

Cuban medical education for South Africa: from process to impact

Demand for Cuban trained doctors is high throughout Latin America, with Brazil having recently recruited 11,400 to meet the need of disadvantaged rural populations. In spite of initial resistance from the medical profession, public reception of this welcome increase in medical capacity has been warm. However in South Africa there has been some criticism of the training from Deans of Medical Schools in South Africa - but the criticism appears to be based more on perceptions and anecdote than evidence. Efforts are needed to document the benefits of increasing doctor numbers and to quantify the rate of return on the investments being made. There has also been a lack of recognition of the unique aspects of Cuban medical education, which focuses heavily on community health, community diagnosis and primary care - all things that policy documents in South Africa on the re-engineering of Primary Care, indicate that South Africa needs.

Currently, there is debate about the relevance of Cuban training programmes in South Africa and a view that existing universities are capable of providing the training doctors need to meet the needs of the whole country [1]. The South African experience of Cuban approaches to medical education is important in terms of its scale, in understanding the advantages and disadvantages of training overseas for local need, and how this approach might be strengthened in order to maximise the health benefits. This is work that it might be adapted for use in other countries.

Evaluations

Evaluations of medical education are important as research findings should replace anecdote and prejudice with evidence. Little evidence exists on Cuban medical education in Africa and the few studies that have been conducted in Portuguese speaking African countries have concluded that investments in medical education have not been as successful in improving retention in underserved areas as was hoped [2,3]. The evidence shows that graduates from Cuban supported medical courses are more likely (80+ %) to aspire to public rather than private sector service, but many want hospital specialist rather than primary care careers [4]. These findings largely reflect failing health systems which do not provide adequate infrastructure and support for primary care, rather than any failure of the (and not necessarily the Cuban approach), which has been shown to meet rural PHC needs in many Latin American countries. It appears that neither the African or Latin American experience can be generalised to the situation in South Africa, which faces its own unique set of challenges.

NICE International research project

Using a DfID policy research programme grant, evidence about the impact of the Cuban approach is being collected to aid policy decisions on improving primary health care and to learn lessons about how medical education might be reformed – both in South Africa and UK.

The potential value of this research is in providing an evidence base for future decisions regarding the programme. The research, taking a Health Technology Assessment approach, will produce cost data and link these to an assessment of impact which should help identify incremental benefit of the investment. Furthermore, building a picture of where Cuban doctors ultimately work the research should help to demonstrate how the programme can make a significant contribution to meeting South Africa's need to expand access to primary care physicians in rural and urban deprived areas throughout the country if the health system is strengthened to create primary care jobs where they are needed.

A research planning meeting (29 June – 1 July) held in HSRC in Pretoria, South Africa, and involving the NICE International project team, Cuban-trained doctors now back in South Africa, professors from a range of universities, a member of the Academic Review Committee for the Cuban-South Africa

programme, and directors of the Pan-American Health Organisation (PAHO) Cuba came up with some surprising observations.

Cuban-trained doctors feel marginalised on their return with many of them relegated from 6th year internships to 4th year medical students. And worse, some of them spend over 2½ years before they graduate, having to repeat courses that they are deemed to have failed. After spending 6 years away from their families and country, learned a new language and culture, this seems perverse way to treat them. Questions about the extend of pastoral care, including mentoring, need to be asked in order to understand whether Cuban trained South African doctors are particularly disadvantaged, or whether this reflects a more general failure in pastoral care.

Faculty from Stellenbosch University exemplified the problems returning Cuban-trained students experience. Professor van Heerden drew on a selected sample of student and Faculty comments and perceptions to conclude that these students' desire to serve their communities was because their communities view them as "the one that is going to make it in life and make us very proud". But he also described some negative and heavily value laden faculty perceptions of these students, which includes comments about students: having a sense of 'entitlement', or being 'lazy' and 'incompetent'. Views he strongly questioned having heard the testimony of three exceptionally talented Cuban trained doctors who also spoke at the meeting. He also explained that in Stellenbosch University, some teaching was given in Afrikaans which these students did not speak, producing further hurdles for them. He made it clear that these views are anecdotal and make a strong case for the research we are proposing.

