do gap' and preparing a workforce of more confident prescribers, strongly reinforcing that effective andragogical design, rather than the instructional delivery medium alone, is fundamental to its impact in HPE.<sup>[3]</sup>

This online, story-driven format offers inherent scalability to other topics in HPE, allowing for broad dissemination. Although the development time for intricate narrative structuring is greater, the benefits for learner engagement and confidence are evident. Future research could explore broader applicability to a larger audience and controlled comparisons.

**Data availability statement.** None.

**Declaration.** None.

**Acknowledgements.** Western Cape Department of Health People Development Centre, Knowledge Translation Unit (KTU), University of Cape Town, Michaela Levy (KTU), Daniella Georgeu-Pepper (KTU).

**Author contributions.** KJ: conceptualisation, methodology, data curation, formal analysis, interpretation of data, writing – original and final draft. CK:

critical revision of important scientific content, review and editing. HB: approval of version to be published, supervision, review and editing. C-JR: approval of version to be published, review and editing, supervision and mentorship.

**Funding.** Western Cape Department of Health and Wellness, Knowledge Translation Foundation.

**Conflicts of interest.** None.

*Afr J Health Professions Educ* 2026;18(2b):e4323. <https://doi.org/10.7196/AJHPE.2026.v18i2b.e4323>

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Received 6 November 2025. Accepted 15 April 2026.