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# Healing Globally, Empowering Locally: Cuban Medical Cooperation in Africa

**By Conner Gorry**

Like many prodigious tales marking a departure from the status quo, this one begins in Africa. In 1963, the Cuban government sent a medical team to Algeria, launching a medical cooperation program that today spans the globe, bringing the message to all people regardless of culture, creed or politics: health care is a right.

In Africa, where a pregnant woman has a 1 in 16 chance of dying in childbirth[1] and 3,000 children die *every day* of malaria[2], that message bears repeating.

And yet, many public health systems in Africa are on the brink of collapse due to brain drain, an alarming loss of health workers to AIDS, and lack of political will on the part of governments. The situation is grave: according to the World Health Organization, Africa will need 1 million health workers over the next decade to deliver basic health interventions.[3]

Where will these 1 million health professionals be found?

## A New Approach

On paper, Cuba hardly seems the country to invigorate the worldwide movement for establishing health care as a birthright. Indeed, the small, cash-strapped nation fits squarely in the developing world matrix, defined as it is by scarce resources, variable infrastructure, and geographic circumstances which constitute a trade disadvantage and make it a target for devastating hurricanes. Significantly, Cuba – unlike any other country in the world – is also trammeled by draconian socio-economic and political pressure applied through the US blockade in all its guises.[4]

The combination of these factors has necessitated a medical approach based on health promotion, prevention and education, while Cuban social justice philosophy dictates the approach be equitably and universally applied. Evidence-based analyses validate the model: Cubans are some of the world's healthiest people, with indicators on par with and sometimes surpassing, those of highly developed nations. It is not surprising therefore, that this approach should be in high demand among countries with structural conditions and challenges similar to those found in Cuba.

The Gambia is a fitting example. With a life expectancy of 56 and 83% of the population living on less than $2 a day[5], this small, west African country of 1.5 million people suffers from the generalized poverty, brain drain, critical absence of health services

(especially in rural areas) and appalling state of poor health found in other parts of sub-Saharan Africa. Moreover, The Gambia is bisected by a river, making it fertile breeding ground for the *Anopheles gambiae* mosquito that transmits malaria, further complicating the health picture. According to the Gambian National Malaria Control Program, there were 600,000 cases – nearly half the entire population – of malaria diagnosed in 2002. Prognosis for those actually falling ill is ominous in this country with one of the worst physician to patient ratios in the entire continent.[6]

The critical situation motivated The Gambian government to forge a policy prioritizing population health -- constructing clinics, leveraging existing funding and relationships from partners including the WHO, UNICEF, the Global Fund to Fight AIDS, TB and Malaria and reaching out to various governments for help.

"When you come up with any program, the first thing you think of is the human resources," said Gambian President Dr. Yahya A.J.J. Jammeh about his country's fortified public health policy. "Even if you have the financial resources, if you don't have the human resources, it's like having a spoon without food to eat."[7] As a result of the government's appeals, the sustenance for The Gambian program came in the form of health professionals from Egypt and Nigeria, and a cooperation accord with Cuba that included all the elements of the Cuban health approach: promotion, prevention, education and universal access to services.

**Cooperation=Integration**

In mid-1999 following a visit by President Jammeh, The Gambia joined Cuba's Comprehensive Health Program (CHP) – the bilateral health cooperation agreement Cuba maintains with 28 other countries worldwide, including 21 in Africa (see Table 1). This program, founded in 1998 after Hurricane Mitch leveled large swaths of Central America, bolsters local public health systems by integrating volunteer health professionals, including specialists, nurses and technicians, who work alongside local doctors and nurses.

**Table 1: African Countries with Cuban Medical Cooperation**

| | |
|---|---|
| South Africa | Lesotho* |
| Angola | Mali* |
| Algeria | Mozambique |
| Botswana* | Namibia* |
| Burkina Faso* | Niger* |
| Burundi* | Nigeria |
| Cape Verde | RASD* |
| Congo | Rwanda* |
| Djibouti | Sao Tome & Principe |
| Eritrea* | Seychelles |
| Ethiopia | Sierra Leone* |
| Gabon* | Swaziland* |
| Gambia* | Tanzania* |
| Ghana* | Chad* |
| Equitorial Guinea* | Uganda |
| Guinea Bissau* | Zimbabwe* |
| Guinea Conakry* | |

Source: Registros estadísticos de la Unidad Central de Cooperación Médica, 2006.
*Countries participating in the Comprehensive Health Program

Several factors distinguish CHP, including the emphasis on supplying highly-trained professionals able to deliver quality care free of charge; modern technology transfer; and ensuring accessibility in even the poorest, most remote parts of each country. Logistically, this has presented many challenges for the Cuban teams, who may perform medical interventions by lantern where there is no electricity, have donated their own blood due to a lack of a reliable supply or developed their own medical phrase books in local dialects.

