

Doctor shortages: Unpacking the ‘Cuban solution’



The programme which trains South Africans as doctors in Cuba will expand nearly tenfold for the next 5 years, pouring 1 000 undergraduates annually into our currently under-resourced local medical campuses from 2018 onwards. For the past 3 years, the annual output of Cuban-trained South Africans, ‘polished up’ in their final year at local medical schools, came to about 8% of the 1 300 graduates fully-trained locally.

The sudden acceleration in Cuban training is a crisis intervention aimed at buying time to adjust and expand our local medical training platform so that it can increase local doctor output while continuing to better re-orientate the Cuban ‘returnees’ towards South Africa’s very different disease profile.

The last three year’s crop of ‘trained-in-Spanish’ graduates currently work as interns or community service officers – and like all Cuban-trained local doctors, will serve 5 years post-internship in their district of recruitment. *Izindaba* interviewed several players at the heart of planning and executing the controversial programme.

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What’s clear is that the debate over the suitability of preventative (Cuban) medical training versus curative (South Africa) training will continue, given this country’s current quadruple burden of disease and ambitious shift towards universal health coverage.

From 2018, South Africa’s 8 medical schools (plus the new Limpopo campus) will need to adjust rapidly or face the politics of unevenly dividing an annual 1 000 fifth-year medical students from Cuba between them, for 5 consecutive years. The total local training platform currently produces 1 300 doctors a year, but current pressure to expand is unprecedented, as government insists on medical schools overcoming campus teaching,



Professor Joe Veriava, head of the South African government’s Academic Review Committee.

supervisory, facility and accommodation constraints as quickly as possible. According to the government’s White Paper on human resources, South African medical campuses will have to double their output of general practitioners (GPs) over the next 15 years just to maintain the current ratios to population.

Cuba has 25 medical schools from which 11 000 doctors graduate annually, and countries from all over the world send students there. Since the island nation has met the doctor needs of several Latin-American countries, South Africa was able to take advantage of its available capacity.

Will more prove less?

Local medical tutors will spend 12 - 18 months re-orientating the Cuban-trained fifth-year students to English medical terminology, and better positioning them for the unique local ‘diseased, injured and/or dying’ patient profiles, so that they can more confidently sit for the domestic final exam (which precedes their Cuban finals). So far, the local failure rate of Cuban-trained students is nearly double that of those trained in South Africa, but most pass within the minimum period of time.

The Cuban trainees are recruited from disadvantaged communities countrywide and with a significantly lower university entrance threshold. They are beneficiaries of an empowerment initiative aimed at returning students to work in their home environments where, some studies indicate, they are more likely to stay. This approach has its detractors, who cite the 5 years of cultural, geographic, social and linguistic distancing these students

experience, and the equivalent or better retention rate of the same type of student trained locally, kept in touch with, and returned to their underserved community.

Cuba places great emphasis on community-based primary care, prevention and citizens’ active participation – the same goals as SA’s universal health coverage plan. Cuba also has one of the world’s best health indices, and all its health services are government-run. However, given that it suffers from one of the world’s heaviest disease burdens, South Africa has a predominantly treatment-oriented focus approach to healthcare and a substantial private sector. Cuba’s population is just over one-fifth of South Africa’s, and its physician density-per-10 000 population is over 10 times higher (67 v. 5.7).

‘It’s the best we could come up with’ – Veriava

The intervention, while far from ideal, trumps all local training capacity alternatives in South Africa and the Southern African Development Community (SADC), said Professor Joe Veriava, head of the South African government’s Academic Review Committee and former Chief of Internal Medicine at the University of the Witwatersrand. It also goes at least a quarter of the way towards meeting South Africa’s medium-term needs for another 20 000 doctors in less than a decade. His committee’s remit, in what they’ve dubbed the ‘Nelson Mandela/Fidel Castro Medical Collaboration’ in an allusion to the programme’s roots, is to train underprivileged local students in Cuba, recruit and conduct peer review on Cuban-born doctors operating in South Africa (of whom 75 arrived this year), and oversee biotechnological collaboration with Cuba.

While conceding that the training programme faces major challenges – for example, students’ first Cuban academic year is almost entirely devoted to learning to speak Spanish – Veriava says the Cuban-trained doctors will get all help possible to overcome the obstacles to their eventual local qualification. This includes a R2 000/month stipend, stationery, food and accommodation and white coats. Furthermore, a recently-appointed special attaché is set to take over the ‘guardian’ duties formerly allocated to the South African embassy.

