Medical education to strengthen health systems in Africa: MEPI as a catalyst for change



The announcement of the Medical Education Partnership Initiative (MEPI) that committed more than USD132 million to medical schools in sub-Saharan Africa (SSA) over a 5-year period coincided with the publication of a seminal article in the *Lancet*^[1] that called for the strengthening of

health systems through transformative education. The significance of these two events has been considerable for the Faculty of Medicine and Health Sciences (FMHS) at Stellenbosch University (SU). While MEPI was to provide substantial resources that would lead to the establishment of the Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI), Frenk *et al.*'s^[1] work would offer a theoretical premise for our thinking and a model for our practice. In this edition of the *AJHPE* we endeavour to showcase some of the work and research that has emanated from the initiative. The articles provide a snapshot in time, reflecting activities that characterised the first few years of SURMEPI.

'The SURMEPI story'^[2] highlights how the project seeks to adopt innovative strategies to improve human resources for health in Africa – particularly focusing on the pipeline that commences already at secondary-school level. In describing this entry point, Moodley *et al.*^[3] introduce a key philosophical construct that provides significant direction for our work, namely social accountability and the importance of ensuring medical graduates are both academically sound and responsive to the needs of the communities they serve. Community-based education (CBE) activities run by the FMHS are based on this founding principle. Another key component of CBE is the fostering of relationships with communities such that the engagement is mutually enabling and focused on strengthening both the educational experience and the community. Creating learning centres in community nodes, therefore, provides a place where CBE can be optimised. Fish *et al.*^[4] offer a synopsis of a purposeful intervention in this regard in the 'Avian Park Service Learning Centre story'.

The establishment of SURMEPI further coincided with the implementation of the Ukwanda Rural Clinical School (RCS) and the project has been instrumental in supporting activities on this platform. The potential for enhancing retention in rural areas and heightening student awareness of the public health system has been well documented. [5] A cluster of articles present a series of evaluative research that has been undertaken at the RCS. These include a focus on what influences students' decisions to go to the RCS; [6] how RCS students following the longitudinal integrated model cope with being in a district hospital for their entire final year; [7] and what the implications are for academic success when students do opt to attend the RCS. [8]

However, simply changing the place where learning happens will not be sufficient to shift behaviour among our medical graduates. And, of course, only a relatively small percentage of our students have the opportunity to spend more than 4 - 6 weeks a year at a rural or community site. If we wish to ensure that all of our graduates emerge as agents for change, equipped to strengthen our health system, then we recognise the need to critically consider what it is that they are being taught. A comprehensive review of the medical curriculum^[9] was, therefore, undertaken with SURMEPI, specifically focusing on aspects of: public health; health systems research;^[10] evidence-

based healthcare;^[11] and infection prevention control.^[12] Importantly, this study, with its series of substudies, has already impacted on the curriculum in significant ways, ensuring exposure of all medical students to these key issues.

SURMEPI has also been active within communities to advance health systems and outcomes. Dramowski *et al.*^[13] describe a quality improvement project to strengthen infection prevention control, while Goliath and colleagues^[14] focus on an assessment of capacity-building needs among rural health managers.

The role of technology in all of our activities has been key. Reaching both students and communities through the electronic communication systems that are now available to us will be essential to ensuring a health system that is stable. An additional focus in this special edition, therefore, is on the role and uptake of podcasting among our student population.^[15,16]

As this tenure of MEPI draws to a close, there is strong focus among the 13 medical schools in SSA that received awards, as well as their African and US partners, to provide an account of how the funding has been utilised and what the outputs have been. The two final articles in this edition provide insight into this work, drawing in voices from the broader MEPI community, specifically focusing on evaluating CBE activities and offering thoughts on how this might best be done. [17,18]

It is now time to ask critical questions, and for those of us within MEPI to reflect on whether or not we have been good custodians of that which has been granted. What have we learnt as a result of having access to resources that have enabled us to enhance our educational practices? To what extent has this strengthened the health systems within which our graduates must function? How do we ensure better patient outcomes for all? Most importantly, how do we share what has been learnt in a scholarly, evidence-based manner? In 2011, Greysen *et al.*^[19] published a review of medical education in SSA, in which they acknowledged the significant developments in the field, also identifying a number of challenges within the system, and the need for more targeted research, particularly in certain neglected areas. While we recognise that this edition does not address all of the issues raised in that article, we do believe that this work will contribute to strengthening medical education as a field of inquiry.



Acknowledgements. Funding from the Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI), which is supported by the US President's Emergency Plan for AIDS Relief (PEPFAR) through Health Resources and Services Administration (HRSA) under the terms of T84HA21652, is gratefully acknowledged.

