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Education for sustainable healthcare: Setting the educational agenda for our future

"Today we are faced with a challenge that calls for a shift in our thinking so that humanity stops threatening its life-support system. We are called to assist the Earth to heal her wounds and, in the process, heal our own" (Maathai, 2004).

The above quote is from Wangari Maathai's Nobel Peace Prize lecture in Oslo, Norway, on December 10, 2004. Maathai, the first black African woman to win a Nobel Prize, recognised the urgency of the threat to our planetary "life-support systems" and, thereby, to ourselves. In 1977, she initiated the "Green Belt Movement", focused around planting trees in Kenya to promote female empowerment and sustainable development. In doing so, Maathai showed her understanding of the profound connection between health, environment and intergenerational and gender equity. Her subsequent community education and mobilisation program reflected the importance of cultivating in Kenyans the "values they wish to see in their own leaders" (Wangari, 2004, para. 18). Reflecting on this indigenous African leadership, we ask what are the leadership values we wish to cultivate in ourselves and our learners? How can we inspire our students to adopt these values and take action as current and future leaders? How can we mobilise educators to this task to "educate for sustainable healthcare"?

According to Costello et al. (2009), "climate change is the greatest threat to sustaining planetary and population health in the 21st century" (p. 1693). In Australia, analysis has demonstrated that the healthcare sector itself contributes approximately 7% of the nation's CO₂ emissions, with 65% (of this 7%) arising from hospital activities and pharmaceutical use (Malik et al., 2018). Yet, few health faculties have developed a systematic integration of sustainability, climate change and planetary health concepts across their curricula. While there is a growing body of literature on educating for sustainability, there is a need to grow best practice evidence on educating for sustainable healthcare.

Sustainability itself has been variously conceptualised. The Brundtland Report's classic 1987 definition of sustainability succinctly describes it as "meet(ing) the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 16). The United Nation's sustainable development goals (SDGs) have drawn attention to the need for social, environmental and economic sustainability, making the case for interlinking these three core elements. In 2017, Raworth drew on the SDGs in designing her model termed "doughnut economics", combining the concepts of social, environmental and economic justice into a framework that calls for a "social

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foundation" for all (including healthcare, housing and education) and an "ecological ceiling" (including biodiversity loss, air pollution and climate change) that we cannot safely exceed. Others have promoted teaching the "One Health" approach, operating at the nexus between animal, human and environmental health, to facilitate action on the SDGs (Villanueva-Cabezas et al., 2022). While these concepts continue to evolve, we need to step into the space to educate for sustainable healthcare without delay. The 2021 AMEE Consensus Statement on Planetary Health and Education for Sustainable Healthcare defines education for sustainable healthcare as "the process of equipping current and future health professionals with the knowledge, values, confidence and capacity to provide environmentally sustainable services through health professions education" (Shaw et al., 2021, p. 272).

What, then, is the place of interprofessional learning in this process? Whilst education has traditionally located the clinician within a hospital or community-based setting operating within an associated multidisciplinary team, it is now apparent that educating and advocating for institutional sustainability requires professionals skilled in transdisciplinary thinking (Shaw et al., 2021; Villanueva-Cabezas et al., 2022). Unfortunately, such attributes are barely visible in current healthcare praxis in undergraduate, postgraduate and continuing education curricula. Indeed, most sustainability education sits within a single profession, subject and, sometimes, a single lecture within a program. We would suggest that interprofessional learning is central to addressing this and the collaborative "systems thinking" elements of sustainability pedagogy (Marope et al., 2017; Shaw et al., 2021).

Indeed, we have developed undergraduate One Health interprofessional subjects by explicitly recognising that promoting proficiency in sustainability thinking and skills is impeded by the conventional acculturation into professional education silos (Villanueva-Cabezas et al., 2022). Overcoming this challenge argues for early, holistic and inclusive teaching methods that incorporate different ways of knowing and being applied within "truly diverse student cohorts" (Villanueva-Cabezas et al., 2022, e188). Similarly, a recent regional assessment of climate change education in public health and medical curricula identified the topic's sequestration within global health and epidemiological subjects as one barrier to broader uptake and impact (Lal et al., 2022).