Adds Veriava, ‘What we don’t know, and what I’d like to see, is with their [the

students'] experience – and if we create a sufficiently enabling environment – they become trail-blazers in creating the right type of health system. They could be instrumental in changing the emphasis in our healthcare system.' However, Professor Dan Ncayiyana, who is leading the set-up of the new University of Limpopo Medical School and conducted a World Health Organization (WHO) probe into the Cuban medical training scheme several years ago, took issue with Veriava and 'like-minded' colleagues. The probe found that it was 'extremely expensive *per capita*', that students take up to 8 years to complete a Cuban degree and enter internship, and that provinces, whose record-keeping is 'in a shambles', did not keep track of graduates from their regions.

'It's the system, not the doctors who determine the moral compass of healthcare in a country,' Ncayiyana said. 'As long as we have a two-tiered system driven by gigantic incomes in the private sector that absorbs more than half the doctors, you can train all your doctors in Cuba and nothing will change here – certainly not when the public system remains as mismanaged and corrupt as *Izindaba* has repeatedly documented.' He likened South Africa's lack of medical schools (the last one was built in 1976 when the population was 22 million) to the country's insufficient power stations, questioning why 'we continue to believe that colonial-era institutions will produce milk and honey till kingdom come'.

Integration 'a work in progress'

Responding to the 'integration challenge', Veriava said measures are in place to enable returnees to 'treat some of the common problems related to the disease burden we have – but at the same time the health minister wants our health indices to improve, so that [the primary healthcare, preventative] element of training is essential to the debate on what is appropriate.' The students would join their locally trained counterparts at local medical schools for modules in their fourth, fifth and sixth years, for increasing amounts of time.

Veriava's Cuban teaching colleagues are doing their best to make changes to accommodate them (e.g. using more English language medical literature), although they could not change the nationally standard Cuban medical curriculum. Veriava appealed to his academic teaching colleagues and locally trained doctors of all vintages to 'come to terms with their biases'. 'These students have surmounted enormous

challenges and they really do pick up the subjective bias that's out there. We want to see them as future doctors, not just Cuban-trained,' he stressed.

Dr Trevor Fisher, Chief Director: Tertiary Care Planning and Policy in the National Department of Health, was on a national recruitment 'roadshow' for the programme when *Izindaba* contacted him. He stressed that the figure of 1 000 Cuban trainees per year will be adjusted if the number of doctors trained at South African universities increases, 'provided those doctors trained are likely to stay in South Africa, address the imbalances of the past and have a primary healthcare approach. In other words, if 500 (more) are trained locally, it will only be necessary to train 500 in Cuba.'

That his Cuban-trained charges were able to specialise 'speaks volumes for their tenacity in training', he added. 'They train in a primary healthcare environment, adapt to a curative environment with sophisticated equipment and procedures and then hopefully will concentrate more on primary healthcare. We should give them all the support we can.'



Professor Dan Ncayiyana, charged with setting up the new Limpopo medical campus.

Ground-level feedback

Rural medicine veteran Dr Victor Fredlund, CEO and Medical Manager of Mseleni Hospital in KwaZulu-Natal (KZN), said 2 of the 4 Cuban-trained locals at his hospital had stayed on after their community service years, displaying 'quite a good attitude on the whole'. 'They're not as fluent in the medical language and lose a bit of ground against their compatriots in any discussion of cases or referring to journals, but as clinicians it all works well.' They also tended 'not to lead with new ideas and follow programmes, doing what's expected and waiting for direction. I don't think their education is

quite as strong, but the culture and patient relationships they come with are good.' He said his four charges have all been local Zulus, which gave them 'a head start on the non-Zulus who work with us'.

Fredlund raised the possibility of using a locally-tailored Cuban education model, 'getting students out into our community health clinics early so they don't just see the disease palaces of district hospitals'. Veriava described this as 'a definite option', adding, 'The whole concept of social accountability and community needs are now buzzwords in medical education.' He expressed interest in Fredlund's student feedback, given the lack of any objective evaluation of Cuban-trained doctors' performances so far, concluding, 'what comes out is they're not bad doctors!'

