

Strengthening health professions education and training: The power of evidence-based approaches

Health professions are anchored in the education and training that underpin them; such training continues to evolve with support from the growing evidence base.^[1] Health professions education (HPE) focuses on the theories, principles, concepts, methods, skills and attitudes specifically required for the education and training of health professionals within the specific learning environment of hospitals or communities. HPE also aims at encouraging the application of educational principles in the unique context of health professions and healthcare settings. The aforementioned reasons typically differentiate HPE from more general educational training. In developed and developing countries, greater variety in skills within health professions is needed if healthcare is to be made accessible to all.^[1] Furthermore, to be able to contribute to the advancement of the different health professions, today's health professionals have to be highly skilled and knowledgeable in a number of competencies.^[2] This implies that health professionals must be educated and trained to the required high standards to address the ever-dynamic community health needs. Improving the quality of training is, therefore, an important contribution to strengthening health systems.^[3] However, such improvement in training needs to be supported by good evidence-based practices that are feasible, especially in institutions with limited resources.

There is a global drive to expand the numbers and competencies of health professionals being trained in response to societal needs.^[4] In addition, major reforms and innovations are taking shape in the field of HPE.^[1] Such reforms include student-centred learning, interprofessional education, community-based education, competency-based education, e-learning and service-learning.^[5,6] To implement these reforms, faculty in health professions training institutions not only need to improve the existing training methods, but also innovate other feasible methods to improve training by means of evidence-based scholarly approaches. *AJHPE* has had a strong tradition of publishing scholarly original research and reviews related to improving the training and performance of health professionals, using evidence-based practices. In this issue, the use of scholarly evidence to improve the education and training of health professionals as well as strengthening existing systems resonates through all the articles, which can generally be grouped into three over-arching themes.

The first theme is about enhancing the learning environment, which is reflected in a number of articles. For example, the article by Westmoreland *et al.*^[7] examines the improvement of the learning environment and wellness of trainee registrars to prevent burnout and exhaustion, while Urimubenshi *et al.*^[8] explore solutions from students' perceptions on how to improve their learning environment. The article by Jacobs and Venter^[9] speaks to improving the clinical learning environment using standardised patient simulation. Dlungwane *et al.*^[10] and Idon *et al.*^[11] explore means of improving the learning environment of post-graduate trainees. The important idea of using feedback to improve the clinical learning environment of students is also discussed in this issue.

The second theme relates to improving skills and competencies of student trainees to address the prevailing needs. A key factor is the need to identify gaps within the skills and competencies of health professionals and design appropriate training interventions using an evidence-based approach. For example, the articles by Van der Merwe *et al.*,^[12] Sanders *et al.*^[13] and Koch *et al.*^[14] indicate skills gaps and appropriate training interventions to enhance trainee skills.

The last theme in the current issue is the value attached to community-based education, which in HPE has been reported to be an excellent mechanism of promoting service-learning^[15] and stimulating the interest of students to work in rural and under-served areas.^[16] This is reflected through aspects of community-based training and how it can be improved to promote a more positive student experience.

Therefore, the scholarly research work in this edition of *AJHPE* demonstrates that improving the training of health professionals can indeed be fanned by an evidence-based foundation. In Africa, many institutions have adopted and adapted teaching and learning approaches from Europe and the USA. Taking on these approaches, as a whole, has proved to be a challenge owing to our own systemic and contextual differences. Therefore, while external forces may drive evidence-based practice in HPE, there is a need for individual institutions to generate local evidence of what works best through scholarly and empirical inquiry. This will fuel and sustain innovations in HPE in Africa.