Susan van Schalkwyk
Guest Editor: SURMEPI supplement
African Journal of Health Professions Education
scvs@sun.ac.za

Editorial

References

- 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. [http://dx.doi.org/10.1016/s0140-6736(10)61854-5]
- 6736(10)61854-5]

 2. De Villiers M, Moodley K. Innovative strategies to improve human resources for health in Africa: The SURMEPI story. Afr J Health Professions Educ 2015;7(1 Suppl 1):70-72. [http://dx.doi.org/10.7196/AJHPE.503]

 3. Moodley K, Fish T, Naidoo S. The role of socially accountable universities in improving the selection of medical
- Moodley K, Fish T, Naidoo S. The role of socially accountable universities in improving the selection of medical students from rural and underserved areas. Afr J Health Professions Educ 2015;7(1 Suppl 1):76-78. [http://dx.doi. org/10.7196/AJHPE.504]
- Fish T, Lourens G, Meyer L, Muller J, Conradie H. When the clinic is not yet built ... The Avian Park Service Learning Centre story. Afr J Health Professions Educ 2015;7(1 Suppl 1):79-80. [http://dx.doi.org/10.7196/ ATHPF 5061
- Van Schalkwyk S, Bezuidenhout J, Conradie H, et al. 'Going rural': Driving change through a rural medical education innovation. Rural and Remote Health 2014;14(2493).
- Daniels-Felix D, Conradie H, Voss M. Choosing final-year placement: Why students decide not to go rural. Afr J Health Professions Educ 2015;7(1 Suppl 1):111-114. [http://dx.doi.org/10.7196/AIHPE.508]
- Health Professions Educ 2015;7(1 Suppl 1):111-114. [http:/dx.doi.org/10.7196/AJHPE.508]
 7. Voss M, Coetzee J, Conradie H, van Schalkwyk S. We have to flap our wings or fall to the ground.' The experiences of medical students on a longitudinal integrated clinical model. Afr J Health Professions Educ 2015;7(1 Suppl 1):119-124. [http://dx.doi.org/10.7196/AJHPE.507]
- Van Schalkwyk S, Kok N, Conradie H, van Heerden B. Academic achievement of final-year medical students on a rural clinical platform: Can we dispel the myths? Afr J Health Professions Educ 2015;7(1 Suppl 1):115-118. [http://dx.doi.org/10.7196/AJHPE.513]
- [Inth/Jackdoing 10.7196/AJII E.313]
 9. Dudley L, Young T, Roher A, et al. Fit for purpose? A review of a medical curriculum and its contribution to strengthening health systems in South Africa. Afr J Health Professions Educ 2015;7(1 Suppl 1):81-85. [http://dx.doi.org/10.7196/AJHPE.512]
- Mukinda F, Goliath C, Willemse B, Dudley L. Equipping medical graduates to address health system challenges in South Africa: An expressed need for curriculum change. Afr J Health Professions Educ 2015;7(1 Suppl 1):86-91. [http://dx.doi.org/10.7196/AJHPE.511]

- Rowher A, Willems B, Young T. Taking stock of evidence-based healthcare in the undergraduate medical curriculum at Stellenbosch University: Combining a review of curriculum documents and input from recent graduates. Aft J Health Professions Educ 2015;71 Suppl 1):98-104. [http://dx.doi.org/10.7196/AHPE.501]
- graduates. Afr J Health Professions Educ 2015;7(1 Suppl 1):98-104. [http://dx.doi.org/10.7196/AJHPE.501]
 12. Dramowski A, Marais F, Willems B, Mehtar S. Does undergraduate teaching of infection prevention and control adequately equip graduates for medical practice? Afr J Health Professions Educ 2015;7(1 Suppl 1):105-110. [http://dx.doi.org/10.7196/AJHPE.500]
- Dramowski A, Marais F, Goliath C, Mehtar S. Impact of a quality improvement project to strengthen infection
 prevention and control training at rural healthcare facilities. Afr J Health Professions Educ 2015;7(1 Suppl 1):7379. [http://dx.doi.org/10.7196/AIHPE.499]
- 14. Goliath C, Mukinda F, Dudley L. Capacity-building needs assessment of rural health managers: The what and the
- how ... Afr J Health Professions Educ 2015;7(1 Suppl 1):92-97. [http://dx.doi.org/10.7196/AJHPE.510]

 13 Walsh S, de Villiers M. Enhanced podcasting for medical students: Progression from pilot to e-learning resource.

 Afr J Health Professions Educ 2015;7(1 Suppl 1):125-129. [http://dx.doi.org/10.7196/AJHPE.505]
- Afr J Health Professions Educ 2015;7(1 Suppl 1):125-129. [http://dx.doi.org/10.7196/A]HPE.505]

 16. De Villiers M, Walsh S. How podcasts influence medical students' learning: A descriptive qualitative study. Afr J Health Professions Educ 2015;7(1 Suppl 1):130-133. [http://dx.doi.org/10.7196/AJHPE.502]
- Bailey R, Baingana RK, Couper ID, et al. Evaluating community-based medical education programmes in Africa: A
 workshop report. Afr. I Health Professions Educ 2015;7(1 Suppl.):140-144. [http://dx.doi.org/10.7196/AIHPP.475]
- workshop report. Afr J Health Professions Educ 2015;7(1 Suppl 1):140-144. [http://dx.doi.org/10.7196/AJHPE.475]

 18. Dreyer A, Couper I, Bailey R, Talib Z, Ross H, Sagay AS. Identifying approaches and tools for evaluating community-based medical education programmes in Africa. Afr J Health Professions Educ 2015;7(1 Suppl
- 1);134-139. [http://dx.doi.org/10.7196/AJHPE.568]
 Greysen SR, Dela Dovlo E, Olapade-Olaopa O, Jacobs M, Sewankambo N, Mullan F. Medical education in sub-Saharan Africa: A literature review. Med Educ 2011;45(10):973-986. [http://dx.doi.org/10.1111/j.1365-2923.2011.04039.x]

Afr J Health Professions Educ 2015;7(1 Suppl 1):68-69. DOI:10.7196/AJHPE.628