

The Role of Medical Schools in Preparing Future Doctors for Sustainable Healthcare

Careers

Name

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Medical schools are essential in the development of knowledge, skills, and professional values of future physicians. With the growing burdens on healthcare caused by climate change, environmental deterioration, and scarcity of resources, sustainability has become an indispensable part of medical professionalism. Sustainable healthcare focuses on providing quality care services to patients with reduced environmental impact and maintaining resilience within healthcare systems. Medical education, therefore, must adapt to these world healthcare challenges to prepare future doctors to work in a sustainable career. A systematic approach to sustainability by medical schools as an element in curriculum, faculty education, and practicum must tackle climate-related health issues, bridge gaps in education, and equip future physicians to provide global populations with in-environmentally responsible, resilient, and ethical care.

Standing evidence indicates that there exist serious gaps in sustainability education in medical training. Elhoshy et al. (2025) also discovered that most medical students join training with poor knowledge of planetary health and sustainable healthcare concepts, although they are aware of their significance. This deficiency in the prior knowledge is not student indifference but a deficiency in the focus of their curriculum. The lack of sustainability in mandatory courses might negatively impact students because they could be unable to relate environmental dynamics to clinical outcomes, which could restrict their readiness to work.

Institutional evaluations also add additional evidence to these shortcomings. Planetary Health Report Card, a survey of medical schools worldwide, indicated that more than 98 percent of the involved schools were rated C or lower regarding sustainability curriculum integration (Hampshire et al., 2022). These results suggest that sustainability education is commonly

decentralized or an elective choice over essential competency. Lack of well-crafted learning outcomes and examinations means that sustainability will continue to be marginal to medical education, although it relates to patient safety and health.

Surveys of medical curricula have shown a significant institutional variation in planetary health education. An investigation into UK medical school curricula revealed significant variation in the treatment of planetary health-related issues, with some medical schools providing direct and systematic coverage, and others integrating ideas among other sustainability-related topics (Bevan et al., 2022). This leads to lopsided treatment of students from various medical schools on the health implications of climate change and environmental degradation. This discrepancy brings about disparities in graduate readiness, leaving certain future doctors better prepared to identify and act on climate health risks than other physicians. Also, this variability undermines the collective professional accountability since the medical workforce has no common base of understanding, so that they can respond to the emerging environmental threats to public health.

The faculty capacity is determinant in defining sustainability education. According to Bray, (2025), the key obstacle to successful teaching in sustainable healthcare is low levels of faculty expertise and confidence. In cases where teachers are not well-trained, the content of sustainability can be presented in a shallow manner or may not be provided at all. Faculty development programs are thus a necessity so that teachers can incorporate sustainability concepts into clinical education and mentor students to be environmentally responsible.

Sustainability education is also enhanced by experiential learning methods. A systematic scoping review in Carrion et al., (2025) established that community-based projects, system-oriented learning, and reflective tasks enhanced the knowledge of sustainable healthcare in

students and their desire to transfer this knowledge into practice. These strategies enable students to observe the relationship between clinical decisions and resource utilization, cost of health care, and environmental results.

In conclusion, medical schools are best placed to equip future physicians for sustainable healthcare careers. Medical education can prepare graduates with the skills necessary to provide responsible, resilient, and ethical medical care by instilling sustainability throughout the curricula, through faculty development, and with a focus on experiential learning. Otherwise, the profession may not end up anything other than reinforcing the practice that negatively affects environmental and population health.

References

Bevan, J., Blyth, R., Russell, B., Holtgrewe, L., Cheung, A. H. C., Austin, I., Shah, V., Butler, M., & Fraser, S. (2022). Planetary health and sustainability teaching in UK medical education: A review of medical school curricula. *Medical Teacher*.
<https://eprints.soton.ac.uk/473454/>

Bray, J. M. (2025). *Enhancing Faculty Confidence and Candidate Selection: Evaluation of a Standardized Holistic Interview Rubric in Nursing Program Admission*.
<https://arch.astate.edu/dnp-projects/112/>

Carrion, C., Llamas, C. A., Safitri, E. D., Domènech-Panicello, C., Downward, G. S., Findyartini, A., Greviana, N., Murni, I. K., Lee, S. M., Llimós, M., Moreno, A., O'Brien, S. L., Ruiz-Mallén, I., Soemantri, D., Widyahening, I. S., Ranakusuma, R. W., Fitriani, D. Y., & O'Callaghan-Gordo, C. (2025). Conceptual frameworks, competencies, contents and teaching methods in planetary health education for health students and professionals: A global systematic scoping review. *BMC Medical Education*, 25(1), 956.
<https://doi.org/10.1186/s12909-025-07450-x>

Elhoshy, H. S., Aref, S. R., & Rizk, M. H. (2025). Evaluation of Planetary Health and Sustainable Healthcare Online Course for Undergraduate Medical Students: A Quasi-experimental Study. *Medical Science Educator*. <https://doi.org/10.1007/s40670-025-02462-0>

Hampshire, K., Islam, N., Kissel, B., Chase, H., & Gundling, K. (2022). The Planetary Health Report Card: A student-led initiative to inspire planetary health in medical schools. *The Lancet Planetary Health*, 6(5), e449–e454.