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1. Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet* 2010;376(9756):1923-1958. [https://doi.org/10.1016/S0140-6736\(10\)61854-5](https://doi.org/10.1016/S0140-6736(10)61854-5)
2. Bhutta ZA, Lassi Z, Pariyo G, Huicho L. Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration into National Health Systems. Geneva: Global Health Workforce Alliance, 2010.
3. Hung W. All PBL starts here: The problem. *Interdiscipl J Problem-Based Learn* 2016;10(2). <https://doi.org/10.7771/1541-5015.1604>
4. Xue H, Qian J, Wang L, et al. 3C3R modified PBL pediatric teaching of Chinese medical students. *PLoS ONE* 2013;8(5):1-9. <https://doi.org/10.1371/journal.pone.0063412>
5. Amoako-Sakyi D, Amonoo-Kuofo H. Problem-based learning in resource-poor settings: Lessons from a medical school in Ghana. *BMC Med Educ* 2015;15:221. <https://doi.org/10.1186/s12909-015-0501-4>
6. Burch VC, Sikkakana CNT, Yeld N, Seggie JL, Schmidt HG. Performance of academically at-risk medical students in a problem-based learning programme: A preliminary report. *Adv Health Sci Educ* 2007;12(3):345-358. <https://doi.org/10.1007/s10459-006-9006-6>
7. Westmoreland KD, Lowenthal ERD, Finalle R, et al. Registrar wellness in Botswana: Measuring burnout and identifying ways to improve wellness. *Afr J Health Professions Educ* 2017;9(3):98-102. <https://doi.org/10.7196/AJHPE.2017.v9i3.881>
8. Urimubenshi G, Songa J, Kandeke E. Assessment of the education environment of physiotherapy students at the University of Rwanda using the Dundee Ready Educational Environment Measure (DREEM). *Afr J Health Professions Educ* 2017;9(3):103-106. <https://doi.org/10.7196/AJHPE.2017.v9i3.828>
9. Jacobs A, Venter I. Standardised patient-simulated practice learning: A rich pedagogical environment for psychiatric nursing education. *Afr J Health Professions Educ* 2017;9(3):107-110. <https://doi.org/10.7196/AJHPE.2017.v9i3.806>
10. Dlungwane T, Voce A, Searle R, Wassermann J. Understanding student early departure from a Master of Public Health programme in South Africa. *Afr J Health Professions Educ* 2017;9(3):111-115. <https://doi.org/10.7196/AJHPE.2017.v9i3.793>
11. Idon PI, Suleiman KI, Olosoji HO, Mustapha Z, Abba HM. Postgraduate trainees' perceptions of the learning environment in a Nigerian teaching hospital. *Afr J Health Professions Educ* 2017;9(3):116-122. <https://doi.org/10.7196/AJHPE.2017.v9i3.786>
12. Van der Merwe B, Kruger SB, Nel MM. Radiation safety requirements for training of users of diagnostic X-ray equipment in South Africa. *Afr J Health Professions Educ* 2017;9(3):123-127. <https://doi.org/10.7196/AJHPE.2017.v9i3.691>
13. Sanders J, Makasa M, Goma F, Kafumukache E, Ngoma MS, Nzala S. A quick needs assessment of key stakeholder groups on the role of family medicine in Zambia. *Afr J Health Professions Educ* 2017;9(3):94-97. <https://doi.org/10.7196/AJHPE.2017.v9i3.831>
14. Koch GGV, Swindon LD, Pillay JD. Training requirements for the administration of intravenous contrast media by radiographers: Radiologists' perspective. *Afr J Health Professions Educ* 2017;9(3):128-132. <https://doi.org/10.7196/AJHPE.2017.v9i3.809>
15. Mubuuke AG, Oria H, Dhabangi A, Kiguli S, Sewankambo NK. An exploration of undergraduate medical students' satisfaction with faculty support supervision during community placements in Uganda. *Rural Remote Health* 2015;15(4):3591.
16. Crampton PV, McLachlan JC, Illing JC. A systematic literature review of undergraduate clinical placements in underserved areas. *Med Educ* 2013;47(10):969-978. <https://doi.org/10.1111/medu.12215>

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