Importantly, recipient countries are able to individualize the program to reflect actual local needs. In The Gambia, this meant implementing an aggressive anti-malaria campaign in which the Cuban team, in cooperation with local authorities and international partners, implemented epidemiological mapping to identify the most vulnerable populations, determined insecticide susceptibility, applied biolarvacides at breeding sites, introduced clinical and laboratory quality control measures, carried out local health promotion and education and provided specialized training to local personnel. The strategy is paying off: malaria cases dropped to 200,000 in 2004,[8] a fraction of the figure two years prior.

All told, CHP and Cuba's other programs in international health cooperation (the sight-saving project called Operation Miracle, the Henry Reeve Brigade, Compensated Cooperation and the Cuban Medical Brigade in Venezuela) have nearly 30,000 health professionals (67% physicians) in 69 countries.[9] Many of these Cuban medical teams work in areas that are such anathema to local professionals – poor and remote, which may lack reliable electricity, water and transportation – that a Cuban doctor is sometimes the first these communities have ever seen.

It's not surprising, therefore, that Cubans volunteering abroad are often spoken about in beatific terms, perceived as embodying both Christian and Hippocratic ideals. "The Cuban doctors are a blessing from God," one Honduran woman told Reverend Raúl Suárez of Havana´s Ebenezer Baptist Church. Suárez explains: "This medical cooperation is the true manifestation of a concept related to the Christian faith...the new name for faith which is solidarity. What a beautiful thing – bringing health to children and poor people."[10]

**Education as the Cornerstone**

Yet Cuban professionals cannot staff public health systems abroad forever. Indeed, the effort of sending tens of thousands of primary health care workers overseas has necessitated adjustments to the domestic system, such as offering more slots for incoming medical students[11], training more (and more highly-trained) nurses and consolidating specialized services in policlinics. For patients, it sometimes means waiting for an appointment – a new experience for the majority of Cubans born after 1959.

It's testament to the rigor of Cuba's program for training human resources for health that despite such cooperation, the country has been able to maintain (and in certain cases even improve) its health indicators and ratio of 591 physicians for every 100,000 patients[12,13]. The question is, how can countries like Equatorial Guinea, with 30 physicians per 100,000 people or Ethiopia with just three[14], learn from that experience and begin to reach sustainable staff levels (in gross numbers, as well as specialties and distribution), to break the dependence on foreign aid and bring health to their population?

Clearly, political will is key: without the financial and structural support of the government, a functional, sustainable public health sector cannot exist. Nor can it exist without the necessary human resources. Working collaboratively with governments and health authorities around the world, but with special emphasis on Africa where resources are scarcest, Cuba has helped establish medical schools to train urgently-needed professionals locally (see Table 2).

**Table 2: Countries with Medical Schools Established by Cuban Cooperation**

| Country | Year Established |
|---|---|
| Yemen | 1976 |
| Guyana | 1984 |
| Ethiopia | 1984 |
| Uganda | 1986 |
| Ghana | 1991 |
| The Gambia | 2000 |
| Equatorial Guinea | 2000 |
| Haiti | 2001 |
| Guinea Bissau | 2004 |

Source: Vice Ministry for Education & Research, MINSAP, 2005.

Just as the CHP program is customizable to local contexts and needs, so too is medical school curricula, which is always formulated to both meet international standards and address the local health picture. Taken together, the CHP and in-country medical education programs mean Cubans are providing professionals to bolster public health systems and reinforce faculty, plus empowering locally, so that communities will be able to ensure better health for themselves.

As of June, 2006, there were 536 students training in medical schools established with Cuban cooperation in The Gambia, Equatorial Guinea, Eritrea, Guinea Bissau and East Timor.[15]

Training students to collaborate with the communities they serve, known as Community-Based Education, is the backbone of the Cuban medical education philosophy both at home and abroad and has been put widely to the test in Africa. The pedagogy of the approach is based on the public health concept of community diagnosis, whereby health indicators for a given community are collected in a systematic way over a period of time to characterize the overall health picture of the population. By better understanding the health status of the community and the prevalence of pathologies affecting it, health professionals can tailor services and provide more effective treatment. Furthermore, this type of training inserts soon-to-be doctors squarely in the community, so they are engaged directly with patients, and sensitized to their living conditions and daily reality.

"This is one of the biggest lessons we learned in Cuba, that the problem of health does not lie in the hands of professionals alone, but in a joint venture with the community," says Dr Thabo Mnisi, Clinical Manager of the Alexandra Health Centre and University Clinic in South Africa – himself educated at the Higher Institute of Medicine in Santiago de Cuba. "People approaching problems together and seeking solutions as a team...the partnership is very dynamic, capable of overcoming any obstacle."[16]

Meanwhile, in Eastern Cape, South Africa, the community approach has been formalized as a curriculum module – with Cuban collaboration – at the Walter Sisulu University Faculty of Health Sciences. According to Cuban Associate Professor Dr Amalío del Río, of the university's Department of Community Medicine who helped develop the course, the approach is "aimed at making graduates relevant to the health of communities beginning in their student years...[and] has helped students gain a greater sense of social responsibility."[17] Vesting and familiarizing students, coupled with quality professional training and community participation, arms these future doctors with the skills, knowledge and understanding so that they can work effectively in any health context -- particularly the most disadvantaged.