Despite these discouragements, testimonies of the three Cuban trained doctors highlighted a level of enthusiasm that was of these doctors is inspiring. One has established an NGO for volunteers who would support health literacy among his rural disadvantaged community. This provided a small income for the volunteers, increased local understanding of the causes, prevention and care of common diseases, and reduced his workload as he now had patients who were in control of their care.



Dr S Madela trained in Cuba. He is happy to use the pavement as his clinic.

Changing the narrative

The narrative on the Cuban trained doctors in South Africa has to change. Currently the discourse is focused on the content of the Cuban education and whether it is suitable for South Africa, which has led to a dialogue about the process of topping up the Cuban training to make sure doctors have the same skill set as South African trained ones. An alternative narrative would focus on the values and the skills and competencies that many Cuban trained doctors possess that are prized in many other parts of the World where Cuba has made a major contribution to service provision (e.g. West Africa for Ebola, Haiti for the earthquake response, Pakistan's flood response, Brazil's rural doctor shortage).

Medical education should aim to produce doctors that meet the health needs of both rural and urban populations, and be accessible to both rich and poor. South Africa's current medical school output of doctors is a long way from meeting these aspirations. The South African Human Resources for Health strategy (2012/13 – 2016/17), indicates that only 35 (3%) of the annual production of 1200 doctors end up working long term in rural areas, a significant failure in terms of meeting population needs. However, this then needs to be contrasted with the success of the Walter Sisulu University training (which is based on the Cuban approach), in retaining and locating students from rural areas back in their own communities to serve their needs. The fact that other established Universities sometimes look down on this achievement rather than celebrating its success, and question the quality of the doctors trained, needs to be documented as this further highlights that a focus on narrowly defined academic measures of quality, rather than on health impact and coverage is failing to address what really matters – improving the health of the population.

2017 and beyond

The dominant issue now is that from 2017 about 900 Cuban-trained doctors will return to South Africa each year until 2020/1 but plans for their deployment are only at a sketchy stage. Recognising the linkage between producing doctors and building the health system in South Africa is critical to achieving any success in gaining universal health coverage and ensuring value for money of current investments. Rather than expanding training platforms in medical schools, expanding the training platforms in primary care settings will be essential. It is here supporting “ward-based outreach teams” that Professor Steve Reid, University of Cape Town proposes that Cuban-trained doctors could be placed. In the same context, it will be important to link any plans involving UK technical support currently being considered by the Royal College of General Practitioners to a good understanding of South Africa's evolving human resources for health strategy and commitment to PHC re-engineering.

Proposed investments in family medicine and primary care and the creation of training platforms for health promotion, disease prevention and health care would provide the ideal environment within which many of the 900 returning Cuban-trained doctors each year could use the knowledge, skills and enthusiasm they have gained for the benefit of rural and urban deprived communities. Their 6th year internship could be based here with supervision provided by trainers drawn from family medicine and primary care. There is still time to set up ‘training the trainer’ courses, strengthen pastoral care and mentoring, and make robust plans for 2017 and beyond.

Overall our meeting highlighted the huge potential value of the Cuban training to support South Africa's ambitions to strengthen and re-engineer primary healthcare. There was a strong consensus that unless we can link efforts to strengthen family medicine training to the re-integration of returning Cuban trained doctors, we will be missing an important opportunity to improve health and equity in South Africa.

1. Mayosi BM, Benatar SR. Health and Health Care in South Africa — 20 Years after Mandela. *New Eng J Med.* 2014;371:1344-1353
2. Ferrinho P, Sidat M, Fresta MJ, Rodrigues M, Fronteira I, da Silva F, Mercer H, Cabral JC, Dussault G. The training and professional expectations of medical students in Angola, Guinea-Bissau and Mozambique. *Human Resources for Health,* 2011;9:9
3. Fronteira I, Rodrigues A, Pereira C, Silva AP, Mercer H, Dussault G, Ferrinho P: Realities and professional expectations of medical students attending Guinea Bissau's medical school in 2007 school year. *Acta Med Port* 2011, 24: 265–270).
4. Ferrinho P, Valdes AC, Cabral J. The experience of medical training and expectations regarding future medical practice of medical students in the Cuban-supported Medical School in Timor-Leste. *Human Resources for Health* 2015;13:13