



## Radical changes in medical education needed globally

Quentin Eichbaum and colleagues<sup>1</sup> describe how new medical schools in Africa have developed curricula that include community and rural health components, long-term family attachments, and admission processes that are more equitable for disadvantaged students. All these worthwhile innovations have been incorporated in previous reforms of medical education,<sup>2,3</sup> but are they sufficient to meet the challenges of achieving universal health care globally? This aspiration will require massive recruitment to primary health care and retention of doctors in places where they are needed.

In developing new models for medical education in Africa, it was surprising not to see reference to the involvement over the past two decades of Cuban medical education and medical schools in many African countries.<sup>4</sup> Importantly, the Cuban educational model provides additional components that seem to produce doctors with more ability to work and stay in difficult places (panel).<sup>5</sup> These components include social responsibility, public health ethics, and community development. And although these do not substitute complementary post-graduate skills

taught in each country to meet local needs, they go a long way to provide the basis for the kind of health professional committed to vulnerable communities.

The massive challenges faced by Africa and other low-income and middle-income countries require radical solutions—the issues have been detailed by an expert group,<sup>6</sup> and WHO's Global Strategy on Human Resources for Health will report in 2016.<sup>7</sup> Perhaps the most important barrier to progress is that evaluations of all health curriculum innovations have been weak, resulting in a very limited evidence base for reform, particularly with respect to long-term outcomes such as quality of care, recruitment, and retention. Stronger evaluation approaches are being developed and implemented by the Training for Health Equity Network, helping to build alliances between innovative schools globally.<sup>8</sup>

Medical schools have always adopted a “one size fits all” approach, with all students trained in the same way, rather than recognising that at graduation career paths will diverge. The minimum core training needed to produce an effective primary care doctor might be achieved without the need for further post-graduate training. Student admission processes might prioritise recruitment from disadvantaged communities rather than academic grades. Curriculum

content could be adapted to primary care and ensure sufficient numbers of motivated doctors are available more quickly than would currently be possible. Further specialty post-graduate training would also be required and could be through a competitive selection process and related directly to health-care needs.

However, it is not just the low-income and middle-income countries that are facing these problems and seeking reform. In the UK it is believed that 8000 more general practitioners are needed; in the USA achieving universal health coverage is still not a reality. Much of the medical education in high-income countries is stale, outdated, and is not delivering what patients or the population need.<sup>6</sup> The Cuban education model merits more detailed consideration, not just for Africa but also for the rest of the world.

We declare no competing interests.

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- 1 Eichbaum Q, Nyarango P, Ferrao J, et al. Challenges and opportunities for new medical schools in Africa. *Lancet Glob Health* 2014; **2**: e689–90.
- 2 WHO. Reorientation of medical education: goal, strategies and targets (No 2). SEARO Regional Publications No. 18. New Delhi: World Health Organization Regional Office for South-East Asia, 1988.
- 3 University of Nottingham Medical School: history. <http://www.nottingham.ac.uk/manuscriptsandspecialcollections/collectionsindepth/university/university-collection/university-of-nottingham-medical-school.aspx> (accessed Jan 14, 2015).
- 4 Ebrahim S, Squires N, Bauzá Díaz M, et al. Ebola control: the Cuban approach. *Lancet* 2014; **384**: 2022.

### Panel: The six star doctor<sup>6</sup>

- Care-giver (physical, mental and social): including comprehensive continuous curative, preventive, and rehabilitative care
- Decision-maker: choosing the best way to address health problems, often within resource constraints, equitably benefiting patients and communities
- Communicator: persuading individuals, families, and communities to adopt healthy lifestyles and become partners in the health effort
- Manager: assimilating and sharing knowledge within multidisciplinary teams, working in partnerships for social development
- Community leader: understanding the determinants of health in the physical and social environment, taking positive interest in community health activities benefiting large numbers of people
- Teacher: helping patients and families to manage common conditions; training non-physician health workers to fill the human resource gap

- 5 del Rosario Morales Suárez I, Fernández Sacasas JA, Durán García F. Cuban medical education: aiming for the six-star doctor. *MEDICC* 2008; **10**: 1–9.
- 6 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**: 1923–58.
- 7 Global Health Workforce Alliance. Health workforce 2030: a global strategy on human resources for health. [http://www.who.int/workforcealliance/knowledge/resources/strategy\\_brochure9-20-14.pdf?ua=1](http://www.who.int/workforcealliance/knowledge/resources/strategy_brochure9-20-14.pdf?ua=1) (accessed Jan 14, 2015).
- 8 Larkins SL, Preston R, Matte MC, et al, on behalf of the Training for Health Equity Network (THEnet). Measuring social accountability in health professional education: development and international pilot testing of an evaluation framework. *Med Teach* 2013; **35**: 32–45.