Professor Errol Holland, Chairperson of the Committee of Medical Deans, said that to implement a National Health Insurance (NHI) system, 'we need these doctors. The way we're now structured [it] would be too much of an imposition to increase enrolment (locally) from 200 to about 320 per annum per campus, so the national health department had to look at other ways of achieving that.' He described the Cuban offer to include South Africa among the 114 other countries they trained for as 'tremendous and generous'.

The project will require major local capital development of facilities beyond the standard campuses and training platforms. Local medical schools would have to get fully prepared to take in Cuban-trained students from their third year onwards (for their third-year orientation students have to familiarise themselves with South African health institutions during their 3-week student vacation). Holland said that because of 'huge differences' in the competencies required by the two countries, 'the earlier we get [the students], the better'. The national health department has stressed to his committee that vigorous capital development and urgent sourcing of supervisory staff will be necessary. Holland's committee is sending English reference works and learning material to the Cuban campuses to help the students. He believes that, 'with proper support we will see the fruits of this very novel approach to increasing the output.'

Local retention models probably better – Reid

Professor Steve Reid, the former director of the Centre for Rural Health at the University of KwaZulu-Natal, a founding member of the Rural Doctors Association of South Africa, (RUDASA) and current Chair of Primary Health Care at the University of

Cape Town, called for a proper evaluation of where Cuban-trained students are 'ending up'. 'I've been asking for some while now for a study revealing how many stay in the public service and how many end up in private practice, how many end up in underserved rural areas versus the city, and whether they are staying as generalists or going for specialisation,' he said.

Anecdotal reports and his KZN experience suggest that the home-grown Umthombo Youth Development scholarship scheme in KZN, which recruits and sponsors local students for training and service in their home districts, keeps them 'more in touch and accountable to their communities of origin.' Reid's hypothesis is that Cuban-trained students would be less accountable to their communities of origin, having been separated from them for so long during their training.

'I'm not denigrating the Cuban system of education but for our kids it's out of context and it's quite difficult to reintegrate them generally,' he emphasised. 'More than 80% of Umthombo grantees are still working in their communities 5 to 10 years down the line – I doubt the Cuban returnees will stay that long.' In his experience with locally-trained students, he's found 'they're much more prepared to jump in. I think the Cuban students are terrified of doing something wrong.'

He described the Cuban model as 'fantastic – it's the way we should all aspire towards. In terms of prevention they're way ahead of us, and therefore they just don't get the desperately ill people we get because their system is so good at keeping people healthy.' However, Cuban students' training,



Professor Steve Reid, a founding member of the Rural Doctors Association of South Africa (RUDASA) and Chair of Primary Health Care at the University of Cape Town.

'might be character building for some, but for others it might break them,' he said citing the high failure rate. 'The idea is right, but the way it's been implemented leaves a lot to be desired. The Cuban graduates need a lot of supporting interventions to their training in order to be able to function optimally in our health system.'

SAMA vice chair skeptical

Dr Mark Sonderup, Vice Chairperson of the South African Medical Association, (SAMA), was forthright. 'Everybody agrees we need more doctors, but is this the best we can do? Surely the resources we

spend on this programme could be used more effectively within the country or the SADC region? The reality is you take these kids, send them off on a 17-hour flight to a godforsaken country where the first language is Spanish and their rate of tuberculosis (TB) is 9 per 100 000 versus our 1 000 per 100 000, for example. You're talking about 11 million people on one island. We have an HIV and TB pandemic from the depths of hell!'

Dr Elma de Vries, a RUDASA veteran now working as a family physician at the new Mitchell's Plain Hospital, blamed the controversial and 'anti-rural' Occupation-Specific (salary) Dispensation (OSD), for encouraging doctors to specialise and specialists to super-specialise. 'The OSD made it too expensive to employ the necessary number of doctors. We need career medical officers. Now we end up with not enough generalists but also with not enough general specialists. We need jacks of all trades to work at primary and district level,' she pointed out. She said that the Cuban medical training did not prepare doctors 'for what is expected of a South African graduate who has to be competent to do a C-section and give a safe anaesthetic, and treat fractures and complicated TB and HIV patients during their community service.' Veriava admitted that several of the Cuban-trained doctors are being lost to specialisation.

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S Afr Med J 2013;103(9):603-605.
DOI:10.7196/SAMJ.7323