EDITORIAL

Evidence versus fake news: Teaching research skills to equip students for practice in the 21st century

False information, colloquially known as "fake news", permeates our contemporary society and poses an ongoing challenge to our collective wellbeing. In healthcare, the proliferation of misinformation carries significant implications, potentially jeopardising the safety of individuals and the public at large.

Thus, the importance of teaching critical appraisal of information and other basic research skills is more pertinent than ever for health professional students. Students need to be able to critically analyse and synthesise multiple pieces of evidence, especially where that evidence may be conflicting or inconclusive. However, there is a lack of consensus on research skills required in health professional degrees (Eley et al., 2022; Lee et al., 2020), and students often have difficulty engaging with courses in evidence-based practice (Lee & Jauncey-Cooke, 2023). There is a need to broaden the definition of "research skills" in curricula to enable students to develop competencies through effective and engaging learning tasks.

To effectively equip health professional students with the necessary research skills, it is crucial to first identify and address the key research skills threshold concepts, that is, which research skills are essential for students to acquire and which are desirable. A recent paper identified seven research skills that were most frequently reported across undergraduate and post-graduate programs (Vieno et al., 2022):

- Critical appraisal
- Information synthesis
- Decision making
- Problem solving
- Data collection
- Data analysis
- Communication

These skills are not only useful during academic programs but also across a range of career pathways in health. This should prompt health professional educators to reflect on current approaches to teaching this content and how well students are developing these research skills.

Curriculum real estate is tight, particularly in medical degrees, though the problem extends through all health professional programs. In the era of fake news, the profile of research education needs to be raised, and time assigned for developing research skills, critical appraisal and evidence-based practice should not be sacrificed. Clinical skill development and clinical reasoning remain underpinned by facts and evidence, thus sacrificing research education time for clinical or other skills development is short sighted and counterproductive.

There are other benefits to students undertaking research projects. Healthcare settings can directly benefit from student research projects supervised by clinical supervisors. A scoping review by Smith, Robson, Robinson and Patton, published in this issue, found that student research projects, quality improvement activities and service evaluations can enable health departments to increase their profile. Further, at the end of training, some health professionals need to undertake a research project for registration with their health professional college, such as the Royal Australasian College of Physicians. Research training undertaken during health professional degrees can provide the fundamental research knowledge and skills needed by graduates for these college projects.

Research training is an essential component of medical education and plays a crucial role in preparing future healthcare professionals for the challenges of the 21st century. By providing health professional students with a sound research education, we can equip them with the skills and knowledge necessary to develop innovative solutions to complex health challenges, contribute to the advancement of medical knowledge and improve patient outcomes.

In this issue

Indigenous research paradigms and methodologies are introduced by Bolton, Remedios and Andrews in this issue's Focus on Methodology. The authors describe their experience exploring the intersection between Indigenous and Western research, with the aim of improving health professional educators' methodological understanding and enriching qualitative research.

Two papers in the ANZAHPE 50th anniversary series trace aspects of the Association's values, history and envisaged future: Ash and colleagues outline ANZAHPE's nurturing role in promoting and supporting health professional education practice, scholarship, research and leadership; Ryan, O'Mara and Tweed highlight the importance of collaboration and harnessing of technology as they consider the intended and unintended consequences of adopting programmatic assessment.

Undergraduate clinical placements and simulation are explored in several papers in this issue. The role of communities of practice in supporting workforce development strategies in Indigenous health and education settings is investigated in a systematic review by Wynn, Delbridge, Palermo and Wilson. A scoping review by Pope, Barclay, Dixon and Kent explores models and approaches of allied health student placements. Use of simulation to develop allied health students' interprofessional skills and understanding across multiple disciplines and campuses is reported by Robson and colleagues.

Three papers focus on post-graduate training and research, and the graduate experience. Inconsistencies in the training of aspiring surgical trainees in Australia are investigated by Ealing and colleagues, who moreover attempt to define the skills required of trainees who seek admission to formal surgical education training. The experience of graduate

nurses in New Zealand is explored by Jamieson and colleagues. Finally, Crowe, Mendez, Churchill and Jones report on an innovative program providing training and support to health professionals undertaking part-time external doctoral studies, highlighting the importance of research education to improve patient outcomes through research translation.

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