Hence, we are calling for educating for sustainable healthcare to be more ambitious, to shift from single discipline and single-subject engagement to interdisciplinary, interprofessional and transdisciplinary professional education. We need to work with colleagues from a range of professions, within and beyond health, to understand how we can incorporate meaningful learning activities into our programs and enable students to take powerful sustainability action while learning. Beyond the excellent 2021 AMEE consensus statement, there are multiple resources to help. In 2017, UNESCO published its recommended key competencies, including anticipatory, strategic, collaborative, critical thinking, system-thinking, normative, self-awareness and integrated problem-

solving competencies, that prepare learners for influencing change (Marope et al., 2017). Anticipatory competency, for example, emphasising "evaluat[ing] multiple futures: possible, probable and desirable" (Marope et al., 2017, p. 57), builds capability to be forward thinking and responsive.

It has been proposed that the leadership, and followership, ethos underlying educating for sustainability should be that of the "eco-ethical" practitioner who promotes collaboration, is empathic and compassionate and inspires positive action that is regenerative, socially and environmentally accountable as well as being First Nations informed and respectful (McKimm & Mclean, 2020; Shaw et al., 2021). Such an ethos links to the concept of the bi-focal clinician educating students to address biophysical health issues in the short term while taking effective action to address the upstream structural factors that impact on health. It is not enough that health workers manage the health impacts of climate change alone, with lack of knowledge or a disregard for the systems that cause the disease outcome.

This ambition calls for us to be strategic in using current enablers to mobilise support for education for sustainable healthcare outcomes. We have seen success when our professions require specific attributes, competencies and content for accreditation. Education for cultural safety and interprofessional education have increased rapidly on the back of professional accreditation requirements, and we need to advocate for our professions to require sustainability literacy and competencies for accreditation, acknowledging these as essential knowledge and skills for health practitioners.

As educators, we have responsibility for educating the next generation of health professionals and building best practice models of educating for sustainable healthcare. We have the advantage of co-designing curricula, including Indigenous perspectives and wisdom, to inform vision, learning activities and assessments. This is a moment when educators can come together in a community of practice, sharing our understandings and knowledge; implementing, researching and publishing our practice; and enabling our leaners to embrace their personal, professional and political identities to shape the near and distant future. ANZAHPE can take the lead in promoting this community of practice. The good news is such a possibility is being offered to us. The ANZAHPE planetary health education HTAG team was launched by Professor Michelle McLean in 2021, and all members of ANZAPHE can find a space to learn more with and from colleagues. As Wangari Maathai (2004) put it, "In the course of history, there comes a time when humanity is called to shift to a new level of consciousness, to reach a higher moral ground. A time when we have to shed our fear and give hope to each other. That time is now" (para. 26).

In this issue

The themes of interprofessional learning, guided student learning and considered curricula design are picked up in the papers published in this issue. Simmons, Callander, Barker and Barnett report on a literature review and the Triple Aim framework to explore the impact of a student-led healthcare service on patient outcomes, while Beckman, Mandrusiak, Forbes, Mitchell, Tower, Cunningham and Lewis used a mixed method study to examine the impact of a student-led interprofessional clinical placement on student, clinical educator and client experiences. Hale & Adhia report on the successful introduction of a model that facilitated continuous student and educator feedback to supplement end-of-course curricula feedback and found that students appreciated seeing changes in response to their feedback. Examining the links between spatial ability, motivation and anxiety when medical students learn neuroanatomy, Newman, Carr and Meyer draw attention to the possibility of personalised educational approaches. In contrast to the close attention to students' learning experience, Mastronardo, Wong, Grace, Fazalbhoy and Muddle direct attention to curricula design and present a close examination of the osteopathy curricula in preparing students for their future careers, identifying strengths and gaps in what is on offer to the graduate. And, in a short paper, Judd and Bretnall present the perfect acronym with their work integrated learning repository of additional resources (WIL ROAR), which contains a body of resources and feedback to support students with diverse learning needs during the time of COVID-19. As part of the focus on methodology theme, Vears and Gillam provide an introduction to inductive content analysis. Finally, Bailie reflects on support needed by students and staff following catastrophic floods, highlighting the impacts of climate change on health professional education.

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