This has proven true in The Gambia as well, where Cuban faculty helped establish the country's first medical school, despite scarce resources and pessimists who called the enterprise impossible. By combining political will, Cuban and local faculty and material resources from a variety of stakeholders including WHO and the Royal Victoria Teaching Hospital, the University of The Gambia Medical School graduated its first 11 doctors in May, all of whom have passed the professional exams allowing them to practice.

**Latin American Medical School**

Perhaps Cuba's most notable effort to educate health professionals from the developing world is the Latin American Medical School (ELAM according to its Spanish acronym). Established in 1999 as part of the same post-Mitch health strategy that launched CHP, the ELAM is a six-year medical school providing full scholarships to students from around the world. In return, the students make a non-binding commitment to work in underserved communities upon graduation.

At present, there are 10,220 students studying at the ELAM from 89 countries – the goal is to train 100,000 public health doctors and thousands of nurses by 2010 from around the world at Cuban health sciences schools. To date, ELAM has graduated 2,910 students; another 1,600 are scheduled to graduate in August 2007.[18]

"I came here to study medicine because all the family members I've lost, all the people I've seen die, died due to lack of medical care," said ELAM student Inmaculada Ncogo Allene from Equatorial Guinea. "My father died from a heart condition that shouldn't have killed him...my brother died from an acute gastrointestinal problem because there were no doctors...I have nephews and nieces, little children, who died of dehydration...there are so many preventable deaths in my country."[19]

There are currently students from 44 African countries – 43 of them sub-Saharan – studying in Cuba, in a variety of disciplines. In Cuban medicine faculties, there are seven African countries represented at present: Cape Verde, Djibouti, Equatorial Guinea, Guinea Bissau, Mali, Nigeria, and South Africa.

**Health for All is Possible**

From Algeria to Zimbabwe, Cuban health professionals are challenging the global health movement to transform "health for all" from rhetoric to reality. The communities where Cuban doctors are volunteering and where graduates from Cuban medical schools are serving, are experiencing that reality – some for the first time. And over time, the heath indicators for those areas – also novel in many remote communities where health data had never been collected before Cuban medical cooperation – are improving.

While certain sectors have demonized Cuba's 'medical diplomacy' as nothing more than self-serving political aggrandizement, this ignores the symbiotic benefits, based on solidarity, that the world accrues, one individual at a time, when health is treated as a human right. Regardless, as Dr Fitzhugh Mullen of George Washington University points out in the recently-released documentary *¡Salud!*, "if more countries practiced foreign policy similar to Cuba, the world would be a better place."[20].

Therein lies our hope.

**Notes**


1. Contrast this with figures for Northern Europe, where a pregnant woman has a 1 in 4000 chance of dying during childbirth and you get an idea of the gross inequalities between industrialized countries and the Global South. World Health Organization Bulletin, February 2005.
2. World Health Organization. World Malaria Report, 2005. Available from: http://rbm.who.int./wmr2005/html/exsummary_en.htm.
3. World Health Organization. Bulletin. February, 2005.
4. For effects of US policy on the health of the Cuban people, see The US Embargo's Impact on Health and Nutrition in Cuba, published by the American Association for World Health, Washington, DC 1997.
5. UNDP. Human Development Report 2006, New York.
6. The latest figures available show there are 11 physicians for every 100,000 people in The Gambia. Ibid.
7. Interview with President Dr. Yahya A.J.J. Jammeh, for the film ¡Salud!, February 17, 2005.
8. National Malaria Control Program, Gambia Department of State for Health and Welfare, February, 2005.
9. Unidad Central de Cooperación, MINREX, June 2006.
10. Interview with Raúl Suárez for the film ¡Salud!, December 12, 2004.
11. For academic year 2006-2007, there are 25,728 students enrolled in medicine, 35,482 enrolled in nursing, 67,472 enrolled in allied health sciences and 4,266 in dentistry. (Escuela Nacional de Salud Pública, June 2006).
12. Anuario Estádistico de Salud, 2005. MINSAP, Habana, Cuba.
13. For purposes of comparison, the United States has 256 physicians for each 100,000 people (UNDP, Human Development Report, 2006).
14. UNDP. Human Development Report, 2006.
15. Unidad Central de Cooperación, MINREX, June 2006.
16. Reed G. Profiles in Commitment: Thabo Mnisi, MD. Medicc Rev. 2005 Aug;7(8):9-11.
17. Rio del A. Community Health Diagnosis as a Curriculum Component: Experience of the Faculty of Health Sciences, Walter Sisulu University, Eastern Cape, South Africa. Medicc Rev. 2005 Aug;7(8):22-25.
18. Escuela Nacional de Salud Pública, June 2006.
19. Frank M. MR Interview: Cedric Edwards, MD. Medicc Rev. 2005 Aug;7(8):12-14.
20. Dr Fitzhugh Mullen in ¡Salud!, available at www.saludthefilm.net